



**COMMONWEALTH OF VIRGINIA
STANDARD CONTRACT**

Contract No. UCPJMU4135

This contract entered into this 27th day of March 2015, by Avante Solutions, Inc. hereinafter called the "Contractor" and Commonwealth of Virginia, James Madison University called the "Purchasing Agency".

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide the services to the Purchasing Agency as set forth in the Contract Documents.

PERIOD OF PERFORMANCE: From March 27, 2015 through June 15, 2018 with seven (7) one-year renewal options.


The contract documents shall consist of:

- (1) This signed form;
- (2) The following portions of the Request for Proposal LBS-764 dated February 21, 2014:
 - (a) The Statement of Needs,
 - (b) The General Terms and Conditions,
 - (c) The Special Terms and Conditions together with any negotiated modifications of those Special Conditions,
 - (d) Addendum No. One dated March 11, 2014,
 - (e) Addendum No. Two dated March 21, 2014,
 - (f) Addendum No. Three dated April 2, 2014.
- (3) The Contractor's Proposal dated April 4, 2014 and the following negotiated modification to the Proposal, all of which documents are incorporated herein:
 - (a) JMU Pricing Letter, dated March 20, 2015;
 - (b) Negotiations Summary, dated March 20, 2015;
 - (c) Exhibit A, JMU Professional Services Estimate;
 - (d) Cherwell End-User License Agreement, dated October 27, 2014;
 - (e) Commonwealth of Virginia Addendum to Contractor's Form, signed by Cherwell Software, LLC, dated September 4, 2014, which shall govern in the event of conflict;
 - (f) Commonwealth of Virginia Addendum to Contractor's Form, signed by Avante Solutions, Inc., dated August 26, 2014, which shall govern in the event of conflict;
 - (g) Response from Avante Solutions, Inc., dated September 15, 2014;
 - (h) Response from Avante Solutions, Inc., dated August 27, 2014;

- (i) Avante Solutions Professional Services Requirements Definition, dated August 26, 2014;
- (j) Response from Avante Solutions, Inc., dated July 18, 2014;
- (k) Cherwell Service Management *Service and Support Guide*

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

By: 
(Signature)

Steven Waxler
(Printed Name)

Title: President

PURCHASING AGENCY:

By: 
(Signature)

Lee Anne Beatty Smith
(Printed Name)

Title: Buyer Senior, JMU



March 20, 2015

James Madison University
Procurement Services MSC 5270
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807

LeeAnne,

This letter is in response to our discussion that took place Tuesday March 10, 2015. We are pleased to offer JMU the following structure for the purchase of the Cherwell technology.

1. This offer is contingent on an award and contract execution and purchase from JMU to Avante prior to March 30, 2015.
2. The specifics of this offer are only valid for JMU and their internal purchase. The pricing terms of our Best and Final Offer dated October 16, 2014 are the terms that will apply to the Cooperative agreement.
3. Cherwell agrees to prorate your initial Maintenance & Support from the date of the award to June 15, 2015. Your annual renewal date on a go-forward will be June 16-June 15. Maintenance & Support for subsequent license orders will be prorated to those dates.
4. JMU will make a commitment to purchase 100 licenses between March 2015 and June 30, 2016.
5. We will honor the price of \$2,500.00 per licenses plus \$500.00 annual Maintenance & Support, with an initial purchase prior to March 30, 2015 of 40 licenses.
6. JMU may purchase additional licenses for \$2,500 after June 30, 2016 provided you have purchased 100 or more licenses by June 30, 2016. If JMU has not purchased 100 or more licenses between the date of this order and June 30, 2016, then JMU may purchase additional user licenses at a cost of \$2,800 per concurrent user.
7. Initial Invoice will be in accordance with attached sample Invoice# AV-JMU-TBD dated March 19, 2015 (total \$124,160.00).

Thank you,

Rich

A handwritten signature in blue ink, appearing to read "Rich Clark", is shown on a light-colored background.

Rich Clark
Avante Solutions, Inc.
rclark@avantesolutions.com
Mobile: (401) 301-9924

SAMPLE INVOICE



Invoice

Invoice #: **AV-JMU-TDB**
Invoice To: **James Madison University**
752 Ott Street
Wine Prince Building
First Floor Suite 1023
Harrisonburg, VA 22807

Date: **March 19, 2015**
Invoice From: **Avante Solutions, Inc.**
728 W. Jackson Blvd.
Suite 105
Chicago, IL 60661

Contact: **LeeAnne Beatty Smith**
Tel: 540-568-7523

Contact: Raquel Alexander
Tel: 866-282-6831 ext. 2004

PO #: TBD

Item	Product Description	Unit	Total
Cherwell Software			
1	40 Cherwell Service Management Concurrent Licenses	\$2,500.00	\$100,000.00
2	Pro-rated Maintenance and Support for 40 Licenses - April 1 2015 through June 15, 2015	\$104.00	\$4,160.00
3	Annual Maintenance and Support for 40 Licenses - June 16, 2015- June 15, 2016.	\$500.00	\$20,000.00
Subtotal:			\$124,160.00
Payment Terms: Net 30		Total Due	\$124,160.00

Please Remit Payment to:

Avante Solutions, Inc.
728 W. Jackson Blvd. Suite 105, Chicago, IL 60661



**RFP # LBS-764 Information Technology Service
Management System
Negotiation Summary for Avante, Inc.**

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1. Cherwell Service Management Licensing Approach and Pricing:

- a. Cherwell Service Management shall be offered in a *Perpetual/Purchase* concurrent license model and a *Subscription* concurrent license model.
- b. SaaS deployment shall be possible for both license models.
- c. A concurrent license, regardless of license model, shall entitle access to all “out-of-the-box” applications, which includes Incident, Service Request, Service Catalogue, Service Portfolio, Problem, Change, Release & Deployment, Configuration, Service Level, Knowledge, Event Management, and Project Management.
- d. There shall be no charge for end-users accessing the Self-Service Application and end-user access shall be unlimited.
- e. There shall be no limit to the number of non-production environments (*i.e. development and test environments*) systems.
 - (1) SaaS deployments shall be provided with one (1) non-production environment at no additional cost.
 - (2) At the Purchasing Agency’s request, additional hosted non-production environments shall be provided at \$10,000.00/per environment/per year.
 - (3) Purchasing Agencies can install unlimited non-production environments on their premise at no additional cost.
- f. There shall be no additional charge for configuration of new applications (*Security, Human Resources, Facilities Management, etc*) in addition to the out-of-the-box processes.
- g. All license models shall include access to all Agent/Technician clients including: Agent Browser, Agent Rich Client, and Agent Mobile Clients.
- h. No license shall be required for access to the Cherwell system for the following:
 - (1) Accessing the Administration module
 - (2) Updating records via email, including responses to requests for approval or notifications of new work actions/tasks
 - (3) Viewing and updating records via web forms (*for example: Self-Service portal or web forms such as a task, approval, or survey request*)
 - (4) Accessing the Dashboard Viewer



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- i. Contractor shall provide temporary concurrent licenses in addition to the purchased/subscribed licenses for the first 90 (ninety) days following the *Go-Live* date to ensure that Purchasing Agency is able to accurately determine the number of licenses that will meet their needs. The number of temporary additional licenses shall be calculated by adding 50% to the number of licenses purchased/subscribed.

j. Perpetual/Purchased License Model Pricing:

Item	Unit Cost
Cherwell Service Management	\$3,350.00/license for 1-24 concurrent licenses \$2,800.00/license for 25-99 concurrent licenses \$2,500.00/licenses for 100-199 concurrent licenses +199 concurrent licenses priced upon request
Annual Maintenance & Support	\$600.00/license for 1-24 concurrent license(s) \$500.00/license for 25-199 concurrent licenses +199 concurrent licenses priced upon request
If Cherwell hosts system, the following charges will be applicable:	
Annual Hosting Fee	\$1,000.00/year for 1-49 license(s) \$2,500.00/year for 50-199 licenses +199 licenses priced upon request
Annual VPN Fee- <i>(Optional but recommended)</i>	\$3,000.00/year

- (1) The Annual Maintenance & Support period shall start at the initial kickoff meeting of the engagement.



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- (2) The purchase of additional perpetual licenses during an Annual Maintenance & Support period shall have the additional Annual Maintenance & Support cost prorated through the end of the current maintenance period.
- (3) The Cherwell license pricing is based on the number of licenses purchased and, after the initial purchase, the number of licenses currently owned. *(Example: the purchase of 25 initial licenses would be \$2800/per license. If 75 more licenses are purchased at a later date, the cost would be \$2800/each for 74 of the licenses and 1 license at \$2500).* The same applies to Annual Maintenance and Support pricing.

k. Subscription License Model Pricing:

Item	Unit Cost
Cherwell Service Management Subscription Fee <i>(monthly)</i>	\$110.00/license for 1-24 concurrent licenses \$95.00/license for 25-99 concurrent licenses \$90.00/licenses for 100-199 concurrent licenses +199 concurrent licenses priced upon request
Annual Maintenance & Support	Included in Subscription Cost
Annual Hosting Fee	Included in Subscription Cost
Annual VPN Fee <i>(Optional and not applicable if installed on-premise)</i>	\$3,000.00/year
Optional- Additional Hosted Non-production Environment <i>(one (1) included in subscription)</i>	\$10,000.00

- (1) Subscription pricing is based on a one-year subscription term and shall be invoiced annually in advance of the subscription year.



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- (2) One (1) production and one (1) non-production environment shall be included with a subscription to Cherwell Service Management.
- (3) Purchasing Agencies that add more licenses during an Annual Subscription period shall have the additional licensing cost prorated through the end of the current subscription period.
- l. Optional Discovery Tool Module: asset scanning and discovery module that shall provide asset scanning and importing to the Cherwell CMDB.
 - (1) Subscription Model pricing: \$4,000.00/per year
 - (2) Perpetual/Purchase Model pricing: \$10,000.00 one-time cost plus additional \$2,000.00 annual maintenance and support.
- m. Optional Reservation Manager module: comprehensive loan equipment management system that shall catalog, track, and manage the check-in and check-out of loan equipment.
 - (1) One-time fee of \$7,500.00 plus additional \$750.00 annual maintenance and support for both licensing models.

2. Avante Professional Services Approach and Pricing:

- a. Professional Services shall be available to support the Purchasing Agency before and after deployment of the Cherwell Service Management System. Services shall include, but not be limited to, pre-engagement planning, requirements definition, installation, testing, integrations, configurations, systems review, administrator and end-user training, go-live support, consultation and project management.
- b. Professional Services shall occur at the discretion of the Purchasing Agency with consult and recommendations from the Contractor. Purchasing Agency shall agree in writing to Professional Services to be performed prior to their start.
- c. Contractor shall invoice the Purchasing Agency monthly for actual time that work was performed by prorating the associated hourly rate (*for example: 5.6 hours of work @ \$187.50/hour shall = \$1050.00*). The Purchasing Agency will not prepay for Professional Services.
- d. The Professional Services rate for all work performed offsite at the Contractor's place(s) of business (*not at the location of the Purchasing Agency*) shall be invoiced at the hourly rate of \$187.50 (*\$1500.00/per day*).



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- e. The Professional Services rate for all work performed *onsite* at James Madison University (JMU) shall be invoiced at the hourly rate of \$237.50 (\$1900.00/per day). The *onsite* hourly rate shall include all travel and reimbursables to perform work on JMU campus.
- f. Professional Services *onsite* hourly rates for Purchasing Agencies (*other than JMU*) accessing this contract cooperatively shall be negotiated and mutually agreed to in writing between the parties.
- g. Contractor *Professional Services Estimate* for JMU:
 - (1) Contractor has provided JMU with a *Professional Services Estimate* for deployment of Cherwell Service Management system based on the scope of work defined within RFP# LBS-764 and further discussions during negotiations. **The JMU Professional Services Estimate is attached as Exhibit A of this contract.**
 - (2) Contractor agrees to provide the services and deliverables outlined within the Professional Services Estimate in accordance with the timeline provided and at a cost *not to exceed* \$118,100.00. However, Contractor shall invoice JMU for actual time that work was performed (*reference section 2.c of this summary document*).
 - (3) Contractor and JMU agree that professional services shall not proceed without a JMU-issued purchase order.
 - (4) The *Professional Services Estimate (Exhibit A)* is all-inclusive of travel and reimbursables. JMU shall not be invoiced additionally for these items.
- 3. Payments: Purchasing Agencies shall communicate invoicing disputes within a timely matter in order to facilitate payment in accordance with the Code of Virginia, §2.2-4347 through 2.2-4354, Prompt Payment.
- 4. Contractor shall provide detailed invoicing to include project title, number of hours by consultants, role title, work performed onsite/offsite, and specific tasks performed.
- 5. All pricing shall be fixed for the initial term of three (3) years and shall apply to all pricing models of Cherwell Service Management, software maintenance and Avante Professional Services pricing.
- 6. Renewal Pricing: Price changes may be negotiated at time of renewal; however, in no case shall the costs for a succeeding one-year period exceed the prior year's contract price(s), increased or decreased by more than the percentage increase or decrease in the other services category of the CPI-W section of the US Bureau of Labor Statistics Consumer Price Index, for the latest twelve months for which statistics are available.



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7. Prime Contractor Responsibilities: The contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that the contractor may utilize, using the best skill and attention. Subcontractors who perform work under this contract shall be responsible to the Prime Contractor. The Contractor agrees to be fully responsible for the acts and omissions of the subcontractors and of persons employed by them as equally as the acts and omissions of his own employees.
8. Subcontracts: No portion of the work shall be subcontracted without prior written consent of the purchasing agency. In the event that the contractor desires to subcontract some part of the work specified herein, the contractor shall furnish the purchasing agency the names, qualifications, and experience of their proposed subcontractors. The contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.
9. Reference Contractor's response dated August 27, 2014, page 12, number 27: Contractor agrees that all points have been negotiated and incorporated within this contract.
10. Contractor rescinds confidentiality for the entire proposal and negotiations with the exception of the following:
 - a. Contractor's Proposal, Section IV, Statement of Needs, Item A.5— pages 15-16
 - b. Contractor's Proposal, Section IV, Statement of Needs, Item D.7-page 34
 - c. Contractor's Proposal, Section IV, Statement of Needs, Item I.8- page 58
 - d. Contractor's Proposal, Section IV, Statement of Needs, Item N.10- page 79
 - e. Contractor's Proposal, Avante's Higher Education System for Cherwell- pages 87-88

Revised Pricing for Avante Professional Services

This cost proposal includes the following sections:

- Scope definition
- Key assumptions
- Professional services costs

Scope Definition

The purpose of this section is to outline the scope of deliverables associated with the University's Cherwell Service Management initiative.

- The processes (ITIL and other) under scope we expect to include to support your requirements include: Incident, Service Request, Problem, Change, Knowledge and Project Management. In addition you will need basic Service Catalog (to support Service Request).
- End-User Self-Service.
- Integration with Email.
- Integration with Active Directory.
- Integration with Bomgar.
- Our proposal also includes on-site Administration Training and User Training.
- No other integrations are included in the scope of this estimate.

Our proposal accounts for providing a turn-key solution (i.e. completing all the deliverables). However, you can elect to assume some of the configurations once your administrator(s) are trained; thereby reducing the professional services costs.

Key Assumptions

The following points represent key assumptions used in the preparation of this estimate:

- The preferred deployment is to be determined however you are leaning toward the On-premise option.
- The scope of Phase 1 is outlined in the aforementioned 'scope definition' section.
- Based on the detail provided in your RFP we anticipate you will look to leverage/utilize as much of the out-of-box process Cherwell provides where applicable with some adjustments for a majority of processes listed (with the exception of Change and Project Management).
- No other integrations are applicable for this phase (in your Section II Background you stated that you have numerous systems (PeopleSoft, Oracle, Dell, Zenoss, Nessus and Symantec for example) that may be considered for integration however without scoping requirements for each we cannot provide an estimate. As we described, once you have received the training on the Administration of Cherwell you would be capable of completing these integrations with your internal staff.

Exhibit A- Professional Services Estimate



Professional Services Cost Table

The purpose of this section is to outline how our Professional Services costs are allocated across the high level Phase 1 deliverables.

Our Professional Services rates will be based upon the following:

- For all work that Avante performs on-site at JMU premises the rate will be \$1,900.00 per day (based on an 8 hour work day) which translates to \$237.50 per hour. This rate includes any travel and expenses incurred by Avante.
- For all work that Avante performs off-site (away from JMU premises) the rate will be \$1,500.00 per day (based on an 8 hour work day) which translates to \$187.50 per hour.

Important note – It is Avante’s policy to bill only for actual time for all work performed utilizing the appropriate hourly rate. The billing is based on the services we provide on a monthly basis.

If we are your selected vendor we will begin the engagement with our Requirements Sessions to completely scope all the specific requirements you may have, and upon agreement from both parties, provide a final cost table with firm services estimate.

Phase Deliverable	Comment	Time Effort
Pre Engagement Planning	This accounts for any follow up and/or documentation that are deemed necessary as an outcome of the technical and non-technical Engagement Planning Session.	1 day Typically performed off-site
Workshop (Optional but Recommended)	Recommended as a prerequisite to the Requirements Definition. Based on your scope, the focus will be on the following concepts: classification, lifecycle / process, priority / SLA, record ownership, etc. This will be limited to 2 days on-site.	No Charge – this includes no charge for time and no charge for expenses incurred by Avante.

Exhibit A- Professional Services Estimate



Phase Deliverable	Comment	Time Effort
Requirements Definition	<p>It will be necessary to identify what changes to the out-of-the-box configuration is applicable to support your deployment.</p> <p>The following areas are under scope: Incident, Service Request, Problem, Change, Project, Knowledge, and Self-Service, as well as basic Service Catalog to support Service Request.</p> <p>This time will be divided between on-site and documentation preparation. Documentation will be limited to business requirements.</p>	<p>7 – 8 days</p> <p>We estimate the onsite portion of this is 4 – 5 days with the remaining time off-site for documentation</p>
Provision/Install	<p>Install Cherwell for use by the University on your premises.</p> <p>Deliverables include: testing of all client access options, production and test environments.</p>	<p>0 day</p> <p>Typically performed off-site</p>
Configuration – Internal User	<p>A key deliverable will include a Customer Profile (i.e. end users being supported).</p> <p>In addition to configuring the profile, the data will need to be populated on a regular basis.</p> <p>Factors driving complexity are the number of sources used to populate the profile, creating different profiles for staff, faculty, students and other potential user groups.</p>	<p>1 day</p> <p>Typically performed off-site</p>
Configuration – Security Groups	<p>A key deliverable will include creating security groups for both the internal and external users.</p> <p>Factors driving complexity are the variations of the number of external IT Vendors and if there are a number of different vendors that will each require a separate security profile.</p>	<p>1 day</p> <p>Typically performed off-site</p>

Exhibit A- Professional Services Estimate



Phase Deliverable	Comment	Time Effort
Configuration – Incident	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include:</p> <ul style="list-style-type: none"> • Classification methodology • Priority SLA / OLA rules • Notification Rules • Process / Lifecycle • Surveys • Scripts • Stop the Clock • Etc. 	<p>5 - 7 days</p> <p>Typically performed off-site</p>
Configuration – Service Request	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include approval rules (plus the points specified under Incident).</p>	<p>3 - 5 days</p> <p>Typically performed off-site</p>
Configuration – Problem	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus University requirements.</p>	<p>1 day</p> <p>Typically performed off-site</p>
Configuration – Knowledge	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include: importing from data sources, connecting to external knowledge repositories, and search sources.</p>	<p>1 day</p> <p>Typically performed off-site</p>

Exhibit A- Professional Services Estimate



Phase Deliverable	Comment	Time Effort
Configuration – Change	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include approval rules, number of change types, etc.</p> <p>As you indicated you have a current process we anticipate you will require changes to the out-of-box process.</p>	<p>5 – 10 days</p> <p>Typically performed off-site</p>
Configuration – Project	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include:</p> <ul style="list-style-type: none">• Number of Project types• Approval rules• Notification Rules• Process / Lifecycle• Versioning• Etc.	<p>5- 10 days</p> <p>Typically performed off-site</p>
Service Level Management	<p>Our recommendation would be that internal resources can deploy Service Level for the University. If you wish you can engage Avante. Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.</p>	<p>1 – 2 days</p> <p>Typically performed off-site</p>

Exhibit A- Professional Services Estimate



Phase Deliverable	Comment	Time Effort
Configuration – Self-Service	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.</p> <p>This estimate provides a basic starting point for Self-Service, basic Incident and Request capabilities for end users to submit and check status on submissions.</p>	<p>2 - 3 days</p> <p>Typically performed off-site</p>
Configuration – Reporting	<p>Although there are reports and dashboards out of the box, we thought it was important to allocate some time to meet some specific University requirements (if any).</p> <p>As we do not have your specific reporting requirements we have provided an estimate only with restrictions.</p> <p>We have allocated 3 - 5 days of time on the high estimate to write no more than 3 custom reports and modify 3 existing reports.</p>	<p>3 - 5 days</p> <p>Typically performed off-site</p>
Integrations Email and Directory	<p>Integration with Email and Active Directory.</p> <p>No time is allocated as this is plug and play out-of-the-box.</p>	<p>0 days</p> <p>Typically performed off-site</p>
Configuration – Mobile Support	<p>In addition to the out-of-box capabilities Cherwell provides for mobile support we allocated some time for specific requirements you may have.</p>	<p>2 – 3 days</p> <p>Typically performed off-site</p>
System Review	<p>One day will be spent reviewing our configurations against the design / specification report to confirm:</p> <ul style="list-style-type: none"> • System is delivered to specification • No issues exist 	<p>1 day</p> <p>Typically performed on-site</p>
Administrators Training	<p>We deliver on-site administration training, typically we support up to 10 attendees, however we will support additional attendees for JMU. Training manuals are provided.</p>	<p>5 days</p> <p>Typically performed on-site</p>

Exhibit A- Professional Services Estimate



Phase Deliverable	Comment	Time Effort
End User Training	<p>To facilitate UAT Testing and User Training, we have budgeted 4 days for “user training”.</p> <p>Avante will provide a train-the-trainer approach where we will allocate time with your trainer(s) to provide instruction, as well as conduct 1 -2 training sessions and sit in on 1-2 training sessions delivered by your staff.</p> <p>This also reflects the effort for developing user manuals specific to the University's configuration at the application / process level.</p>	<p>4 days</p> <p>We estimate the onsite portion of this is 2 days with the remaining 2 days off-site for documentation</p>
Go-Live Support	Go-live support includes getting the system ready for production use (i.e. deleting test records, etc.), as well as being available the day of go-live.	<p>1 day</p> <p>Typically performed on-site</p>
Project Management	Please see comments below	<p>5 - 6 days</p> <p>Typically performed off-site</p>
Sub Total On-site Work – this subtotal is for the number of days we anticipate to perform work “On-site” at JMU premises as indicated in the table for each Phase Deliverable.		<p>13 - 14 days</p> <p>(\$24,700.00 - \$26,600.00)</p>
Sub Total Off-site Work – this subtotal is for the number of days we anticipate to perform work “Off-site” at JMU premises as indicated in the table for each Phase Deliverable.		<p>41 – 61 days</p> <p>(\$61,500.00 - \$91,500.00)</p>
Grand Total		<p>54 - 75 days</p> <p>(\$86,200.00 - \$118,100.00)</p>

Project Management

We will assign an Avante Project Manager to work with your designated University Project Manager to coordinate resources and manage the agreed to implementation activities and milestones as to be defined in our Requirements documentation.

CHERWELL END-USER LICENSE AGREEMENT

THIS END-USER LICENSE AGREEMENT ("EULA"), TOGETHER WITH ANY APPLICABLE CHERWELL ORDER CONFIRMATION FORM THAT REFERENCES THIS EULA AND THE COMMONWEALTH OF VIRGINIA AGENCY CONTRACT FORM ADDENDUM ATTACHED HERETO AS EXHIBIT A (COLLECTIVELY, THE "AGREEMENT"), IS BETWEEN CHERWELL SOFTWARE, LLC, A DELAWARE LIMITED LIABILITY COMPANY ("CHERWELL"), AND THE CUSTOMER IDENTIFIED ON THE ORDER CONFIRMATION FORM ("CUSTOMER"). THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN CUSTOMER AND CHERWELL REGARDING THE CHERWELL SOFTWARE PRODUCTS ("LICENSED SOFTWARE") AND THE MAINTENANCE AND SUPPORT AND PROFESSIONAL SERVICES THAT ARE LISTED ON THE ORDER CONFIRMATION FORM. BY INSTALLING OR USING THE LICENSED SOFTWARE, CUSTOMER ACKNOWLEDGES THAT IT HAS READ AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN THIS AGREEMENT.

1. GRANT OF LICENSE

1.1 Perpetual License. The Licensed Software, which includes all configurable and executable application content or "Blueprints," is licensed to Customer for use subject to the terms of this Agreement. Cherwell hereby grants to Customer and Customer fully accepts, upon delivery, a nonexclusive, nontransferable and perpetual (unless terminated as provided below) right to use only the executable version (no source code) of the Licensed Software. Customer is allowed only the number of concurrent users of the Licensed Software as shown on the Cherwell Order Confirmation Form. If Customer wishes to expand the number of authorized concurrent users covered by the license, Customer can purchase additional user licenses. Customer's authorized concurrent users of the Licensed Software can include Customer, its subsidiaries and affiliates, and their employees and authorized representatives, agents and contractors. Customer may install copies of the Licensed Software in non-production environments, for purposes of testing, development or disaster recovery, provided, however, that such copies cannot be used for production purposes and there cannot be more than one installation of the Licensed Software in a production environment. In no event shall the number of concurrent users in a production environment exceed the authorized concurrent users covered by the license.

1.2 Intellectual Property Rights. The Licensed Software is protected by copyright and other intellectual property laws. Cherwell retains all rights, title and interest in and to the Licensed Software. Customer agrees that this is a license only and that no title passes to Customer. If Customer makes or installs copies of the Licensed Software as provided in this Agreement, the original and all copies of the Licensed Software may not leave Customer's control and are owned by Cherwell. Customer retains all rights to its data.

1.3 Restrictions. To the maximum extent permitted by applicable law, Customer may not resell or otherwise transfer for value the Licensed Software without the written consent of Cherwell. Customer may not export, ship, transmit, or re-export the Licensed Software in violation of any applicable law or regulation, including, without limitation, the Export Administration Regulations issued by the United States Department of Commerce and the United States trade embargoes and economic sanctions administered by the U.S. Treasury Department, Office of Foreign Assets Control, or any such similar law or regulation issued by such other governmental entity which may have jurisdiction over such export. Customer agrees not to: (i) modify, decompile, disassemble or reverse engineer the object code portions of the Licensed Software; (ii) distribute, rent, lease or lend the Licensed Software; or (iii) use the Licensed Software except as expressly permitted under this Agreement.

2. INDEMNIFICATION

2.1 Cherwell shall defend, indemnify and hold Customer harmless against all third party claims, suits, proceedings, costs, damages, losses and expenses (including reasonable attorneys' fees), and judgments incurred, claimed or sustained by Customer arising out of or related to any allegation that any portion of the Licensed Software (including any updates, error corrections, or upgrades thereto), when used solely in the manner and for the purpose for which it was licensed hereunder, violates any patent, copyright, trade secret,

trademark, or other third party intellectual property right. If a claim is filed in a court or other administrative proceeding seeking to enjoin the use of the Licensed Software, Cherwell shall either: (i) at Cherwell's cost, procure for Customer the right to continue to use the relevant portion of the Licensed Software; (ii) replace, at Cherwell's cost, the relevant portion of the Licensed Software with a substitute product that functions substantially in accordance with the applicable specifications for that portion of the Licensed Software; or (iii) at Cherwell's cost, modify the Licensed Software so that it does not infringe or misappropriate, provided that the Licensed Software, as modified, continues to perform substantially in accordance with the applicable specifications.

2.2 Cherwell's indemnification obligation pursuant to the above shall not apply to the extent any infringement claim is found to be caused by (i) Customer's use of the Licensed Software in a manner that is not provided for under this Agreement or Cherwell's user documentation; or (ii) Customer's use, operation or combination of all or any component or portion of the Licensed Software with all or any portion of other software, equipment or systems not provided or required by Cherwell. As a condition precedent to any liability of Cherwell, if Customer receives notice of any infringement claims for which indemnification may be available under the above, Customer must promptly notify Cherwell in writing of the infringement claim.

2.3 Cherwell acknowledges that Customer is a state agency represented by the Virginia Attorney General's Office. Customer (on its own and through its legal counsel) shall cooperate in good faith with Cherwell regarding defense, selection of any appointed counsel, and course of resolution, including settlement, of any infringement claim.

3. WARRANTIES AND DISCLAIMERS

3.1 Limited Warranties. Each party represents and warrants to the other that it has the legal power to enter into this Agreement. Cherwell further represents and warrants that: (a) it has the right to grant to Customer the license to use the Licensed Software as set forth in this Agreement without violating any rights of any third party and that, to the best of Cherwell's knowledge, the Licensed Software does not infringe or otherwise violate any intellectual property rights of any third party; (b) the Licensed Software shall operate in material compliance with Cherwell's user documentation; (c) all services provided by Cherwell pursuant to this Agreement relating to the Licensed Software will be performed in a timely and professional manner, by qualified and skilled individuals, and in conformity with standards generally accepted in Cherwell's industry; and (d) the Licensed Software shall be delivered free of any virus or otherwise malicious code, or any code or command intended to bring down the Licensed Software or Customer's computers/networks automatically or upon command or otherwise impair their use.

3.2 Limited Remedy. In the event of any breach of warranty, Customer's sole and exclusive remedy shall be for Cherwell to either correct or replace, at no additional charge to Customer, any portion of the Licensed Software or services found to be defective or, if Cherwell is unable to correct or replace the defect, refund the license fees and any prepaid but unused Maintenance and Support or hosting fees paid to Cherwell by Customer; and in the event Cherwell introduces any virus or such disabling code or commands into the Licensed Software or any of Customer's equipment, make commercially reasonable efforts to restore any and all data or programming lost by Customer as a result of such virus or disabling code.

3.3 Disclaimer. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTIES SET FORTH IN SECTION 3 ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED. CHERWELL DOES NOT WARRANT THAT THE OPERATION OF THE LICENSED SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. EXCEPT AS SET FORTH IN THIS SECTION 3, CHERWELL MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE LICENSED SOFTWARE, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

4. LIMITATION OF LIABILITY; EXCLUSION OF DAMAGES

4.1 Limitation of Liability. To the maximum extent permitted by applicable law and except for Customer's payment obligations under this Agreement and Cherwell's obligation to indemnify Customer under Section 2, each party's entire liability under this Agreement shall be limited to the amount paid by Customer for the Licensed Software, which does not include any amounts paid for related services.

4.2 Exclusion of Consequential and Related Damages. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR LOST PROFITS, LOSS OF USE OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, EXCEPT TO THE EXTENT THAT ANY THIRD PARTY CLAIM SUBJECT TO INDEMNIFICATION UNDER SECTION 2 INCLUDES SUCH DAMAGES. IN PARTICULAR, AND WITHOUT LIMITATION, CHERWELL SHALL HAVE NO LIABILITY FOR ANY DATA STORED OR PROCESSED WITH THE LICENSED SOFTWARE.

5. MAINTENANCE AND SUPPORT AND SERVICES

5.1 General. Maintenance and Support is offered on no less than an annual basis and will commence and be invoiced in accordance with the Order Confirmation Form. Cherwell will invoice Customer for Maintenance and Support renewal fees at least sixty (60) days prior to the end of each term. Maintenance and Support fees increase as Customer adds additional concurrent user licenses. Failure to pay any amount due under this Agreement may result in suspension of Maintenance and Support. If Maintenance and Support is interrupted as a result of expiration or termination, Customer may be charged a reinstatement fee equal to the cost of Maintenance and Support for the period from the date of expiration or termination to the date of renewal.

5.2 Maintenance. "Maintenance" entitles Customer to receive updates, upgrades, patches, bug fixes and new releases or versions of the Licensed Software, including updated documentation, as Cherwell may provide from time to time without requirement of a separate license agreement, and without additional charge other than payment of the annual Maintenance and Support fee.

5.3 Support. Where provided by and purchased from Cherwell, "Support" entitles Customer to technical assistance with Customer's ongoing use of the Licensed Software, Monday through Friday, 6:00 a.m. to 6:00 p.m. (Mountain Standard Time). Cherwell will provide support for the most current version of the Licensed Software and one prior version, including interim releases between the two versions; for example, upon release of version 5.x Cherwell will support version 5.x and 4.x. Cherwell may provide limited support for older versions. Cherwell will use its best efforts to answer Customer's specific questions and provide support in accordance with Cherwell's service and support guidelines. Support does not include any third party products that are not part of the Licensed Software.

5.4 Professional Services. Where provided by and purchased from Cherwell, "Professional Services" may include training, implementation, installation, on-site assistance, customization, and configuration of the Licensed Software. The total "Professional Services" fee quoted on the Cherwell Order Confirmation Form, if any, is an estimate of the number of days required based on Cherwell's current understanding of Customer's stated implementation requirements. A statement of work shall be mutually agreed upon prior to commencement of any Professional Services.

6. TERM/TERMINATION

6.1 Effective Date and Term. This Agreement is effective as of the earlier of the date set forth on the Cherwell Order Confirmation Form or the date Customer first installs or uses the Licensed Software (the "Effective Date"). Customer's right to use the Licensed Software shall continue in perpetuity unless and until Cherwell terminates this Agreement for material breach by Customer. The parties acknowledge and agree that

the license granted pursuant to Section 1 shall survive termination or expiration of Maintenance and Support Services.

6.3 Termination. Either party may terminate this Agreement upon written notice to the other party if the other party fails to cure a material breach of this Agreement within thirty (30) days of written notice of the breach from the terminating party. If Customer elects to terminate only Maintenance and Support for Cherwell's failure to cure a material breach of its Maintenance and Support obligations, Cherwell shall return to Customer any prepaid but unused Maintenance and Support fees, on a monthly pro-rata basis as of the date Cherwell was notified of Customer's intent to terminate. Upon any termination by Cherwell for an uncured breach by Customer, unless such termination is with regard to Maintenance and Support services only, Customer agrees to remove all Licensed Software from its computers, destroy all copies of the Licensed Software, and, upon request from Cherwell, certify in writing its compliance.

7. CONFIDENTIALITY

7.1 Definition. As used in this Agreement, "Confidential Information" means any information, whether oral or written, designated by a party as confidential or that reasonably should be understood to be confidential or proprietary in nature. Customer's Confidential Information shall include Customer data stored or processed with the Licensed Software. Cherwell's Confidential Information shall include the Licensed Software. Confidential Information of each party shall include the terms of this Agreement (but not the fact of its existence), as well as each party's business and marketing plans, financial data, employee data, product plans and designs, and technical information. However, Confidential Information shall not include any information that (i) is or becomes generally known to the public other than by breach of this Agreement; (ii) was known to the receiving party prior to its disclosure; (iii) becomes known to the receiving party after proper disclosure from a third party not under an obligation of confidentiality; or (iv) was disclosed to the minimum extent necessary to comply with a lawful court order or government law or regulation, provided that in the case of (iv) the disclosing party shall provide the other party with advance written notice thereof and reasonably cooperate with the other party to limit disclosure and obtain protective orders or other relief as appropriate.

7.2 Protection. Each party agrees to hold the other party's Confidential Information in strict confidence and to treat such other party's Confidential Information with at least the same degree of care employed with respect to its own Confidential Information (but in no event less than reasonable care). Neither party shall (i) use the other party's Confidential Information for its own account or in any manner not contemplated by this Agreement; nor (ii) disclose the other party's Confidential Information to a third party without the prior written consent of the other party. Both parties shall limit access of each others' Confidential Information to those of its employees, contractors and agents who have a need for such access and who are bound to confidentiality obligations substantially similar to those set forth in this Section. This Section shall survive termination or expiration of the Agreement (for any reason) for a period of three (3) years.

8. MISCELLANEOUS

8.1 Severability. If any of the terms, or portions thereof, of this Agreement are invalid or unenforceable under any applicable statute or rule of law, the court shall reform the Agreement to include an enforceable term as close to the intent of the original term as possible; all other terms shall remain unchanged.

8.2 Entire Agreement. This Agreement constitutes the entire agreement between Customer and Cherwell relating to the subject matter hereof and supersedes all prior and contemporaneous agreements, representations, proposals and negotiations, whether written or oral. Any additions to, or modifications of, this Agreement shall be binding upon the parties only if in writing and executed by a duly authorized representative of Customer and Cherwell. TERMS AND CONDITIONS OF ANY CORRESPONDING PURCHASE ORDER OR OTHER DOCUMENT RELATING TO THE LICENSED SOFTWARE THAT ADD TO OR CONFLICT WITH THE TERMS CONTAINED IN THIS AGREEMENT SHALL BE DEEMED MATERIAL AND ARE REJECTED.

8.3 Waiver. The waiver or failure of either party to exercise in any respect any right provided for in this Agreement shall not be deemed a waiver of any further or future right under this Agreement.

8.4 Past Due Accounts. Any invoices not paid within the time period agreed on the Order Confirmation form and not disputed in good faith may be subject to a monthly finance charge of 1.5% of amounts due or the maximum amount allowed by law, whichever is lower. CHERWELL MAY WITHHOLD ANY APPLICABLE LICENSE KEY OR PASSWORD UNTIL ALL AMOUNTS DUE FOR THE LICENSED SOFTWARE ARE FULLY PAID.

8.5 Assignment. This Agreement is binding upon, and inures to the benefit of, the parties hereto and their respective successors and permitted assigns. A party may not assign any of its rights, obligations, or responsibilities under this Agreement without the prior written consent of the other party, which shall not be unreasonably withheld, except that neither a change in control in the assigning party nor assignment to any entity (other than a competitor of the other party) that controls, is controlled by or is under common control with the assigning party, shall be deemed an assignment in violation of the foregoing; provided, however that the assigning party gives the other party thirty (30) days advance written notice of any such change in control or assignment.

8.6 Choice of Law. This Agreement is governed under the laws of the state of Delaware, without regard to its conflicts of laws principles. This Agreement will not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

8.7 Third Parties. No person who is not a party to this Agreement has or shall have any right to enforce any term of this Agreement and no consent of any third party shall be required for any cancellation or variation of the Agreement. Cherwell may authorize certain third parties, such as value-added resellers or solutions partners ("Partners"), to distribute the Licensed Software and Maintenance and Support Services. Partners are not authorized to modify this Agreement or the rights granted to Customer with regard to the Licensed Software. If Customer purchases Support Services or Professional Services to be performed by the Partner, the terms of any agreement between Customer and Partner for such services shall govern, and Cherwell shall not be liable or responsible for Partner's performance under such agreement.

8.9 Taxes. Unless otherwise stated on an Order form, Cherwell's fees do not include any taxes, levies, duties or similar governmental assessments of any nature, including without limitation value-added, sales, use or withholding taxes, assessable by any local, state, provincial, federal or foreign jurisdiction (collectively, "Taxes"). Customer is responsible for paying all Taxes associated with its purchases under this Agreement. If Cherwell has the legal obligation to remit or collect Taxes for which Customer is responsible under this paragraph, the appropriate amount shall be invoiced to, and paid by Customer, unless Customer provides Cherwell with a valid tax exemption certificate authorized by the appropriate taxing authority. For the avoidance of doubt, Cherwell is solely responsible for taxes assessable against Cherwell based on its income, property or employees.

Signature lines for the EULA are located on the Cherwell Order Confirmation form to which the EULA is incorporated by reference.

EXHIBIT A

**COMMONWEALTH OF VIRGINIA AGENCY
CONTRACT FORM ADDENDUM**

**COMMONWEALTH OF VIRGINIA AGENCY
CONTRACT FORM ADDENDUM TO CONTRACTOR'S FORM**

AGENCY NAME: James Madison University

CONTRACTOR NAME: Cherwell Software, LLC

DATE: September 4, 2014

The Commonwealth and the Contractor are this day entering into a contract and, for their mutual convenience, the parties are using the standard form agreement provided by the Contractor. This addendum, duly executed by the parties, is attached to and hereby made a part of the contract.

The Contractor represents and warrants that it is a(n) ☐ individual proprietorship ☐ association ☐ partnership ☒ corporation ☐ governmental agency or authority authorized to do in Virginia the business provided for in this contract. (Check the appropriate box.)

Notwithstanding anything in the Contractor's form to which this Addendum is attached, the payments to be made by the Commonwealth for all goods, services and other deliverables under this contract shall not exceed Purchase Order Amounts; payments will be made only upon receipt of a proper invoice, detailing the goods/services provided and submitted to James Madison University. The total cumulative liability of the Commonwealth, its officers, employees and agents in connection with this contract or in connection with any goods, services, actions or omissions relating to the contract, shall not under any circumstance exceed payment of the above maximum purchase price plus liability for an additional amount equal to such maximum purchase price. In its performance under this contract, the Contractor acts and will act as an independent contractor, and not as an agent or employee of the Commonwealth.

The Contractor's form contract is, with the exceptions noted herein, acceptable to the Commonwealth. Nonetheless, because certain standard clauses that may appear in the Contractor's form agreement cannot be accepted by the Commonwealth, and in consideration of the convenience of using that form, and this form, without the necessity of specifically negotiating a separate contract document, the parties hereto specifically agree that, notwithstanding any provisions appearing in the attached Contractor's form contract, none of the following shall have any effect or be enforceable against the Commonwealth:


1. Requiring the Commonwealth to maintain any type of insurance either for the Commonwealth's benefit or for the contractor's benefit;
2. Renewing or extending the agreement beyond the initial term or automatically continuing the contract period from term to term;
3. Requiring or stating that the terms of the attached Contractor's form agreement shall prevail over the terms of this addendum in the event of conflict;
4. Requiring the Commonwealth to indemnify or to hold harmless the Contractor for any act or omission;
5. Imposing interest charges contrary to that specified by the Code of Virginia, §2.2-4347 through 2.2-4354, Prompt Payment;
6. Requiring the application of the law of any state other than Virginia in interpreting or enforcing the contract or requiring or permitting that any dispute under the contract be resolved in the courts of any state other than Virginia;
7. Requiring any total or partial compensation or payment for lost profit or liquidated damages by the Commonwealth if the contract is terminated before its ordinary period;
8. Requiring that the contract be "accepted" or endorsed by the home office or by any other officer subsequent to execution by an official of the Commonwealth before the contract is considered in effect;


9. Delaying the acceptance of this contract or its effective date beyond the date of execution;
10. Limiting or adding to the time period within which claims can be made or actions can be brought;
11. Limiting the liability of the Contractor for property damage or personal injury;
12. Permitting unilateral modification of this contract by the Contractor;
13. Binding the Commonwealth to any arbitration or to the decision of any arbitration board, commission, panel or other entity;
14. Obligating the Commonwealth to pay costs of collection or attorney's fees;
15. Granting the Contractor a security interest in property of the Commonwealth;
16. Bestowing any right or incurring any obligation that is beyond the duly granted authority of the undersigned agency representative to bestow or incur on behalf of the Commonwealth.

This Agency contract consisting of this Agency addendum and the attached Contractor's form contract constitute the entire agreement between the parties and may not be waived or modified except by written agreement between the parties.

This contract has been reviewed by staff of the agency. Its substantive terms are appropriate to the needs of the agency and sufficient funds have been allocated for its performance by the agency. This contract is subject to appropriations by the Virginia General Assembly.

IN WITNESS WHEREOF, the parties have caused this contract to be duly executed, intending thereby to be legally bound.

AGENCY by 
Title Buyer Senior, JMU
Printed Name LeAnne Beatty Smith

CONTRACTOR by 
Title Sr. Business Development Manager
Printed Name Rusty Ray

JUL. 2009

**COMMONWEALTH OF VIRGINIA AGENCY
CONTRACT FORM ADDENDUM TO CONTRACTOR'S FORM**

AGENCY NAME: James Madison University

CONTRACTOR NAME: Avante Solutions, Inc.

DATE: August 26, 2014

The Commonwealth and the Contractor are this day entering into a contract and, for their mutual convenience, the parties are using the standard form agreement provided by the Contractor. This addendum, duly executed by the parties, is attached to and hereby made a part of the contract.

The Contractor represents and warrants that it is a(n) ☐ individual proprietorship ☐ association ☐ partnership ☒ corporation ☐ governmental agency or authority authorized to do in Virginia the business provided for in this contract. (Check the appropriate box.)

Notwithstanding anything in the Contractor's form to which this Addendum is attached, the payments to be made by the Commonwealth for all goods, services and other deliverables under this contract shall not exceed Purchase Order Amounts; payments will be made only upon receipt of a proper invoice, detailing the goods/services provided and submitted to James Madison University. The total cumulative liability of the Commonwealth, its officers, employees and agents in connection with this contract or in connection with any goods, services, actions or omissions relating to the contract, shall not under any circumstance exceed payment of the above maximum purchase price plus liability for an additional amount equal to such maximum purchase price. In its performance under this contract, the Contractor acts and will act as an independent contractor, and not as an agent or employee of the Commonwealth.

The Contractor's form contract is, with the exceptions noted herein, acceptable to the Commonwealth. Nonetheless, because certain standard clauses that may appear in the Contractor's form agreement cannot be accepted by the Commonwealth, and in consideration of the convenience of using that form, and this form, without the necessity of specifically negotiating a separate contract document, the parties hereto specifically agree that, notwithstanding any provisions appearing in the attached Contractor's form contract, none of the following shall have any effect or be enforceable against the Commonwealth:

1. Requiring the Commonwealth to maintain any type of insurance either for the Commonwealth's benefit or for the contractor's benefit;
2. Renewing or extending the agreement beyond the initial term or automatically continuing the contract period from term to term;
3. Requiring or stating that the terms of the attached Contractor's form agreement shall prevail over the terms of this addendum in the event of conflict;
4. Requiring the Commonwealth to indemnify or to hold harmless the Contractor for any act or omission;
5. Imposing interest charges contrary to that specified by the Code of Virginia, §2.2-4347 through 2.2-4354, Prompt Payment;
6. Requiring the application of the law of any state other than Virginia in interpreting or enforcing the contract or requiring or permitting that any dispute under the contract be resolved in the courts of any state other than Virginia;
7. Requiring any total or partial compensation or payment for lost profit or liquidated damages by the Commonwealth if the contract is terminated before its ordinary period;
8. Requiring that the contract be "accepted" or endorsed by the home office or by any other officer subsequent to execution by an official of the Commonwealth before the contract is considered in effect;

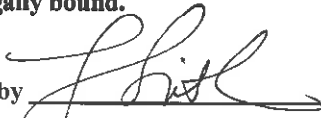
9. Delaying the acceptance of this contract or its effective date beyond the date of execution;
10. Limiting or adding to the time period within which claims can be made or actions can be brought;
11. Limiting the liability of the Contractor for property damage or personal injury;
12. Permitting unilateral modification of this contract by the Contractor;
13. Binding the Commonwealth to any arbitration or to the decision of any arbitration board, commission, panel or other entity;
14. Obliging the Commonwealth to pay costs of collection or attorney's fees;
15. Granting the Contractor a security interest in property of the Commonwealth;
16. Bestowing any right or incurring any obligation that is beyond the duly granted authority of the undersigned agency representative to bestow or incur on behalf of the Commonwealth.

This Agency contract consisting of this Agency addendum and the attached Contractor's form contract constitute the entire agreement between the parties and may not be waived or modified except by written agreement between the parties.

This contract has been reviewed by staff of the agency. Its substantive terms are appropriate to the needs of the agency and sufficient funds have been allocated for its performance by the agency. This contract is subject to appropriations by the Virginia General Assembly.

IN WITNESS WHEREOF, the parties have caused this contract to be duly executed, intending thereby to be legally bound.

AGENCY by



Title Buysen Senior, JMU

Printed Name LeeAnne Beathy Smith

CONTRACTOR by



Title President

Printed Name Steven Waxler

JUL. 2009

September 15, 2014

James Madison University
Procurement Services MSC 5270
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807

LeeAnne,

This letter is in response to the "Round 2 Follow-up Questions" you provided via email Wednesday September 10, 2014.

We have provided additional clarification for each time beginning on page two (2) below.

Please let me know if you would like to schedule a call to review.

Thank you,

Rich

A handwritten signature in blue ink, appearing to read "Rich", on a light-colored background.

Rich Clark
Avante Solutions, Inc.
rclark@avantesolutions.com
Mobile: (401) 301-9924

Avante Response to Round 2 Questions

Below we have provided our additional clarification to each item in red:

2. Can JMU customize who gets update emails as the call progresses? (*ex: someone calls the helpdesk about an issue that may take a day or two to complete resulting in a few emails being sent to the originator. The originator wants us to keep his/her supervisor in the loop*) Can JMU add the supervisor to the call so that updates go to the originator AND the supervisor(s)?

Yes. This is a common request and Cherwell can support the ability to add a user to receive notifications for any ticket.

Q: Can you supply additional detail around this? The intention of the question is around the ad hoc ability to add people into the notification chain.

There are a number of ways this can be supported in Cherwell. One method would be to add the feature of selecting and linking additional contacts to the Support/Incident/Service Request (or any ticket type). These contacts would be included in the notification chain. Any added contact could then receive any notifications, both automated and manual.

3. Can JMU send out broadcast messages to users? (*ex: A department routinely sends out emails to all of their users letting them know that the servers will be down during certain times and an additional message when the system is back online*).

Yes, Cherwell fully supports broadcast messages.

Q: Can you supply additional detail around this?

Yes, broadcast messages can be sent where an analyst with the appropriate security rights can run a One-Step that has been configured as an email template and have the email sent to all or a specific group of users. Multiple email templates can be supported by configuring multiple One-Steps that would contain specific email content and as well prompt for further content from the analyst while the process is being executed. Furthermore email One-Steps can be configured where the One-Step can send the email to a specific set of users, for example by department or location.

4. Identify how status updates are provided at the task/resource level and the incident/Problem/Service request level.

Status updates are configurable and can be drive by notifications such as emails, updates to dashboards, and or text alerts as examples. This applies to all record types including Task, Incident, Problem, Service Request, Change record etc. Status updates can be configured specific to each record type, so for example if a Task is assigned to a user they receive an email, if an Incident is assigned to a user it can show on their home dashboard as well as in their queue (note they can also receive an email alert). The status updates and notifications with Cherwell are very flexible and robust.

Q: We need two statuses available for an Incident/Problem/Service Request. We would like one status at the resource level which allows each resource (person) to identify the status of her/his particular effort or responsibility. Since an Incident/Problem/Service Request may have multiple assigned resources we would like each resource to be able to enter her/his individual status. We would also like to have a status at the Incident/Problem/Service Request level. This status allows the Incident/Problem/Service Request manager to identify the overall status of the Incident/Problem/Service Request. Identify how status updates are provided at the task/resource level and the incident/Problem/Service request level.

Cherwell fully supports both a Status at the Incident level, as well as at the Resource level. At the Resource level this comes in the form of Tasks. Tasks are linked to the Incident record and assigned to a Resource or group of Resources. Below is a description of the functionality followed by a screen print:

The Incident has a Status (see the top left of the screen) just below the Incident 102107 label that shows the Status; in this case the Incident is “In Progress”. In addition any Task assigned to a Resource also has a Status (note the lower half of the Incident is showing an associated Task assigned to Henri). Just to the right of the Task 10165 label shows the Status, in this case this Task is in the “Acknowledged” Status. Please also note that all the Classifications and Status’ are configurable to your specific descriptions.

The screenshot displays the Cherwell Service Management application interface. The top section shows the Incident 102107 record, which is currently in the "In Progress" status. The interface is divided into several panels. On the left, there's a sidebar with navigation options like "Task Panel", "Journals", "Portal Comments", "Tasks (1 Open)", "Similar Incidents", "Configuration Items", "SLM History", "Reason for Breach", "Change Request", and "Problem". The main content area is divided into three steps: "Step 1: Record the Details", "Step 2: Classify", and "Step 3: Investigate the Incident". Step 1 includes fields for Description, Call Source, and Priority. Step 2 includes fields for Service, Category, Subcategory, Priority, and Primary CI. Step 3 includes fields for Connectivity and TCP/IP Protocol. Below the main content area, there's a section for "Task 10165" which is currently in the "Acknowledged" status. This task is assigned to "You" (3rd Level Support) and has a due date of 9/10/2014. The task description is "Check the mail server".

7. How many of your higher education clients run this application on-premise versus hosted? Do those using hosted utilize web services?

Cherwell does not specifically disclose client data however over 10% of the Cherwell customer base is Higher Education, of that 60% are deployed On-premise and 40% are deployed as SaaS.

Q: Can you respond to portion of the question around web services?

Currently Cherwell does not retain this type of information for our clients so there is no way to provide this information (however we suspect a number of hosted clients currently use Web Services).

8. What authentication method does mobile use for both a hosted or an on-premise implementation?

In the current version Cherwell only uses internal authentication capabilities. In coming releases more options for mobile authentication will be provided.

Q: Can you supply more detail here?

In general Cherwell supports multiple methods for user authentication which includes; Internal, LDAP, SAML and Windows. You can have a different Authentication methods based on the different client types (in the screen below we provided the example for the Authentication settings for the Browser Client where we selected LDAP as the authentication method as an example).



Currently for mobile devices Cherwell supports authentication via the internal Cherwell mechanism only (which means the mobile user authenticates via a Cherwell ID and Password that is generated either by the system or by the user). The driver behind this is one of security, as most mobile devices are typically outside your network. Due to this the mobile user would not have any way to authenticate using a Windows or LDAP login. The screen below shows the Authentication settings for mobile devices.



9. The demonstration was often run with the user logged into the laptop as a user with administrative privileges. Do you have to run the client as administrator?

No, role based security drives the user experience. In our demonstration system we have a role called “Administrator” that has 100% access and rights to the system, which allows us to show any feature and capability in the system. When you deploy Cherwell you will create your own roles that will drive the user rights and experience based on their login credentials.

Q: This question was around Windows privileges to run the client, not application privs. Can you address?

The user on the workstation does not need network or windows Administrator privileges to run the client. There is no difference in user functionality.

August 27, 2014

James Madison University
Procurement Services MSC 5270
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807

LeeAnne,

The purpose of this letter is to provide you with a response to the questions that you provided in your email Monday August 25, 2014 regarding our response to RFP# LBS-764.

As requested we have provided this response prior to your deadline of Wednesday, August 27 at 3 pm EST.

Please let me know if you would like to schedule a call to review.

Thank you,

Rich

A handwritten signature in black ink, appearing to read 'Rich Clark', on a light-colored background.

Rich Clark
Avante Solutions, Inc.
rclark@avantesolutions.com
Mobile: (401) 301-9924

Avante Response to Questions

James Madison University (JMU) – RFP #LBS-764 “Information Technology Service Management System”
Avante Negotiation/Clarification Questions
August 25, 2014

1. How can disparate groups be accommodated within the proposed solution? (*ex: separate service desk type functions*) How is licensing affected? To what extent can these areas manage their processes, security, etc.?

Yes. Cherwell fully supports multi-tenant capabilities where multiple groups can leverage the same instance of Cherwell yet have completely different functionality, user experience and data segmentation. For example the system can be deployed regionally where only certain processes/capabilities (for example Self-Service, Incident, Knowledge and Request at location “A” and Incident, Problem, Change at location “B”) are deployed. Cherwell fully supports multi-tenancy and has a number of clients who utilize this to support different user groups within the same organization. Cherwell offers multi-tenancy data format, including 'siloes' data, to maintain data segmentation between different user groups (ie. different campuses or different departments).

The licensing is not affected and is an advantage with Cherwell as they utilize a concurrent license model. You can elect to have 1 pool of licenses for all groups to share, as well as reserve a certain number of licenses for a specific group or groups. This provides the ability to maximize the access to the system while minimizes the number of licenses you will require. You only need to purchase licenses to cover the total number of IT active users logged into the system at peak utilization.

For Administration you can elect to provide credentials and permissions to any group or department to manage their “system”. Each group can have 1 or more designated Administrators that can have as much or as little permissions as you decide. You can grant them full Administration capabilities or provide some limited capabilities; this all depends on the training and ability for the Administrator for each specific group.

We would be happy to schedule a brief call to review this topic and answer any additional questions as Cherwell provides very flexible capabilities around a multi-tenant deployment.

2. Can JMU customize who gets update emails as the call progresses? (*ex: someone calls the helpdesk about an issue that may take a day or two to complete resulting in a few emails being sent to the originator. The originator wants us to keep his/her supervisor in the loop*) Can JMU add the supervisor to the call so that updates go to the originator AND the supervisor(s)?

Yes. This is a common request and Cherwell can support the ability to add a user to receive notifications for any ticket.

3. Can JMU send out broadcast messages to users? *(ex: A department routinely sends out emails to all of their users letting them know that the servers will be down during certain times and an additional message when the system is back online)*

Yes, Cherwell fully supports broadcast messages.

4. Identify how status updates are provided at the task/resource level and the incident/Problem/Service request level.

Status updates are configurable and can be driven by notifications such as emails, updates to dashboards, and or text alerts as examples. This applies to all record types including Task, Incident, Problem, Service Request, Change record etc. Status updates can be configured specific to each record type, so for example if a Task is assigned to a user they receive an email, if an Incident is assigned to a user it can show on their home dashboard as well as in their queue (note they can also receive an email alert). The status updates and notifications with Cherwell are very flexible and robust.

5. How does licensing work when the licensed number of active users is exceeded?

Users who attempt to log in over the license level get a message stating that there are currently no licenses available, please attempt to login again shortly (note this notification is configurable).

As we described earlier the Concurrent license model in Cherwell provides a number of advantages. You can reserve a group of licenses for specific users (groups of users) to be sure they always have access to the system; this is typically set up for the tier 1 help desk users.

In addition you can configure the “time out for inactivity” window so for users that have not been active for a set time period will automatically be logged out, freeing up the license.

6. What are the details around “portals/collaboration” on the roadmap?

At a high level the 5.0 version has an improved browser interface which narrows the gap between all the capabilities in the Rich client versus the Browser client. Cherwell is committed to have full parity between all user clients (Rich, Browser and Mobile) and version 5.0 that will be released in September provides this for the technician browser portal. From a collaboration perspective Cherwell is also enhancing their interactions capabilities, for example with the Self-Service more direct communication options, as well as between technicians.

7. How many of your higher education clients run this application on-premise versus hosted? Do those using hosted utilize web services?

Cherwell does not specifically disclose client data however over 10% of the Cherwell customer base is Higher Education, of that 60% are deployed On-premise and 40% are deployed as SaaS.

8. What authentication method does mobile use for both a hosted or an on-premise implementation?

In the current version Cherwell only uses internal authentication capabilities. In coming releases more options for mobile authentication will be provided.

9. The demonstration was often run with the user logged into the laptop as a user with administrative privileges. Do you have to run the client as administrator?

No, role based security drives the user experience. In our demonstration system we have a role called "Administrator" that has 100% access and rights to the system, which allows us to show any feature and capability in the system. When you deploy Cherwell you will create your own roles that will drive the user rights and experience based on their login credentials.

10. Confirm your agreement with the following:

PRIME CONTRACTOR RESPONSIBILITIES: The contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime contractor. The contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.

Avante confirms and agrees.

11. Confirm your agreement with the following:

SUBCONTRACTS: No portion of the work shall be subcontracted without prior written consent of the purchasing agency. In the event that the contractor desires to subcontract some part of the work specified herein, the contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.

Avante confirms and agrees.

12. Confirm that Avante has provided examples of all documents (e.g. software license, business agreement, and/or service maintenance agreement) that would require incorporation into a contract award (Appendix C of your initial proposal). If not, provide any additional agreements that would require incorporation.

We confirm all the required agreements were included in our Appendix C of our RFP response. Please see below where we have provided a brief overview:

Cherwell Agreements

We provided all the Cherwell Agreements that will need to be executed in our RFP response, and for convenience we have provided those agreements as an attachment to this response. These include:

The Cherwell Order Confirmation Form – this will be executed between the University and Cherwell and confirms the purchase terms for the cost of the licenses as well as the appropriate license agreement. We provided Order Confirmation Forms based on an anticipated number of licenses, one for the Perpetual and one for the SaaS. If we are the selected vendor we can update accordingly (for number of licenses, type of license and type of deployment).

The EULA – this governs the use of the software for the Perpetual license model (attached to the Order Confirmation form for the Perpetual option).

The EUSA – this governs the use of the software for the Subscription license model (attached to the Order Confirmation form for the Subscription option).

The Cherwell Hosting Addendum – this is applicable if you elect for Cherwell to host your deployment (attached to the Order Confirmation form for the Subscription option).

Avante Agreements

We included our Professional Services Terms and Conditions in our RFP response and have also included this as an attachment to this response.

13. Firms that request JMU to sign additional agreements shall be required to sign the Commonwealth of Virginia Contractor’s Addendum Form prior to JMU signing their form. The COV Addendum Form shall govern in the event of conflict. Avante and/or Cherwell should return a signed copy of this addendum as relevant. (COV Addendum form attached)

Avante has signed the form and included with our response.

14. Describe the exit strategy that JMU would employ at the end of a contract with Avante for a Cherwell ITSM solution. For example, how would JMU retrieve their data from a SaaS deployment? What is the timeline for JMU to request data transfer at the end of a contract? What is the timeline for Avante or Cherwell to provide requested data to JMU? Which formats would this data be provided in?

As a customer you have access to your data at all times. This applies to both hosted and on-premise deployments. You can simply access the Administration interface and complete a full data backup at any time. For the SaaS deployment at the end of the contract (if not renewed) Cherwell will provide a full back-up within 30 days of the expiration. The format will be based on the size of the data store (for example for the full data a copy of the complete MS Database). Cherwell will then destroy via DOD standards all customer data that resides in their hosting environment.

15. Avante indicates that there is an additional price break for subscription pricing when 100+ concurrent licenses are used. Provide the per license subscription pricing for 100+ concurrent licenses.

Yes, we have provided this in the Pricing table "A" in item 18 below.

16. Indicate any price breaks that would be extended in the Perpetual/Purchase License Model for the purchase of 100+ licenses.

We have provided this in the Pricing table "B" in item 18 below.

17. It is JMU's understanding that at the beginning of the engagement with Avante for a Cherwell Service Management implementation, a Statement of Work (SOW) shall be mutually agreed upon, which shall provide a formal scope of the requirements leading up the date when JMU will go-live.

- a. Provide your firm's best hourly rate for offsite professional services.

\$1,500.00 is our best rate for all off-site Professional Services (note this is discounted from our list price of \$1,650.00). This is the daily rate and the hourly rate is \$187.50.

- b. Provide your firm's best rate for onsite professional services, which shall include all travel expenses.

\$1,900.00 is our best rate for all on-site Professional Services which includes travel and expenses (note this is discounted from our list price of \$2,000.00). This is the daily rate and the hourly rate is \$237.50.

18. Confirm that the following is your firm's **best** pricing for Cherwell Service Management Licensing and indicate any additional discounts that would be available to JMU:

Below we have completed the pricing table with our best and final pricing as you have requested. We would like to highlight that we have provided additional discounts from what we initially provided in our RFP response.

A. SaaS Subscription License Model

Item	Unit Cost	Units	Total Cost
Cherwell Service Management Subscription fee-monthly cost	\$110.00/license for 1-24 concurrent licenses \$95.00/license for 25-99 concurrent licenses \$90.00/license for 100-199 concurrent licenses	TBD	TBD
Annual Maintenance & Support			Included in subscription cost
Annual Hosting Fee			Included in subscription cost
Annual VPN fee (optional and not applicable if installed on-premise)	\$3000.00	Optional- TBD	TBD
Optional –Additional Hosted Non-production Environment <i>(1 (one) included in subscription)</i>	\$10,000.00	Optional -TBD	TBD

B. Perpetual/Purchased License Model

Item	Unit Cost	Units	Investment
Cherwell Service Management	\$3,350.00/license for 1-24 concurrent licenses \$2,800.00/license for 25-99 concurrent licenses \$2,500.00/license for 100-199 concurrent licenses	TBD	TBD
Annual Maintenance and Support	\$600.00 for 1-24 concurrent licenses \$500.00 for 25-99 concurrent licenses \$500.00 for 100-199 concurrent	TBD	TBD
<i>If Cherwell hosts then include the following</i>			
Annual Hosting Fee	\$1000.00 for 1 – 49 licenses \$2,500.00 for 50 - 199	TBD	
Annual VPN Fee	\$3000	Optional- TBD	TBD

19. It is stated on page 101 of your initial response that JMU would need to sign a *System Requirements and Definition Report* prior to the commencement of implementation. Provide a sample *System Requirements and Definition Report* that contains the same language that JMU's document would contain.

We have provided a sample Requirements document as a separate attachment to this response. Note this is confidential and should not be shared with anyone outside the University as it contains system design elements. We have marked that file as confidential.

20. Confirm that JMU may purchase any of the following and describe the benefits and drawbacks of each method of purchase:

Preface to this item - Cherwell offers licenses under a concurrent user model. The concurrent model is defined as; allowing you to have as many active logins as you have purchased/subscribed licenses. The Cherwell system includes the functionality that allows you to reserve any or all of the concurrent users to specific individuals and / or departments and business units to ensure that they are always able to get access to the system. The feature can be enabled or removed at your choosing.

The concurrent license model has a number of advantages that we described in our RFP response and as we discussed with your evaluation team during our on-site vendor presentation. One of those advantages is how the concurrent model supports part-time users as well as shift workers. These part-time and shift workers are sharing the pool of concurrent licenses that the University has purchased/subscribed to. As these users tend to be more occasional, this means the fewer number of licenses that will be required to support the usage. When compared to systems that have a named license model this becomes a significant advantage and significant lower cost of ownership.

Regardless of the licensing or deployment model, the software is the same and the license model is concurrent.

We confirm that JMU may purchase any of the following options described below. We have provided a few benefits and drawbacks:

a. Subscription SaaS

Benefits for subscription are lower initial costs. Drawback is long term license costs are higher than perpetual.

Benefits for SaaS are no infrastructure to manage. Drawback is restricted access to the database and integration to other systems can require more complexity.

b. Perpetual SaaS

Benefit for Perpetual is the capital expense for the licenses is higher initially however you can manage the accounting benefits.

Benefits for SaaS are no infrastructure to manage. Drawback is restricted access to the database and integration to other systems can require more complexity.

c. Subscription On-Premise

Benefits for subscription are lower initial costs. Drawback is long term license costs are higher than perpetual.

Benefit for On-premise includes better access to the database, as well as significantly easier to integrate with other third party systems.

d. Perpetual On-Premise

Benefit for Perpetual is the capital expense for the licenses is higher initially however you can manage the accounting benefits.

Benefit for On-premise includes better access to the database, as well as significantly easier to integrate with other third party systems.

21. How would Avante and JMU handle the implementation given that JMU IT staff who would be involved in the implementation have other full-time responsibilities within the department? Also, if the implementation needs to stop temporarily and resume at a later point, how would that work?

Managing the staff for the implementation is a factor of sound Project management. As part of our deployment methodology we will assign an Avante Project Manager and require the University to also designate their internal Project Manager. Together both Project Managers will ensure that all mutual staff are managed accordingly.

In the event the implementation needs to stop temporarily the respective Project Managers will document the “stop point” and work progress and activities so they are prepared to resume the project efficiently once the University provides the go-ahead.

Below we have provided an overview of our Project Management:

Avante provides Project Management as part of every deployment of Cherwell Service Management. The University will be assigned a Project Manager (PM) once the contract is

executed and that individual will remain your PM and single point of contact throughout the deployment. We will also require that you designate a Project Manager from the University to work with our PM throughout the engagement.

Our PM works closely with the designated University PM and is involved during the design, development and implantation stages of a project to ensure that project timelines, scope, budget, deliverables are all met. Our PM will provide all necessary documentation including; a formal Project Plan, Statement of Work, Requirements Documentation, Testing Plan Samples for UAT, Status Reports, Work Schedules, Training Materials, and Time Summary Reports. In addition we will provide weekly status reports that include:

- Overall summarization of the Project progress.*
- Deliverables achieved.*
- Deliverables remaining, progress, and expected delivery on each.*
- Issues and risks affecting specific deliverables and the Project schedule or any other aspect of the Project.*

22. Identify any potential fees to James Madison University that have not yet been disclosed or not yet identified in your proposal.

No other fees are applicable.

We would like to highlight that we did include some optional capabilities around Asset Discovery and Loan Management on page 92 of our response.

23. Confirm your understanding that as an agency of the Commonwealth of Virginia, James Madison University cannot make pricing confidential. After the award of RFP# LBS-764, all pricing submitted, either successful or unsuccessful, will be made part of the public record.

Avante confirms understanding.

24. As a public agency of the Commonwealth of Virginia, James Madison University cannot deny access to public records. Confirm your understanding that portions of your firm's response to RFP# LBS-764 that should be marked as confidential or proprietary in nature should be done so in writing.

Avante confirms understanding.

25. Avante shall agree to strike the following language from your proposal, *"The University must dispute any work within 7 (seven) days from receipt of applicable invoice; otherwise, all invoices are due within thirty days from the invoice date."*

JMU will agree to communicate any invoicing disputes within a timely manner in order to facilitate payment in accordance with the Code of Virginia, §2.2-4347 through 2.2-4354, Prompt Payment.

If our proposal is accepted Avante confirms we will modify the language as you requested.

26. Identify the amount of sales your company had during the last twelve months with each of VASCUPP Member Institution. A list of VASCUPP Members can be found at: www.VASCUPP.org

Cherwell – The College of William and Mary is a Cherwell client and have \$20,000.00 in sales over the past 12 months.

Avante – we confirm that Avante Solutions has not had any sales revenue during the past twelve months for any VASCUPP Member Institution.

27. Reference pg. 124, paragraph 2 of your firm’s initial response to RFP# LBS-764. Provide clarification on what is meant by “minor changes” to the RFP terms and conditions.

Upon review of the Terms and Conditions included in your RFP, specifically in “VII. Special Terms and Conditions” there are a number of items that are specific to software that are covered in the Cherwell Software Agreements (EULA, EUSA, and Hosting Addendum) we included in our RFP response (as well as attached to this response). Some of those items have slight differences from the language in the Cherwell agreements including the following items: B, O, Q, R, S, T, U, V, W, X and Y.

We did not find any major discrepancies and if we are awarded the bid we fully expect to negotiate and resolve any discrepancy with acceptable language changes.

To give a specific example item “Q Excessive Downtime” is addressed in the Cherwell Hosting Addendum which we included in our RFP response, which we have included the specific language below (from page 137 of our RFP response):

2. SYSTEM AVAILABILITY; EXCUSED OUTAGES

2.1 Availability. *The Licensed Software shall be available 99.98% of the time per month, except for Excused Outages. Excused Outages are defined as unavailability of the Licensed Software caused by (a) Scheduled Maintenance, as defined below; (b) Customer’s systems or Customer’s actions or inactions; and (c) circumstances beyond Cherwell’s control or the control of Cherwell’s authorized agent or service provider, including without limitation, acts of God, acts of government, flood, fire, earthquakes, civil unrest, acts of terror, strikes or other labor problems, and equipment and telecommunications failures, delays, attacks or intrusions , provided*

Cherwell or its authorized agent or service provider takes reasonable and commercial care to prevent such failures, delays, attacks or intrusions.

2.2 Scheduled Maintenance. *Scheduled Maintenance is defined as routine maintenance that occurs on a designated day and time each month and out of band or emergency maintenance that occurs only during designated non-peak hours. Cherwell will provide Customer with at least 48 hours advance notice of any Scheduled Maintenance and any change to the designated days and times of Scheduled Maintenance. Cherwell reserves the right to perform emergency maintenance as necessary and will promptly notify Customer of any downtime caused by the emergency.*

2.3 Notification and Cooperation. *In addition to the Scheduled Maintenance notice above, Cherwell will promptly notify Customer of any service outages via email or telephone. All notices will include a recovery time estimate. Cherwell will attempt to resolve outages within the time estimated but any timeframes are estimates only and are not guaranteed. Cherwell will also notify Customer when the outage is resolved and services have been restored. Customer acknowledges that in certain circumstances system unavailability may be caused by issues with Customer's computers or systems and agrees to cooperate with Cherwell to determine the source of the outages.*

2.4 Service Credits. *In the event the Licensed Software is not available as set forth above, Customer shall be entitled to a Service Credit equal to the value of the down time (on a pro-rata basis, using Customer's annual hosting fee), applied as a credit on Customer's next invoice. Customer must request a Service Credit in writing to Cherwell within 15 days of the end of the month for which a Service Credit is requested, and provide sufficient detail necessary to support the Service Credit. In the event Customer is entitled to Service Credits over any three consecutive months, or for any five months during a 12-month period, then notwithstanding any other provision of the Agreement, Customer shall have the right to terminate this Addendum and receive a pro rata refund of any prepaid but unused hosting fee.*

A decorative graphic featuring three sets of concentric blue circles of varying sizes. Two sets are in the upper right, and a larger one is in the bottom right. Thin blue lines intersect the circles and extend across the page.

Avante Solutions

Professional Services Requirements Definition

Prepared for:

CUSTOMER

Phase 1

Version 2.2

Tuesday, August 26, 2014

Notices

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Version Control

Version	Date	Change Details
1.0	4/21/2014	First Draft
2.0	4/24/2014	Changes made as per April 23 call
2.1	May 1, 2014	Small addition to Page 45 – Data Migration
2.2	May 14, 2014	Adding Release and other changes answer/incorporate feedback from May 8

Distribution List

Name	Company
CUSTOMER	CUST
Richard Corry	Avante Solutions, Inc.
Faron Roth	Avante Solutions, Inc.
Lorin Lybbert	Avante Solutions, Inc.

Executive Summary

The purpose of this document is to initially provide a written framework and a basis for go-forward discussions and a working relationship between Avante Solutions, and CUST on a proposed ITSM Solution.

This document will define the functional capabilities that will support CUST's deployment:

- Breakdown applicable to this project include:
 - Employee Profile
 - Incident
 - Service Request
 - Problem
 - Change
 - Release
 - Configuration Management (CMDB)
 - Knowledge
 - IT Project Management
 - Self Service

Detailed Requirements – Employee Profile

Employee Profile

The following profile will be added, changed or updated as part of the implementation.

Note: All required fields to have red border when fields.

** Additional field changes will be identified once the source data for import is identified and reviewed.

The following is a screenshot of the existing form that will be customized to contain the above fields. A link is planned to launch a browser to view the customer's location. This is dependent upon required data to be pulled from AD. Social Information and fields will be removed. SAM Account Name, Mobile Carrier and Network Id are to be removed

Contact Manager

Employee

Status: **New** Next: Active

Breached Incidents: **0**

Open Incidents: **0**

I Want To:

- [View Detailed Date/Time Information](#)
- [Add a Configuration Item](#)
- [Create an Incident](#)
- [Prehire](#)
- [More..](#)

[Run Resume](#)

Identification

Full name: ☐ VIP

Pre: First: Middle: Last: Suffix:

Department: SAM Account Name:

Title: Manager:

Details

Building/Site: Phone:

Floor/Room: Mobile:

Location Type: Mobile Carrier:

Address: E-Mail:

Town/City: Network ID:

State/County: Zip/Postcode: Employee Status:

Notes: SLA Subscription Level:

Last Survey Date:

Social Information

Twitter Handle:

Facebook Url:

LinkedIn Url:

Personal E-Mail:

The source data will come from MS AD. An AD import job will need to be configured for nightly updates.

Record Status (OOB)

- New
- Prehire
- Active
- Disable User Account
- Terminated

Employee Status

- Full-Time
- Part-Time
- Temporary
- Contractor
- Remote Access Only

It is expected that CUST will review Employee Status and provide Additional values as needed.

Linked Major Objects

Incidents:

A One-to-Many relationship is established with Incident in the Cherwell Out of the Box Deployment.

An additional relationship will be established with Incident identifying the Customer as the Requestor.

CMDB:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Integration

The out of the box Cherwell LDAP / AD connector will be used for User (Licensed Users) import., providing the ability to create user accounts with Windows Login for the licensed users.

Email integration will be configured with an email account setup to use the current Microsoft Exchange. This will require Exchange configuration and setup.

Telephony Integration will be setup allowing for Screen Pops to be made. This will require CUST to script the provided Cherwell command line to enable the screen pop capability.

Data Migration

Customer data will be imported with a scheduled job from Active Directory. This will be mapped to the Internal Customer profile object.

Detailed Requirements – Incident & Service Request

Incident & Service Request- Detail Form

The following section outlines the gap changes to meet the requirements that will be supported in the deployment of Incident/Service Request Management Module.

Incident Profile

The following profile will be added, changed or updated as part of the implementation.

Note: All required fields to have red border when fields empty.

Incident		
Field	Type	Notes
Record Details		
Add - Reporter Name	Lookup	Will be used for Alternate Contact Person
Add - Reporter Contact Email	Text	Auto-filled from Alternate Contact
Add - Reporter Contact Phone	Text	Auto-filled from Alternate Contact
Notify Reporter	Logical	Check box to enable/disable notification going to linked Reporter
Notify Requestor	Logical	Check box to enable/disable notification going to linked Requestor
Record Public ID	Text	ID field uniquely identify record
Resolved	Date Time	Captures Date time when ticket was resolved
Resolved by	Text	Captured the technician to resolved the record
Responded	Date Time	Captures the date time when the technician responded to the New ticket.
Responded by	Text	Captures the name of who responded to the ticket
Count Reassignments	Number	Increments each time the record is assigned to a new Team ownership
Customer Contacted?	Logical	[Required] Located on Resolution tab
Correct Classification?	Logical	[Required] Located on Resolution tab
Expedited Reason	Text	[Require] when Urgency is Expedited
Escalation Count	Number	Increment each time the record has an escalation against it.

Incident / Service Request Form

The following screenshot shows the current Incident form in the Out of the Box Cherwell Application. The layout will change slightly to support the CUST requirements, and additional Alternate Contact Person details.

A link will be added to load Location Map. It is expected that CUST will identify Location Map ID with in AD.

A “Reporter” will be added to allow documenting who is Requesting Help and who is Reporting the issue. An indicator will be added for both the Reporter and Requestor to enable/disable notifications being sent.

An analyst will only be able to assign a record to an Individual level of a team they belong to, otherwise they will only be permitted to assign at the Team Level. Tickets will be assigned to a Team using the Owned by Section on the left portion of the Screen. Records ownership changes will be recorded. In Cherwell 4.60e Short Description is included. There is a VIP image that will appear for VIP Customers (Not Shown below). It will appear slightly to the right of the Requestor Name field.

Incident Statuses and Process Actions

The following represent the valid statuses for an Incident record. Once the request is created, the status will be driven by the status buttons on the toolbar.

Status	Available Actions
New	Begin Work <i>** Only set using automated interface (email monitor, Event and Self-Service).</i>
In Progress	Set Pending, Resolve <i>** In Progress Status will be the default status for all Incidents and Service Requests initiated manually.</i>
Pending	Remove Pending Status (Off Hold)
Resolved	Close
Closed	Reopen
Button	Action
Begin Work	Sets status to 'In Progress' Only available if Status is currently set to New.
Set Pending	Sets status to 'Pending'.
Remove Pending Status	Sets status to 'In Progress'.
Resolve	Sets status to 'Resolved'. Sends email to Customer, system auto-closes after 3 Days
Close	Sets Status to 'Closed'
Back Date	Adjusts the dates for Create and Responded to an earlier date. Intended to be used for "Walk Up" tickets where an issue was reported personally but not documented until a later time/date.

Incident Priority Matrix

The Priority Matrix will be updated to support CUST's requirements. This is an example of the matrix from the out of the box system. It is expected that CUST will provide their required Priority Matrix for implementation. Incidents marked as Priority 1 may be flagged as a Major Incidents.

By selecting the Priority from the matrix Priority, Impact(Column Header) and Urgency(Row Header) fields will be populated with the associated values.

	Company	Trading	Department	Individual
Emergency	1	2	2	3
Major	2	2	3	4
Standard	3	3	4	5

Service Request Priority Matrix

This is an example of the matrix from the out of the box system for Service Request. It is expected that CUST will provide their required Priority Matrix for implementation.

By selecting the Priority from the matrix Priority, Impact(Column Header) and Urgency(Row Header) fields will be populated with the associated values.

	Must Have	Should Have	Whenever Possible
Expedite	1	2	3
Standard	2	3	3

Classifications

The classification of the Incident and Service Request is done using the classification fields of Service, Category and Sub Category. It is expected that CUST will provide their required classification values for implementation. CUST will also need to provide instruction regarding what level will drive the SLA.

It is anticipated that a fourth level of Classification will be added as Subcategory and subcategory will be moved down to another classification field.

Service:

Category:

Subcategory:

Call Source

The Call Source field is used to identify the source of how the Incident or Service Request was created.

Default value: Phone

Call Source	Comments
E-mail	Auto generated by an incoming email to a monitored email box. These are emails that are generated by a person.
Event	Auto generated by an incoming email to a monitored email box where the sender is an event management monitoring application (Argent).
Phone	Default – Customer called in to report and issue or request something.
Portal	Incident or Service Request was generated via the Self-Service Portal
Chat	Incident or Service Request was entered following a chat session.
Walk up	Analyst was approached by a customer in person.
Voice Mail	Analyst retrieved a voice mail and recorded the details in an Incident or Service Request

Incident and Service Request Templates

An Incident/Request Template, or Quick-Ticket, is a one-step that is built to help streamline the process of logging issues or requests that commonly come into the Service Desk. An example is Password Reset, where the description, classification, and resolution are all standard responses. A list of items will be built, with the assistance of the CUST Team, to provide the Service Desk with a list of templates that can quickly create, auto-fill, and close these repetitive tasks.

It is expected that CUST will provide at minimum 2 Quick Ticket samples they would require for use in the system and have these created as part of the implementation.

Linked Major Objects

Customer:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment. An additional One-to-One relationship will be created to identify the Requestor

Major Incidents:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment.

Problem:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment. A Problem will be created automatically upon the close of all Major Incidents

Change:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment.

CMDB:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment. A filter may be applied to restrict the list of CI's according to the Record classification.

Supporting Tabs

QA:

A from extension tab will be created as part of this Deployment. It is expected that CUST will provide a list of Questions for Incident/Service Request.

Resolution:

Incident / Service Request Resolution Form

The following is the Resolution form used for both Incident and Service Request.

Resolution Details

Close Description:

Cause:

Submit to KB

Resolved on First Call

The Resolution form is located on the Resolution details Tab. Note: This tab will be displayed all the time and the current visibility rules removed.

Two check box fields will be added to this form: “Has the client been Contacted?” and “Is classification correct?”.

Journals:

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

A one-step action will be added as a way for the Analyst to communicate to the Customer. On the occasion that a request cannot be actioned for a period of time this communication will allow the analyst to provide details as to why and when the request will be actioned. The comments will be sent to the Customer via an email and a Journal entry will be made to document the communication. If the communication was verbal the analyst would manually create a Journal Note.

Journal - Note

Created 4/11/2014 3:57 PM by Henri Bryce

☒ Mark as Read ☒ Show In Self Service

Quick Entry:

Pri:



Tasks:

Tasks will be used with Service Requests for assigning specific work to a team and an individual. Incident assignment will be done with the Incident Owned by fields. The following is the task form and object configuration. Under the “I want to:” task dependency can be established.

Title will be change to Short Description

The screenshot shows a 'New Task' form. At the top, there's a navigation bar with 'New Task', 'Record 1 of 1', and a 'View' dropdown. Below this, the task is identified as 'Task 10518' with a status of 'New'. Action links include 'Next: Acknowledge', 'Decline this Task', and 'Reassign this Task'. The 'Owned By' section shows 'Owned By Team: - not yet assigned -' and 'Owned by: - not yet assigned -', with a 'Take Ownership' link. The 'I want to:' section offers 'Add to my Outlook calendar', 'Link to upstream Task', and 'Add downstream Task'. The main form area has a 'Title' field (highlighted with a red border), a 'Type' dropdown, and a 'Description' text area. On the right, there are checkboxes for 'Task is for a future date/time' and 'Track time spent' (set to 0.00 hours), a 'Close Code' dropdown, and a 'Completion Details' text area.

Approvals:

The approval tab provides the list of approvers and their vote for the specific Service Request in question. The following is the approval form as it is configured out of the box.

Service Request may require one or more Approval records to fulfill the request. It is expected that CUST will define, through record classification, what Approvals are required. Approvals may be created automatically or manually. A button and associated workflow will be added to “Request More Information”.

The screenshot shows an 'Approval 11017' form with a status of 'Waiting'. It includes fields for 'Approver Name' and 'Approval Team', both with dropdown menus. Below these are three buttons: 'Approve', 'Deny', and 'Abstain'. There is a 'Deadline' field with a calendar icon. A 'Details' section contains a large text area. At the bottom, there is a 'Comments' section with another large text area.

“Request More Information” when triggered from the button will prompt the user for comments to be sent to the record owner. An email will be sent to record owner to provide more information.

“Request More Information” when triggered from an Approval Email. An Email will be created with the Monitored Email Account as the “To:” address. The email will be processed Creating and email to be sent to the Record Owner requesting more information.

Business Processes

The Cherwell Business Process Server is responsible for sending Email Notifications to represent Status changes such as Records created and Closed, as well as automating certain aspects of the Lifecycle of the record.

Escalation and Notification are documented below.

The following lists the Business Process rules that will be configured for the Incident Management deployment. It is expected that CUST will provide email content.

Name:	Notify - Impacted User/Initiator When a ticket is Created
Trigger:	When a Ticket is Created
Email Sent To:	Customer
Subject:	{ticket type} {ticket ID} has been created.
Body:	<p>Thank you for contacting the CUST Service Desk.</p> <p>This is an automated response to inform you that we have logged your {ticket type}. If this request is urgent, please call the Service Desk.</p> <p>Your tracking number for this {ticket type} is {ticket.id}.</p> <p><u>{TicketType} Details:</u></p> <p>Description: Incident.Description</p> <p>If you wish to request a status update please contact us quoting reference number {TicketID}, E-mail inquiries should be sent to "".</p> <p>Thank you,</p>

	CUST ServiceDesk
Name:	Notify - When Ticket is Resolved
Trigger:	When Ticket is Resolved
Email Sent To:	Customer
Subject:	{ticket type} {ticket ID} has been resolved.
Body:	<p>Your {ticketType} {ticketID} is now in the resolved status. This ticket will not be worked on in its current state. If this was not resolved to your satisfaction this ticket can be reopened within the next 7 days.</p> <p><u>{TicketType} Details:</u></p> <p>Description: {description}</p> <p>Resolution: {resolution if ticket type = service request than this is filled in with “completed” }</p> <p>If this ticket has not been resolved to your satisfaction, please contact the Service Desk quoting this number {TicketID}, E-mail inquiries should be sent to “”</p> <p>Thank you, CUST Service Service Desk</p>
Name:	Notify - When Task is Created
Trigger:	When a Task is Created
Email Sent To:	Team or Assignee if not Blank
Subject:	You have been assigned a task in ticket {ticketID}
Body:	<p>A Task has been assigned to you under the Task.Assigned To Team team by Task.CreatedBy on Task.CreatedDateTime for Task.ParentTypeName Task.ParentPublicID.</p> <p>{ticket type} details: {CustomerDisplayName}</p> <p>Description: <i>Ticket.Description</i></p> <p>Task notes: {task notes}</p>
Name:	Notify - When Approval is Created
Trigger:	When an Approval is Created on a Service Request
Email Sent To:	Approver
Subject:	{Record type}({ticketID}) requires your approval
Body:	<p>Your approval is required to proceed with Service Request {ticketID}. The Service Request details are as follows:</p> <p><u>Click here to Approve</u></p>

	Click here to Deny Click here to Request More Information View in Portal Recipient: {Requestor Name} Request Type: {Classification details} Target Delivery: {Target Date} Description: {Description} Approval notes: {approval notes}
Name:	Notify – More Information Required
Trigger:	When Button is pressed or Approval: Request More Information is processed
Email Sent To:	Record Owner
Subject:	{Record type}({ticketID}) requires more information
Body:	{Approver Name} has requested more information before approving this request. See comments section below Recipient: {Requestor Name} Request Type: {Classification details} Target Delivery: {Target Date} Description: {Description} Comments: {Comments from approver}
Name:	Automated Priority 1 Notify Manager
Trigger	Priority 1 Incident Created and in “In Progress” Status
Email Sent To:	Manager will be notified.
Name:	Automated Notify Manager on Reassignment Breach
Trigger	Incident Reassignment count is greater than 3
Email Sent To:	Manager will be notified.
Name:	Automated Task Creation for Service Requests
Trigger	Based upon specific Defined Service Requests
Action	Create Tasks TBD
Name:	Automated Problem Creation for every Major Incident Closed
Trigger	When every Major Incident is closed
Action	Create Problem TBD
Name:	Automated Surveys
Trigger	Closed Incident Records – Rule Every 10 th Closed Incident. This can be changed if required.
Action	Create Survey, link survey to Incident and Customer record. Send email to Customer with survey link in the email.
Name:	Record Placed on Pending
Trigger	Pending Process Action
Action	Analyst will be prompted for reason. This will allow the “Pending More information” to be documented.

Name:	Notify – When Customer has not been contacted within 24 Hours
Triger	When Customer has not been Contacted within 24 hours of Task Creation and repeated every 24 hours (Using Work Hours)
Action	Email to record owner and manager
Name:	Notify – SLA Breach
Triger	When SLA has been breached
Action	Email to record owner and manager
Name:	Notify – Survey Score Breach
Triger	When a minimal score is breached
Action	Email to the manager

Customer Surveys

Customer surveys will be sent based upon and Incident being closed. The rule requires the frequency of sending surveys. The frequency is currently set of every 10th closed incident. A condition will be added so that a customer will only receive one survey per month.

The following survey form and questions are available for the implementation. It is recommend that CUST review the questions and provide guidance to any changes required to the questions supplied out of the box.

When a survey receives a very low score a notification will be sent to the Manager.

Survey: Incident 102208



We appreciate the recent opportunity for the IT department to serve you. We always strive to improve upon our service, by meeting your expectations and needs. Thank you for taking a moment to fill out this survey. This data will help us improve our service to you in the future.

Thank you for your participation!

Details of your recent incident# 102208:

Technician: Henri Bryce

Description: something not working

Please rate the service you received on your recent incident:

	Absolutely	Yes	Sort of	Not really	No
The service was completed in a timely manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I received quality service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The technician was knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The technician was courteous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Excellent	Satisfactory	Poor
Please rate your experience as a whole	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please enter any additional comments you have about your experience:



Specifics Forms

The Specifics Forms will be shown in the area of the Incident module labeled as 'Step 3' when applicable. When a Specifics form is built and linked to the classification that is selected, it will appear in the area below the Incident details. It is anticipated that Specific Forms will be deployed for both Incidents and Service Request in this phase of the implementation.

An example of a specific form would be for trouble shooting printing problems. An example of the form is listed below.

1st. Call Resolution:

- | | |
|--|--|
| <input type="checkbox"/> Is the power on? | <input type="checkbox"/> Paper Jam? |
| <input type="checkbox"/> Any loose cables? | <input type="checkbox"/> Toner Low? |
| <input type="checkbox"/> Out of Paper? | <input type="checkbox"/> Is it Online? |

Print Error Code

- ☐ Check Print Queue for Error Code

Symptom/Error:

Cause:

Notes:

Email Monitor

An email monitor will be configured to monitor

- Incoming emails for new Incident/Request creation
 - There will be an Internal Customer account in Cherwell created to capture all unknown email address "Unknown Customer"
- Responses from customer for existing Incidents/Requests
- Service Request Approval replies
 - Approved
 - Denied
 - Request more information
- Any number of Email accounts can be monitored

An email monitors will be configured each identified account. It was discussed that each BT area will have a monitored account. It is expected that CUST will provide email accounts and credentials.

Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

The out of the box dashboards will be used as a starting point for the implementation. An Operational dashboard for technicians (analysts) will be configured to show user specific Tasks, Incidents and Service Requests.

The following is an example of an operational dashboard that will be configured. This dashboard will be configured based upon further discussions once the system objects (Incident and Service Requests) are configured as per the requirements.

The Global IT Dashboard has widgets that will show the Workload and Task Workload by Team

Monday
April 14 2014

Executive 0.0
Customer Satisfaction

Global IT 54
Incidents and Requests

My Work 6
My Open Incidents

Incidents 47
Total Open Incidents

Requests 7
Total Open Requests

Problems 4
All Open Problems

Changes 9
Open Change Requests

Projects 0
All Open Projects

CMDB 14
Total Assets

Reporting 129
Incidents this Year

Dark Theme
High Res

MY WORK
Filter: Within last 1 month

My Status

Incidents and Requests Owned by Me

Type	ID	Customer Name
Incident	102223	Eric Cox
Incident	102227	Eric Cox
Incident	102232	Eric Cox
Incident	102235	Eric Cox

Tasks Owned by Me

Task ID	Title	Owned By	Status
No records found			

Team Status

Total Tickets: 8, Incidents: 8, Tasks: 35, VIP Tickets: 7

Priority One: 2

Problems Owned by My Team

Problem ID	Priority	Status	Service
10220	1	Resolved	Printing
10166	2	Work in Progress	Printing
10217	3	Work in Progress	Printing

Open Change Requests Owned by My Team

Change...	%	Proposed Start Date	Scheduled E
10655	75	3/30/2014 12:00 AM	3/30/2014

Open Tasks Owned by My Team

Task ID	Title	Owned By	Status
10496	Test	Andrew Simms	New
10499	Do this ..	Andrew Simms	New

Cherwell Software

Integration

Integration between Cherwell and Varonis will be included in this phase. It is expected that CUST will provide details regarding this integration.

Suggested areas of integration:

- Employee Onboarding
- Access Request
- Create AD Groups
- Create AD Accounts
- Audit Report

Once Varonis has completed the task the Service Request may be closed.

Data Migration

Historical and Active Incidents and Service Requests will be imported from a data export from Serena into Cherwell. It is expected that CUST will provide Avante with data .

Mobile Client

The out of the box dashboards will be used as a starting point for the implementation

Detailed Requirements - Problem

Problem Management - Detail Form

The following section outlines the gap changes to meet the requirements that will be supported in the deployment of the Problem Management Module.

Problem Profile

The following profile will be added, changed or updated as part of the implementation.

Note: All required fields to have red border when fields empty.

Problem		
Field	Type	Notes
Record Details		
Remove – Send Tweet	Link / Button	
Disable Publish Known Error In Portal	Link/Button	

Problems can be created from a Major Incident, Change or manually. It is suggested that a threshold will be set to create Problem Records automatically. CUST needs to identify if/when Problems records are created automatically from a Major Incident.

Problem Form

The following screenshot shows the current Incident form in the Out of the Box Cherwell Application.

Problem 10221

Status: **New** Next: Begin Work

Priority: **0**

Linked Incidents: **0**

Owned By: Assign to...

- select owner -
- select team -
- no e-mail on record -
- no phone on record -

I Want To:

[Take Ownership](#) [Publish to Top Issues List in Portal](#)
[Set as Resolved](#)
[View more status options](#)

Step 1: Identify and Classify

Short Description: [Tweet](#) Services:

Detailed Description: [Add Image](#) Category:

Priority: **0**

Step 2: Investigation and Analysis

Diagnosis: [Impacted CI's](#)

Step 3: Workaround and Known Error

Workaround: ☐ Workaround Exists

[Submit Workaround to Knowledge Base](#)
[Publish Known Error in Portal](#)
[Tweet Known Error](#)

Step 4: Root Cause and Resolution

Resolution: Cause Code:

Problem Statutes and Process Actions

The following represent the valid statuses for Problem record. Once the request is created, the status will be driven by the status buttons on the toolbar.

Status	Available Actions
New	Begin Work
Work In Progress	Set as Resolved
Resolved	Close
Closed	Reopen
Button	Action
Begin Work	Sets status to 'Work In Progress' Only available if Status is currently set to New.
Set as Resolve	Sets Status to Resolved
Close	Sets Status to 'Closed'

Problem Priority Matrix

The Priority Matrix will be updated to support CUST's requirements. This is an example of the matrix from the out of the box system. Problem Priority Matrix will match the Incident Priority Matrix. It is expected that CUST will provide their required Priority Matrix for implementation.

	Company	Trading	Department	Individual
High	1	2	2	3
Medium	2	2	3	4
Low	3	3	4	5

Classifications

The classification of the Problem is done using the classification fields of Service and Category. It is expected that CUST will provide their required classification values for implementation.

It is anticipated that an additional level of classification will be added: SubCategory

Service:

Category:

Linked Major Objects

Incidents:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment

Change:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment

CMDB:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Supporting Tabs

Journals

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

Journal - Note

Created 4/11/2014 3:57 PM by Henri Bryce

☒ Mark as Read ☒ Show In Self Service

Quick Entry:

Pri:

Tasks

Tasks will be used assign work to multiple teams or individuals. The following is the task form and object configuration.

New Task Record 1 of 1 View

Task
10518

Status: New
Next: Acknowledge
Decline this Task
Reassign this Task

Owned By:
Owned By Team: - not yet assigned -
Owned by: - not yet assigned -
Take Ownership

I want to:
Add to my Outlook calendar
Link to upstream Task
Add downstream Task

Title:

Type:

Description:

☐ Task is for a future date/time hours

☐ Track time spent 0.00 hours

Close Code:

Completion Details:

Avante Solutions, Inc.
Phase 1

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PRIVATE AND CONFIDENTIAL

Business Process

The Cherwell Business Process Server is responsible for sending Email Notifications to represent Status changes such as Records created and Closed, as well as automating certain aspects of the Lifecycle of the record.

The following lists the Business Process rules that will be configured for the Problem Management deployment.

Name:	Notify – Assignee / Team
Trigger:	When a Problem Ownership is Assigned
Email Sent To:	Owner or Team
Subject:	You have been assigned a Problem {problemID}
Body:	<p>Your have been assigned Problem Problem {problemID}.</p> <p>Description: {Description}</p>
Name:	Notify – Problem closed
Trigger:	When a Problem closed
Email Sent To:	Service Desk Team
Subject:	Problem {problemID} has been closed
Body:	<p>Problem {problemID} has been closed</p> <p>Description: {Description}</p>
Name:	Notify – Workaround Identified
Trigger:	When problem workaround is documented
Email Sent To:	Service Desk Team
Subject:	Problem {problemID} has a workaround
Body:	<p>Problem {problemID} no has a work around</p> <p>Description: {Description}</p> <p>Workaround: {Workaround}</p>
Name:	Notify – When 30 days No Action
Trigger:	When a Problem record has not been modified within 30 Days
Email Sent To:	Record Owner and Manager
Subject:	Problem {problemID} has been dormant for 30 days
Body:	<p>Problem {problemID} shown no action in the last 30 days</p> <p>Description: {Description}</p>

Email Monitor

None defined.

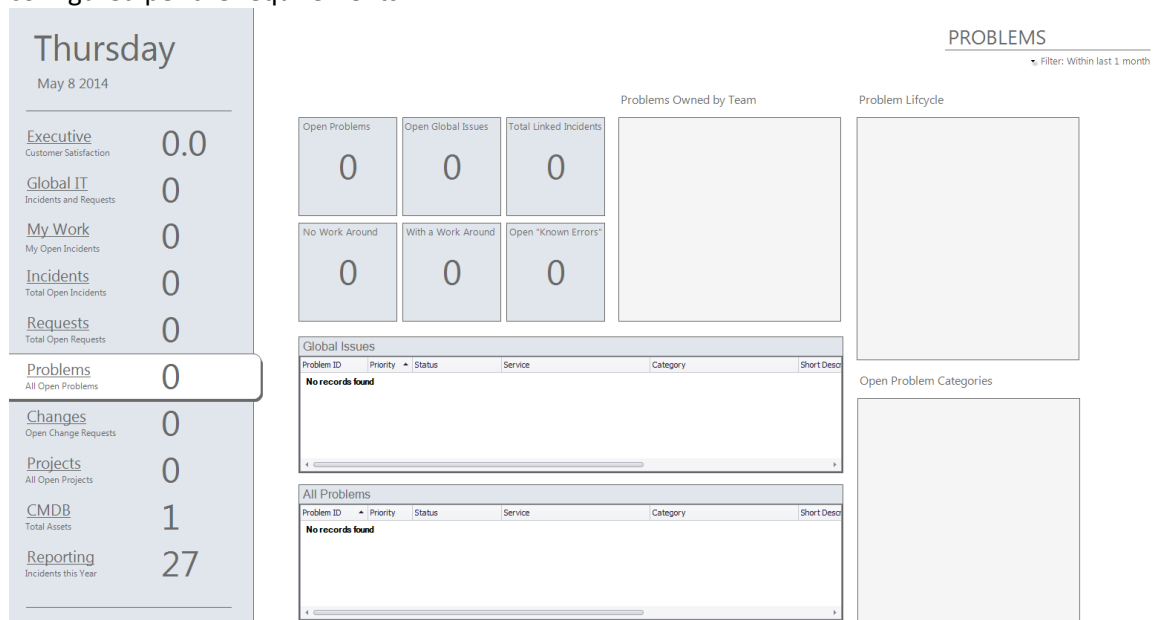
Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

The out of the box dashboards will be used as a starting point for the implementation. An Operational dashboard for technicians (analysts) will be configured to show Problems.

The dashboard will be configured based upon further discussions once the system objects are configured per the requirements.



Integration

None Defined

Data Migration

Historical and current records will be imported from a Serena data extraction. It is expected that CUST will provide the data extraction.

Mobile Client

No mobile access for Problem defined.

Detailed Requirements - Change

Change Management - Detail Form

The following section outlines the gap changes to meet the requirements that will be supported in the deployment of the Change Management Module.

Change Profile

The following profile will be added, changed or updated as part of the implementation.

Note: All required fields to have red border when fields empty.

Change		
Field	Type	Notes
Record Details		
Risk Tab – Questions	Text	<i>Validated list of questions to drive Risk</i>
Outage Required	Yes/No	
Outage From	Date Time	
Outage To	Date Time	

Costing items fields and Summary/Actuals will be removed from the form and tabs.

Title field will be renamed to Short Description to keep fields consistent throughout application.

Required Fields

- Title
- Priority
- Primary CI
- Description
- Proposed Dates
- Outage Required
 - From
 - To

Change Form

The following screenshot shows the current Change form in the Out of the Box Cherwell Application. (Expanded View).

Change 10663

Type: **Normal**

Status: **New** (Next Status: Evaluating)

Priority:

Requestor: **Henri Bryce** (719) 386.7000, Henri.Bryce@RiverTCorp.com

Owned By/Change Mgr: [Assign to...](#)

I Want To:

- [Take Ownership](#)
- [Assign to Team](#)
- [Create PIR Questionnaire](#)
- [Change to Assessing Status](#)

☐ Show All Tabs

☒ Show Related Records

Classify

Change Type: **Normal** ☐ Visible to Customer Portal

Change Title:

Priority:

Description:

Identify Affected CI

Primary CI:

Service Affected:

Service Importance:

Schedule

Proposed Start Date:

Proposed End Date:

Planning: [Change Calendar](#) [Collision Detection](#)

Implement

Percent Complete:

Number of Open Tasks: 0

[Create a New Task](#)

Review

Final Disposition:

Proposed Start Date:

Proposed End Date:

Actual Start Date:

Actual End Date:

Duration In Days: 0

Post Implementation Review Notes:

Summary/Actuals

Actual Cost: \$ 0.00

CapEx Budget Cost:	\$0.00
OpEx Budget Cost:	\$0.00
Total Cost:	\$0.00
Budget Remaining:	\$0.00

Change Statuses and Process Actions

The following represent the valid statuses for Change record. Once the request is created, the status will be driven by the status buttons on the toolbar. The Status values will differ based upon the Change Type. A Pending Status and Process actions will be added to all Change types,

user will be required to add Pending reason. For all Change Types the Evaluating and Assessing Status' will be merged into Assessing.

Change Type	Status	Description	Next Status Text	Alt 1 Status Text
Emergency	New	A New Emergency Change.	Evaluating	Assessing
Emergency	Assessing	The Change manager is reviewing the request and gathering initial data.	Scheduling	
Emergency	Scheduling	The Change is being scheduled.	Submit for Approval	Implementing
Emergency	Approving	The Change is going through the approval process.	Implementing	Denied
Emergency	Pending	The Change will not be actioned pending further information	Activate	Cancel
Emergency	Implementing	Implementing the Emergency Change.	Review	
Emergency	Review	Reviewing the Emergency Change.	Closed	
Emergency	Closed	The Emergency Change is Complete.	ReOpen Change	More...
Emergency	Denied	The Emergency Change has been Denied.	Closed	Resubmit for Approval
Major	New	A New Major Change.	Evaluating	Assessing
Major	Assessing	The Change manager is reviewing the request and gathering initial data	Submit For Approval	Scheduling
Major	Denied	The Major Change has been Denied	Closed	Resubmit for Approval
Major	Pending	The Change will not be actioned pending further information	Activate	
Major	Approving	The Change is going through the approval process	Implementing	Denied
Major	Closed	The Change has been completed	ReOpen Change	More...
Major	Review	Reviewing the Major Change.	Closed	Reassess unsuccessful
Major	Scheduling	The Change is being scheduled	Submit for Approval	Implementing
Major	Implementing	Implementing the Major Change.	Review	Closed
Major	Waiting Approval	The Change is going thru the approval process	Scheduling	Denied
Normal	New	A New Normal Change.	Implementing	Implementing
Normal	Implementing	Implementing the Standard Change.	Review	Complete the Change
Normal	Review	Review the Normal Change	Closed	
Normal	Pending	The Change will not be actioned pending further information	Activate	
Normal	Closed	The Normal Change is Complete.	ReOpen Change	More...

Change Priority Matrix

The Priority Matrix will be updated to support CUST's requirements. This is an example of the matrix from the out of the box system.

It is expected that CUST will provide their required Priority Matrix for implementation.

Urgency	Impact			
		Department-wide	Small Group/VIP	Individual
	Mission-Critical Service	Urgent	Urgent	High
	Support Service	High	High	Normal
	Optional Service	Normal	Normal	Low

Change Type

- Emergency
- Major
- Normal

Change Type will be driven by either Risk Assessment or Priority. CUST will need to decide what direction to take for assigning Change Type

See Approval Section for details on Approval Process for each Approval type

Linked Major Objects

Incidents:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Problem:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Change:

There are NO Relationships with Change in the Cherwell Out of the Box Deployment

Release:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment

Project:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment

CMDB:

A Many-to-Many relationship is established with the Cherwell Out of the Box Deployment

Supporting Tabs

Risk Impact

The Risk and Impact will be set by the questions answered in the Risk Form. CUST will be required to provide further details as additional questions have been requested by CUST. The following is the out of the box risk form. It is anticipated that this will be matrix driven or built into a chart.

The Risk values currently are the following and are auto set based upon the number of questions checked off.

- Low
- Medium
- High
- Major

Risk Analysis: None

- | | |
|--|--|
| <input type="checkbox"/> Mission or Business Critical? | <input type="checkbox"/> Not During Normal Maintenance Window? |
| <input type="checkbox"/> Fast Track? | <input type="checkbox"/> Requires Service Outage? |

Notes / Effect of not implementing (attach document(s) if necessary and reference in text below):

Technical Analysis

This is the Cherwell out of the box Technical Analysis tab view. These fields will be moved up to the main form.

Technical Analysis (Attach documents if necessary, reference name in fields below.)

Impact:

Necessity:

Feasibility:

Backout Plan

This is the Cherwell out of the box Backout Plan tab view. This field will be moved up to the main form.

Back Out Plan

Back Out Plan (attach document if necessary, reference document name in field below):

Acceptance Criteria

This is the Cherwell out of the box Acceptance Criteria tab view. This field will be moved up to the main form. All Major Change require testing results to be attached.

Acceptance Criteria

Acceptance Criteria (attach document if necessary, reference document name in field below):

Review

This is the Cherwell out of the box Review tab view. Post Implementation Review must be completed by a different user than the Owner for Emergency Changes.

Review

Final Disposition:

Review Notes (attach document(s) if necessary, refer to in text below):

Approvals

The approval tab provides the list of approvers and their vote for the specific change in question. The following is the approval form as it is configured out of the box. A button will be added to “Request More Information”.

Approval 11017		Status: Waiting
Approver Name:	Approval Team:	
<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>	
<div style="display: flex; justify-content: space-around;"> Approve Deny Abstain </div>		
Deadline: <input style="width: 100px;" type="text"/>		
Details: <div style="border: 1px solid #ccc; height: 30px; width: 100%;"></div>		
Comments: <div style="border: 1px solid #ccc; height: 60px; width: 100%;"></div>		

“Request More Information” when triggered from the button will prompt the user for comments to be sent to the record owner. An email will be sent to record owner to provide more information.

“Request More Information” when triggered from an Approval Email. An Email will be created with the Monitored Email Account as the “To:” address. The email will be processed Creating and email to be sent to the Record Owner requesting more information.

Approval process

Normal Changes require the approval of the Change Manager. Additional Approvals can be created if needed.

Major Changes require a multitier approval process: 1. Change Manager Approval, 2. Business Asset Owner Approval (for All application), 3. CAB Approval.

CAB approvals will default to one approval record to designate on behalf of the CAB. On the occasion when a CAB Meeting is not possible a process will set the current CAB Approval record as Abstained and create individual Approval Records for each CAB Member.

Emergency Changes are typically documented after the change has been implemented. Emergency Changes are reviewed by CAB for CAB approval

Journals

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

Journal - Note

Created 4/11/2014 3:57 PM by Henri Bryce

☒ Mark as Read ☒ Show In Self Service

Quick Entry:

Pri:
Normal

Tasks

Tasks will only be used with Change Requests for assigning specific work to a team and an individual. The following is the task form and object configuration.

New Task Record 1 of 1 View

Task
10518

Status: New
Next: Acknowledge
Decline this Task
Reassign this Task

Owned By:

Owned By Team: - not yet assigned -
Owned by: - not yet assigned -
Take Ownership

I want to:

[Add to my Outlook calendar](#)
[Link to upstream Task](#)
[Add downstream Task](#)

Title:

Type:

Description:

☐ Task is for a future date/time

☐ Track time spent 0.00 hours

Close Code:

Completion Details:

Business Process

The Cherwell Business Process Server is responsible for sending Email Notifications to represent Status changes such as Records created and Closed, as well as automating certain aspects of the Lifecycle of the record.

The following lists the Business Process rules that will be configured for the Change Management deployment. It is expected that CUST will provide email content.

Name:	Notify – Emergency Change
Trigger:	When an Emergency Change is Created
Email Sent To:	Email distribution list – All Division
Subject:	Emergency Change {changeID} has been created
Body:	Description: {Description}
Name:	Notify – Requestor on Status Change
Trigger:	Change of status
Email Sent To:	Requestor
Subject:	Change {changeID} status is {status}
Body:	Description: {Description}
Name:	Approvals
Trigger:	Change status change
Create Approval(s)	Create approvals based upon the status of the change and the Change Type. CUST required identifying the Change Approval rules.
Name:	More Information Required
Trigger:	Manually Triggered
Email Sent To:	Requestor
Subject:	Change {changeID} requires further documentation
Body:	The approval process for Change {changeID} has been halted pending further documentation. {Comments from Approver}
Name:	Notify – Manager on Proposed Date Change
Trigger:	Proposal Date Change
Email Sent To:	Requestor's Manager
Subject:	Change {changeID} proposed date change
Body:	Change {changeID} proposed dates have been change... The reason for the date change: {Proposal Data Change Reason} Description: {Description}

Name:	Notify - When Task is Created
Trigger:	When a Task is Created
Email Sent To:	Team or Assignee if not Blank
Subject:	You have been assigned a task in Change {ChangeID}
Body:	<p>A Task has been assigned to you under the Task.Assigned To Team team by Task.CreatedBy on Task.CreatedDateTime for Task.ParentTypeName Task.ParentPublicID.</p> <p>Change Request details: {Requestor} {Change Type}</p> <p>Description: <i>Change.Description</i></p> <p>Task notes: {task notes}</p>
Name:	Notify – 24 Hour Breach
Trigger:	When Customer has not been notified within 24 hours
Email Sent To:	Record Owner and Manager
Name:	Notify – 30 Day No Action
Trigger:	When a Change record has not be actioned within 30 days
Email Sent To:	Record Owner and Manager

Email Monitor

An email monitor will be configured to monitor:

- Change Management Approval replies
 - Approval
 - Denied
 - Request More Information

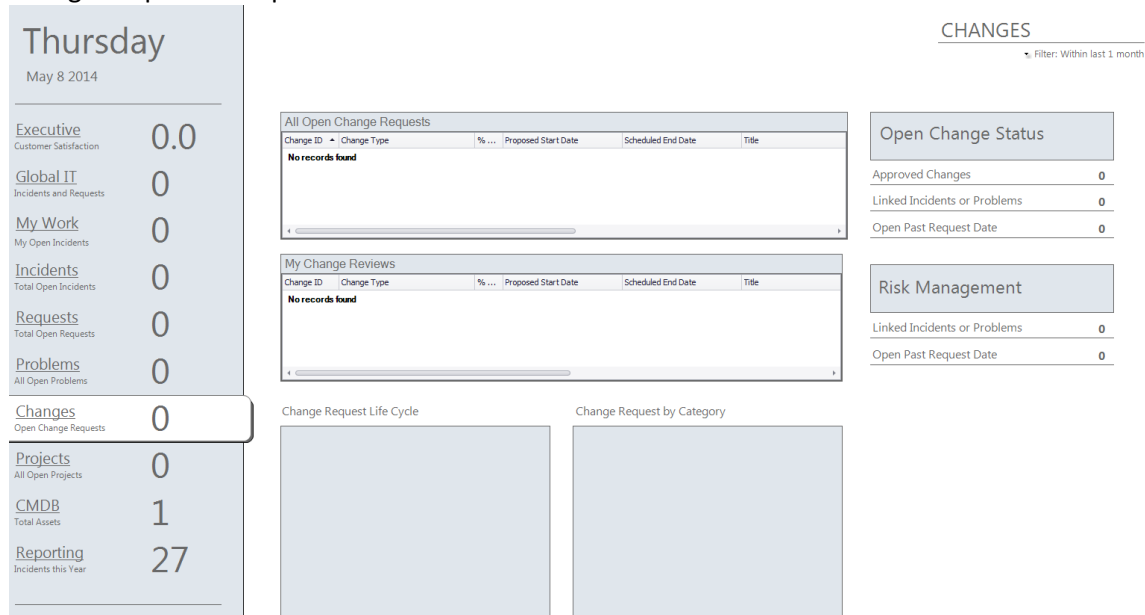
Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

The out of the box dashboards will be used as a starting point for the implementation. An Operational dashboard for technicians (analysts) will be configured to show Changes.

The dashboard will be configured based upon further discussions once the system objects are configured per the requirements.



Integration

None Defined

Data Migration

Historical and current records will be imported from a Serena data extraction. It is expected that CUST will provide the data extraction.

Mobile Client

No mobile access for Change defined.

Detailed Requirements - Release

Release Management - Detail Form

The following section outlines the gap changes to meet the requirements that will be supported in the deployment of the Release Management Module.

Release Profile

The following profile will be added, changed or updated as part of the implementation.

Note: All required fields to have red border when fields empty.

Release		
Field	Type	Notes
Record Details		
Requested by		Hidden
Owned by		Default to the Creator of the record
Planned Start	Date/Time	Change from Date only
Planned End	Date/Time	Change from Date only
Category	Text	Driven by Risk matrix

Security will be set up around Release. Those belonging to the Security Group will have the ability to create a Release Record. Requested By field will be removed from the form and Auto filled with the Owned by value. The Deployed field will be removed. Risk Picklist will be changed to a matrix. In the Cherwell OOB all Emergency Releases require an approval record to be created; this feature will be turned off.

Release Form

The following screenshot shows the current Release form in the Out of the Box Cherwell Application

The screenshot displays the 'Release' form in the Out of the Box Cherwell Application. The form is titled 'Release' and 'New'. It includes a sidebar with 'Status' (Next: Accepted and Start Design), 'Risk', 'Owned By' (with links to select owner/team and notes on phone/email on record), and 'I Want To' (Take Ownership, View Detailed Date/Time Information). The main form has tabs for Design, Build, Test, Plan, and Deploy. The 'Details' section includes fields for Title, Category, Type, Version, Risk, Requested By, Due Date, and Description. The 'Schedule' section includes Planned Start Date and Planned End Date.

Release Statuses and Process Actions

The following represent the valid statuses for a Release record. Once the record is created, the status will be driven by the status buttons on the toolbar.

Status	Available Actions
New	Accepted and Start Work
Accepted	Approve, Reject
Approved	Set as Active, Deploy, Close
Active	Review,
Deployed	Review, Close
Reviewed	Close
Rejected	Close
Closed	
Button	Action
Accept and Start Work	Set Status to "Accepted"
Approve	Set Status to "Approved" <i>CUST to provide Security details as to who can Approve the release.</i>
Reject	Set Status to "Reject"
Set as Active	Set Status to "Active"
Deploy	Set Status to "Deployed"
Review	Set Status to "Reviewed"
Close	Set Status to "Closed"

Release Risk Matrix

It is expected that CUST will provide Matrix values. Risk will drive the Category.

Release Type

The Release Types are as follows:

- Emergency
- Major
- Normal

Linked Major Objects

Change:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment.

CMDB:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment.

Supporting Tabs

Release Roles

The Release Roles offers a way to link Cherwell users to a Release record and identify the Release Role.

Design Phase

This is the Cherwell out of the box Design Phase tab view.

Please identify the scope and content of the change. Attach any supporting documentation as well.

Please provide a justification for this release and any risks associated with the release.

What is the Backout Plan?

☐ Design Complete

Build Phase

This is the Cherwell out of the box Build Phase tab view.

Components

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> Hardware | <input type="checkbox"/> Documentation |
| <input type="checkbox"/> Software | <input type="checkbox"/> Process |

Check for affected CI's/Services

Visual CMDB

On the BUILD COMPONENTS tab please choose CI's associated with the Release.

Please insert any hyperlinks to Build Documentation:

☐ Build Complete


Test Phase

This is the Cherwell out of the box Test Phase tab view.

Title: <input type="text"/>	Test Run
Script: <input type="text"/>	Test Result: <input type="text"/>
Expected Results: <input type="text"/>	Summary: <input type="text"/>
	<input type="checkbox"/> Test Complete

Plan Phase

This is the Cherwell out of the box Plan Phase tab view.

Planned Start Date:	<input type="text"/>
Planned End Date:	<input type="text"/>
	<input type="button" value="Release Planning Calendar"/>
<input type="checkbox"/> End-User Training Required	

Journals

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

Journal - Note		Created 4/11/2014 3:57 PM by Henri Bryce
<input checked="" type="checkbox"/> Mark as Read	<input checked="" type="checkbox"/> Show In Self Service	
Quick Entry:	Pri:	
<input type="text"/>	<input type="text" value="Normal"/>	
<input type="text"/>		

Tasks

Tasks will only be used with Change Requests for assigning specific work to a team and an individual. The following is the task form and object configuration.

The screenshot shows a 'Task' form with the following sections:

- Header:** New Task, Record 1 of 1, View
- Status:** New
 - Next: Acknowledge
 - Decline this Task
 - Reassign this Task
- Owned By:** - not yet assigned -
 - Take Ownership
- I want to:**
 - Add to my Outlook calendar
 - Link to upstream Task
 - Add downstream Task
- Task 10518**
- Title:** [Text Field]
- Type:** [Dropdown Menu]
- Description:** [Text Area]
- ☐ Task is for a future date/time
- ☐ Track time spent: 0.00 hours
- Close Code:** [Dropdown Menu]
- Completion Details:** [Text Area]

Business Process

The Cherwell Business Process Server is responsible for sending Email Notifications to represent Status changes such as Records created and Closed, as well as automating certain aspects of the Lifecycle of the record.

The following lists the Business Process rules that will be configured for the Release Management deployment. It is expected that CUST will provide email content.

Name:	Notify - When Task is Created
Trigger:	When a Task is Created
Email Sent To:	Team or Assignee if not Blank
Subject:	You have been assigned a task in ticket {ticketID}
Body:	<p>A Task has been assigned to you under the Task.Assigned To Team team by Task.CreatedBy on Task.CreatedDateTime for Task.ParentTypeName Task.ParentPublicID.</p> <p>{ticket type} details: {CustomerDisplayName}</p> <p>Description: <i>Ticket.Description</i></p> <p>Task notes: <i>{task notes}</i></p>

Email Monitor

None defined.

Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

A Release dashboard will be created for the implementation. An Operational dashboard for technicians (analysts) will be configured to show Releases.

The dashboard will be configured based upon further discussions once the system objects are configured per the requirements.

Integration

None Defined

Data Migration

None Defined

Mobile Client

No mobile access for Release defined.

Detailed Requirements – Configuration Management

Configuration Management (CMDB)

The Cherwell out of the box will be used for the deployment of the Configuration Management Module.

Configuration Item Profile

Minimal change will be made to the CMDB as part of the implementation.

Note: All required fields to have red border when fields.

Change		
Field	Type	Notes
Record Details		
Date Purchased	Date	<i>Add to Computer</i>
Environment	Text (lookup table)	<i>Add to Server. Values: Prod, Test, UAT, DMZ</i>

Configuration Item Types

The following configuration item types are included in the Cherwell out of the box deployment.

- Computer
- Server
- Printer
- Network Device
- Mobile Device
- Telephony Equipment

The following were added by CUST. I it anticipated that these will be minimal work

- Business Applications
- A/V
- Meeting rooms

Computer Form

The following screenshot shows the current Incident form in the Out of the Box Cherwell Application.

Computer

Status: **New** [Next: Order](#)

Open Incidents: **0**

Primary User:

[- no email on record -](#)
[- no phone on record -](#)

Owned By:

[- select owner -](#)
[- select team -](#)

I Want To:

- [Take Ownership](#)
- [View Detailed Date/Time Information](#)
- [Create a New...](#)
- [Vizualize CI/Network Map](#)
- [Activate this CI](#)
- [View more status options](#)

Details

Asset Tag: [New](#)

Computer Type:

Serial Number:

Primary Use:

Manufacturer:

Model:

Building:

Floor:

Room:

Network

MAC:

Host Name:

User Name:

Friendly Name:

IPv4 Address:

IPv6 Address:

Operating System

OS:

OS Family:

OS Group:

OS Service Pack:

OS Version:

Properties

BIOS Version:

CPU Type: #:

CPU Speed:

Memory: Virtual Mem:

Video:

Financial

Vendor:

Purchase Date:

Invoice ID: ☐ Attached?

Purchase Price:

Purchase Type:

Details ☐ Journals ☐ Related Records ☒ CI Details ☐ Related CIs ☐ Contracts ☐ All Tabs

Server Form

Server

Status

New

Next: Order

Open Incidents

0

Primary User:

- no email on record -

- no phone on record -

Owned By:

- select owner -

- select team -

I Want To:

[Take Ownership](#)

[View Detailed Date/Time Information](#)

[Create a New...](#)

[Vizualize CI/Network Map](#)

[Activate this CI](#)

[View more status options](#)

Details

Asset Tag: 4461

New

Manufacturer:

Server Type: Model:

Serial Number: Building:

Primary Use: Floor:

SLA: Room:

☐ CriticalMaintenance Calendar:

Network

MAC:

Hostname:

Username:

Friendly Name:

IPv4 Address:

IPv6 Address:

Operating System

OS:

OS Family:

OS Group:

OS Service Pack:

OS Version:

Properties

BIOS Version:

CPU Type: #:

CPU Speed:

Memory:

0

 Virtual Mem:

0

Video:

Financial

Vendor:

Purchase Date:

Invoice ID:

☐ Attached?

Purchase Price: \$ 0.00

Purchase Type:

Details☐ Journals☐ Related Records☒ CI Details☐ Related CIs☐ Contracts☐ All Tabs

Printer Form

Printer

Status

New

Next: Order

Open Incidents

0

Primary User:

- no email on record -

- no phone on record -

Owned By:

- select owner -

- select team -

I Want To:

[Take Ownership](#)

[View Detailed Date/Time Information](#)

[Create a New...](#)

[Vizualize CI/Network Map](#)

[Activate this CI](#)

[View more status options](#)

Details

Asset Tag: 4463

New

Manufacturer:

Printer Type: Model:

Serial Number: Building:

SLA: Floor:

☐ CriticalRoom:

Network

MAC:

Host Name:

Friendly Name:

IPv4 Address:

IPv6 Address:

DescriptionProperties

Drive Spaces:

Total Pages:

0

Network Device Form

Network Device

Status

New

Next: Order

Open Incidents

0

Primary User:

No Image

- no email on record -

- no phone on record -

Owned By:

No Image

- select owner -

- select team -

I Want To:

[Take Ownership](#)

[View Detailed Date/Time Information](#)

[Create a New...](#)

[Visualize CI/Network Map](#)

[Activate this CI](#)

[View more status options](#)

Details

Asset Tag: 4454

New

Manufacturer:

Device Type:

Model:

Serial Number:

Building:

SLA:

Floor:

☐ Critical

Room:

Network

Description

MAC:

Hostname:

Friendly Name:

IPv4 Address:

IPv6 Address:

Total Ports: 0

Free: 0

Mobile Device Form

Mobile Device

Status


New

[Next: Order](#)

Open Incidents

0


Primary User:



- no email on record -

- no phone on record -

Owned By:

 - select owner -

- select team -

I Want To:

[Take Ownership](#)

[View Detailed Date/Time Information](#)

[Create a New...](#)

[Vizualize CI/Network Map](#)

[Activate this CI](#)

[View more status options](#)

Details

Asset Tag: [New](#)

Device Type:

Serial Number:

Manufacturer:

Model:

☐ Personally Owned

☐ Non-Standard Product (enter description)

Network

MAC Address:

Hostname:

Friendly Name:

IPv4 Address:

IPv6 Address:

☐ Cellular Enabled

Vendor:

Phone Number:

IMEI:

SIM Card:

Operating System


OS:

OS Family:

OS Group:

OS Version:

Description



Telephony Equipment Form

Telephony Equipment

Status


New

[Next: Order](#)

Open Incidents

0


Primary User:



- no email on record -

- no phone on record -

Owned By:

 - select owner -

- select team -

I Want To:

[Take Ownership](#)

[View Detailed Date/Time Information](#)

[Create a New...](#)

[Vizualize CI/Network Map](#)

[Activate this CI](#)

[View more status options](#)

Details

Asset Tag: [New](#)

Equipment Type:

Serial Number:

SLA:

☐ Critical

Manufacturer:

Model:

Building:


Floor:

Room:

Other

Friendly Name:

Description



Configuration Item Status

The following represent the valid statuses for a Configuration Item. This list can be shared between all CI types or individual Status' can be defined.

- Active
- Down
- In Repair
- In Stock
- In Testing
- New
- Ordered
- Planned
- Retired
- Stolen/MIA
- Surplussed
- Evergreened
- Loaner

Linked Major Objects

Customer:

A One-to-many relationship is established with the Cherwell Out of the Box Deployment

Incidents:

A One-to-many relationship is established with the Cherwell Out of the Box Deployment

Problem:

A One-to-many relationship is established with the Cherwell Out of the Box Deployment

Change:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Release:

A One-to-Many relationship will be included in this Deployment

Project:

A One-to-One relationship will be included in this Deployment

CMDB:

A Many-to-Many relationship is established with the Cherwell Out of the Box Deployment

Supporting Tabs

Journals

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

Journal - Note

Created 4/11/2014 3:57 PM by Henri Bryce


☒ Mark as Read

☒ Show In Self Service

Quick Entry:

Pri:

Normal



Business Processes

None defined.

Email Monitor

None defined.

Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

The out of the box dashboards will be used as a starting point for the implementation.

Integration

None defined.

Data Migration

It is anticipated that a Desktop and Printer data extraction will be provided by CUST for importing into Cherwell to provide CI owner.

A Data Import will be provided by CUST for Servers, AV, Network Equipment, Business Applications

The application listing will be imported into the CI System object. This will contain the name of the application and the owner name + team of who owns the app.

Mobile Client

No mobile access for CMDB defined.

Detailed Requirements – IT Project Tracking

Project - Detail Form

The following section outlines the Out of the Box deployment of the Project Management Module.

Project Profile

Any customization for Project will be held to the end of the project. If there is time remaining the follow customizations for the Project module may be implemented.

Note: All required fields to have red border when fields empty.

Project		
Field	Type	Notes
Record Details		
Project Gate Start (1-5)	Date Time	
Project Gate End (1-5)	Date Time	

Planned Dates will be replaced with the Project gate Fields. Each Project Gate will require an approval. Escalation notifications will be sent when dates are not met.

Project Form

The following screenshot shows the current Project form in the Out of the Box Cherwell Application.

Project

Risk: **Low**

Status: **New** (Next: Assign to PM)

Priority

Requestor: [No Image] - no phone on record - no e-mail on record

Owned By/Project Mgr: [No Image] - select owner - select team

I Want To: Send a Project Health Update, Notify Task Owners to Update Tasks

Initiation Approval Execute Closing

Budget Remaining: \$0.00

Budget Schedule Deliverables Risk

Project Info (Last Edited by)

Project ID: [Field]
Name: [Field]
Description: [Field]
Priority: [Dropdown] (1 High - 5 Low)
Portfolio ID: [Dropdown] Portfolio Manager: Select Portfolio ID to Assign
Location: [Field]

Effort/Cost Info

Estimated Effort: 0.00 (Hours) Actual Effort: 0.00 (Hours)

CapEx Budget: \$0.00
OpEx Budget: \$0.00
Total Cost: \$0.00
Budget Remaining: \$0.00

Schedule Info

Planned Start Date: [Field] Planned End Date: [Field] Actual Start Date: [Field] Actual End Date: [Field]

Project Statuses and Process Actions

The following represent the valid statuses for a Project record. Once the request is created, the status will be driven by the status buttons on the toolbar.

Status	Available Actions
New	Assign to PM
Assigned	Request Approval, Execute Project
Awaiting Approval	Execute Project
Active	Approve Closing
Closed	Re-Open Project
Button	Action
Assign to PM	Sets status to 'Assigned' Only available if Status is currently set to New.
Request Approval	Sets status to 'Awaiting Approval'.
Execute Project	Sets status to 'Active'.
Approve Closing	Sets status to 'Closed'.
Re-Open Project	Sets Status to 'Active'

Project Priority

The Cherwell Out of the Box Priority is 1– 5.

Linked Major Objects

Customer:

A One-to-One relationship is established with the Cherwell Out of the Box Deployment

Incidents:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Problem:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Change:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Release:

A One-to-Many relationship will be included in this Deployment

CMDB:

A One-to-Many relationship is established with the Cherwell Out of the Box Deployment

Supporting Tabs

Business Case

The following screenshot shows the current Business Case form in the Out of the Box Cherwell Application.

The screenshot displays the 'Business Case' form. It features a header bar labeled 'Business Case'. Below the header, there are three main sections: 'Business Reasons:', 'Cost Details:', and 'Resource Details:'. Each section contains a large, empty text area with a vertical scrollbar on the right side. To the right of each text area is a small icon with a green plus sign and a magnifying glass, likely representing a search or add functionality.

Deliverable

The following screenshot shows the current Deliverable form in the Out of the Box Cherwell Application.

The screenshot displays the 'Deliverable' form. It features a header bar labeled 'Deliverable'. Below the header, there are several fields and sections: 'Deliverable ID:' with a small text input field; 'Name:' with a larger text input field; 'Description:' with a large text area and a vertical scrollbar, accompanied by a search icon; 'Requirements:' with a large text area and a vertical scrollbar, also accompanied by a search icon; a checkbox labeled 'Customer Accepted'; 'Start Date:' and 'End Date:' with date pickers; and a small icon with a green plus sign and a magnifying glass.

Project Member

The following screenshot shows the current Project Member form in the Out of the Box Cherwell Application.

Project Member

Project Member is a Customer

☐ Project Notification E-Mail

Name:

Role:

E-Mail:

Phone Number:

Notes:

Risks/Issues

The following screenshot shows the current Risk/Issues form in the Out of the Box Cherwell Application.

Risks/Issues

Category:

Description:

Effect:

Impact:

Status:

Open

Avante Solutions, Inc.
Phase 1

60 | Page

PRIVATE AND CONFIDENTIAL

Meeting Minute

The following screenshot shows the current Meeting Minute form in the Out of the Box Cherwell Application.

The screenshot shows the 'Meeting Minute' form. It includes fields for 'Meeting Minute ID', 'Title', 'Category', and 'Description'. On the right side, there are fields for 'Status', 'Due Date', 'Ball in Court', and 'Ball in Court E-Mail'. A button labeled 'E-Mail BIC' is located next to the 'Ball in Court E-Mail' field.

Cost Items

The following screenshot shows an example of one of the current Cost form in the Out of the Box Cherwell Application.

Cost Items are budgeted line items that define the budget and cost of the ITPT Project. Cost Items include:

- Cost Item – Provisioning
- Cost Item – Tool
- Cost Item – Other
- Cost Item – Labor

The screenshot shows the 'Labor Cost' form. It includes a 'Resource Name' dropdown menu, 'Cost Type' radio buttons for 'CapEx' and 'OpEx', a 'Budget Cost' field showing '\$ 0.00', and a 'Total Cost' calculation. The calculation shows '0.00' (hours) multiplied by '\$ 0.00' (rate) equals '\$ 0.00' (total cost).

Journals

The Journal Form will have the “Show in Self-Service” check box set to false (unchecked) as it’s default value. The current setting is that of Checked.

Journal - Note

Created 4/11/2014 3:57 PM by Henri Bryce

☒ Mark as Read ☒ Show In Self Service

Quick Entry: Pri:

Tasks

Tasks will be used with Project for assigning specific work to a team and an individual. The following is the task form and object configuration.

New Task Record 1 of 1 View

Task 10518

Status: New

[Next: Acknowledge](#)
[Decline this Task](#)
[Reassign this Task](#)

Owned By:

[Owned By Team: - not yet assigned -](#)
[Owned by: - not yet assigned -](#)
[Take Ownership](#)

I want to:

[Add to my Outlook calendar](#)
[Link to upstream Task](#)
[Add downstream Task](#)

Title:

Type:

Description:

☐ Task is for a future date/time hours

☐ Track time spent 0.00 hours

Close Code:

Completion Details:

Business Processes

The Cherwell Business Process Server is responsible for sending Email Notifications to represent Status changes such as Records created and Closed, as well as automating certain aspects of the Lifecycle of the record.

The following lists the Business Process rules that exist for the Project Management deployment. It is expected that CUST will provide email content.

Name:	Notify - When Task is Created
Trigger:	When a Task is Created
Email Sent To:	Team or Assignee if not Blank
Subject:	You have been assigned a task in {Task.ParentTypeName} {ticketID}
Body:	<p>A Task has been assigned to you under the Task.Assigned To Team team by Task.CreatedBy on Task.CreatedDateTime for Task.ParentTypeName Task.ParentPublicID.</p> <p>{Task.ParentTypeName} details: {CustomerDisplayName}</p> <p>Description: <i>Ticket.Description</i></p> <p>Task notes: {task notes}</p>

Email Monitor

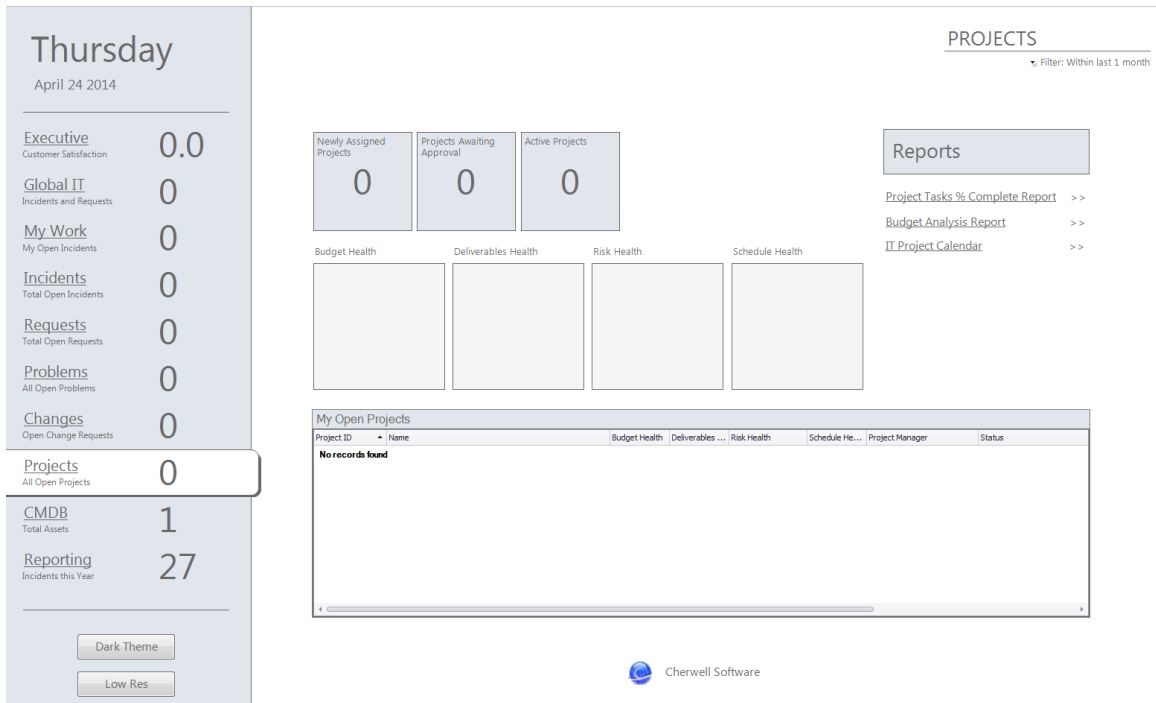
There are no Cherwell out of the Box Email Monitor Configured for Project

Reporting

The out of the box reports will be the starting point for reporting requirements. No additional reports will be configured.

Dashboards

The out of the box dashboards will be used as a starting point for the implementation. A new widget will be created showing users the Projects they are selected as members.



Integration

None Defined

Data Migration

None Defined

Mobile Client

None Defined

Detailed Requirements – Knowledge

Knowledge Management

The knowledge management application will be configured to support the requirements.

The following knowledge sources will be configured:

- Knowledge Articles
- Known Errors
- Open Incidents

Status

The following are the status values for a Knowledge Article:

- New
- Draft
- Submitted
- Approval
- Published

The following is the Knowledge Article Form:

Knowledge Article 10365

Status: **New** (Next: Submit New Article)

Likes: **0**

Dislikes: **0**

Owned By: - select owner -
- select team -

Voting: Do you like this article?
Like Dislike

I Want To: Take Ownership
View Detailed Date/Time Information
Request Approval
Publish this Article

Article used 0 times, including 0 times from the Customer Portal.

☒ Visible to Customer Portal - not yet recorded -

Title:

Solution or Workaround:

Keywords:

Service: Article Type:

Category: Article Source: Cherwell Service Management

Subcategory: Last Imported: n/a

Detailed Requirements – Self Service

Self Service

The Self-Service Portal will be configured and the following changes have been identified. Branding will be required to be changed / updated. This is the color theme and as well any logos.

Not Logged In Page

Configuration will provide general contact information only. All other information will be removed.

Logged in Page

The following changes will be made.

- Remove Discussion Widget from dashboard
- Remove Problem information
- Remove Devices Assigned to Me
- Hide Knowledge from Portal
- Add Announcements Widget – will account for expiry dates. (See Notification Section)
- ITIL terminology will be changed
- Merge Incident and Service Requests in to “My Requests”
- Show My closed Requests

The following is the out of the box Not Logged in Page and Logged in Page of the Self-Service Portal.

Not Logged In

Company Portal
1-800-555-1234

Home Reset Password

Sites

Click to login

Quick Search

Go

Portal Home

Monday, April 14, 2014

Welcome

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc nec risus et est bibendum feugiat vel vel sapien. Fusce condimentum nulla a ante consequat placerat. Cras eu risus a turpis mattis **Click to login** aliquam. Nulla elit nulla, ullamcorper in tincidunt adipiscing, auctor vel magna. Aliquam a odio turpis.

[Company Website](#)

Sed at libero ligula. Quisque euismod *sodales nulla* et congue. Mauris elit leo, rhoncus non adipiscing et, tincidunt sed lacus. Maecenas rutrum mauris quis ante interdum et consectetur neque vehicula. Sed at quam eget diam convallis tincidunt. Sed nec arcu feugiat dolor cursus euismod et ac sem. Morbi mollis

Community Discussion Board

Dinner?
Last Modified March 18 @ 1:40 PM
Im working late...

Network Outage
Last Modified February 11 @ 11:03 AM
Expect to be back up at bio campus ...

Twitter feed outage
Last Modified February 10 @ 8:54 PM
Our twitter will be out of service until next day.

BIO-SCI Network Issues
Last Modified February 10 @ 12:30 PM
We are working on the network issues....

FYI - Outage today ...
Last Modified January 14 @ 10:26 AM
Location ...

lunch?
Last Modified January 14 @ 10:23 AM
whos buying...

Service Desk Hours

Monday - Thursday	8am - 5:00pm
Friday	8am - 4:30pm
Saturday & Sunday	Closed

Logged In

Company Portal
1-800-555-1234

Home Service Catalog Public Documents Charts and Items

Sites

Eric Cox

Quick Search

Go

Portal Home

Monday, April 14, 2014

Requests and Incidents

[Browse Service Catalog](#)
[Report an Outage or Incident](#)
[View the Status of My Requests](#)

Find Help

[Search Our Knowledge Articles](#)
[View Frequently Asked Questions](#)

Manage Devices

[View Devices Assigned to Me](#)
[Request a New Device](#)
[Register a Personal Device](#)

Community Discussion Board

[Create a New Discussion](#)

Streaky printouts
Last Modified 8/19/2013 @ 10:26 AM
Anyone else having trouble with the upstairs printer?

Donuts!
Last Modified 6/26/2013 @ 10:31 AM
There are donuts in the conference room; get them while they last!

Carpool to next week's conference

[Add a Comment](#)

My Items

Open Service Requests	21
Open Incidents	87
Active Discussions	2
Devices Assigned to Me	2

Problems

Top Issues	2
Known Errors	4
Subscribed	8

Service Desk Hours

Incident Form

The incident form will be modified to remove the wizard actions (Next) and will just present a single form for the customer to complete.

- Add Asterisks "*" beside all required fields.

The following is the out of the box form.

Incident 102296

✓ Step 1
Describe Incident

✓ Step 2
Describe Urgency

➔ Step 3
Summary and Submit

Submit

Please Review and Submit



Eric Cox
Phone: 719-555-1212
Dept: Operations

If this is not correct, or if you have alternate contact information, please comment:

Description*

Cant print.

Urgency*

Does this affect multiple users that you know of?
☐ Yes ☒ No

Does this issue prevent you from doing your primary business function?
☐ Yes ☒ No

Submit

The description field will be limited to 800 characters

Add Urgency Questions

- Has this ever worked?
- Attach Error Message.

Service Catalogue

Incident Reporting and Service Requests will be made available on the Portal. CUST will work with Avante to identify Services available on the Portal to create Incidents and Service Requets.

Detailed Requirements - Notification

Notification Management - Detail Form

The following section outlines the requirements that will be supported in the deployment of the Notification Management Module.

Notification Profile

The following profile will be added as part of the implementation.

Note: All required fields to have red border when fields empty.

Notification		
Field	Type	Notes
Record Details		
Notify	Picklist	<i>Values: Users, Team, Location</i>
Type	Picklist	<i>Values: Announcement, Alert</i>
Details	Text	
Notified	Date/Time	<i>Notification Start Date</i>
No Longer Applicable	Date/Time	<i>Notification Expiry Date</i>

Notification will be create manually

Notification Form

The following screenshot shows an example of the Notification form. It is anticipated that the form design and layout will change slightly.

Notification Statuses and Process Actions

The following represent the valid statuses for Notification record. Once the record is created, the status will be driven by the status buttons on the toolbar.

Status	Available Actions
Draft (Default)	Publish, Close
Posted	Hide, Close
Hidden	Publish, Close
Closed	Reopen
Button	Action
Publish	Set Status to 'Posted'
Hide	Set Status to 'Hidden'
Reopen	Set Status to 'Draft'
Close	Set Status to 'Closed'

Client Deliverables

All deliverables have been outlined in the online shared spreadsheet. Avante and the CUST team have been granted access to this document with read and write privileges.

Assumptions - Phase 1

The following assumptions (exceptions) to the original contract were identified below:

Event Monitoring

- Argent event monitoring was identified in as being in scope within the original contract; however it has been identified that this is no longer required for deployment in phase 1.
- Foglight event monitoring was identified in as being in scope within the original contract; however it has been identified that this is no longer required for deployment in phase 1

Configuration Management

- CMDB was as not in scope within the original contract; however it has been identified in the requirements as being required for deployment in Phase 1. This module will be included in the deployment, but no configurations will be made. The module will be implemented “Out of the box” or “as-is” how it is shipped from the manufacturer. If minor configurations need to be made, we can look at the impact of implementing those changes. Only Asset Import is in scope of Phase 1
- Configuration Management was expanded in scope during revision 2.2 of the requirements to include 3 additional CI types and 4 additional data imports. Avante will provide a Change Order that outlines the scope and effort for this addition.

Knowledge Management

- Knowledge Management was not in scope within the original contract; however it has been identified in the requirements as being required for deployment in Phase 1. This module will be included in the deployment. If minor configurations need to be made, we can look at the impact of implementing those changes.

Key Tasks

1. Discuss the Requirements Document to ensure all business requirements have been captured, and make notes around any changes you require.
2. Review those changes with Avante. Avante will revise the requirements documentation for your review.
3. Sign off on the Requirements Documentation
4. Commence configuration and delivery of the system
 - a. CUST to complete the “Client Deliverables” as outlined

Acceptance

Please indicate acceptance of this agreement by signing the duplicate copies in the space provided below, and returning them to us for execution. Thank you.

Professional Services Requirements Definition
Phase 1

CUSTOMER

Avante Solutions, Inc.

Richard Corry
Operations Manager

(printed name & position)

(signature)



Tuesday, August 26, 2014

(date)

July 18, 2014

James Madison University
Procurement Services MSC 5270
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807


LeeAnne,

The purpose of this letter is to provide you with a response to the questions that arose during our presentation Tuesday July 8, 2014.

Please let me know if you would like to schedule a call to review.

Thank you,

Rich

A handwritten signature in black ink, appearing to read 'Rich', on a light-colored rectangular background.

Rich Clark
Avante Solutions, Inc.
rclark@avantesolutions.com
Mobile: (401) 301-9924

Avante Response to Questions

1. Functionality matrix across all clients. (i.e. Today there is not 100% parity between the smart client and the browser client. Avante & Cherwell need to identify which capabilities are not yet available on the Browser Client versus Smart Client.) -

Below is a grid that outlines the capabilities for each of the access options offered by Cherwell; note this reflects the version 5.0 that Cherwell is releasing this summer.

Accessing Cherwell Service Management™

Capabilities	Client	Browser	Mobile	Outlook
Advanced Searching	✓	✓		
Calendar	✓	✓ ³		
Compose Email	✓	✓ ⁶	✓	✓
Create/Edit Records	✓	✓	✓ ²	✓
Dashboards	✓	✓ ³	✓ ¹	
Managers	✓	✓ ³		
Printing	✓	✓ ⁶	✓ ⁶	✓ ⁶
Relationships (Tabs)	✓	✓	✓ ⁴	✓
Run Report	✓	✓ ³		
Run One-Steps	✓	✓ ⁵	✓	✓ ⁵
Visualization	✓	✓ ³		

Footnotes:

1. Twitter, RSS Feed Widget and Command Button (Like launching a report, or running a One-Step) currently not available
2. Additional configuration and One-Steps required
3. Ability to create, edit or delete currently not available
4. Additional configuration required and drill-down currently not available
5. Ability to run One-Steps that access the local machine (MS Excel, etc.) or use the 'Run Program' feature currently not available
6. Using a One-Step

2. Confirm if mobile authentication can be achieved via Shibboleth.

Cherwell mobile access is controlled by the CSM system it's accessing. The authentication methods being used by the CSM instance will be used to authenticate the Mobile device.

3. Cherwell data center uptime statistics for the last year.

"Cherwell does not typically provide this information, however Cherwell guarantees an uptime of 99.98% for their service. For uptime statistics, Power, cooling and Internet is 100% for last year and the same so far for this year.

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Service & Support Guide



Innovative Technology Built Upon Yesterday's Values

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Welcome to Cherwell Maintenance and Support

The success of any organization in the current marketplace and business environment is largely dependent upon its ability to identify customer needs and provide a timely response to changing customer requirements. We understand the importance of providing flexible, powerful software and the value of ensuring a high level of performance. As your business partner, Cherwell Software is dedicated to meeting your service and support needs.

Cherwell is passionate about, and dedicated to, addressing the everyday needs of our customers. We continually challenge ourselves to improve our service and support offerings. We are committed to ongoing training and development: internally to our services team, and externally to help our customers become more efficient and effective in the business of providing services to their customers.

Our commitment to our customers has earned Cherwell outstanding levels of customer satisfaction and retention. Delivering unparalleled service to our customers is our fundamental objective. We want every experience with Cherwell to be professional and timely. Please let us know how we are doing. We appreciate your feedback.

Thank you for your business. We are so pleased to be on your team.

Best regards,

Carrie Cornella
Director, Client Relations
Cherwell Software, Inc.

Guide to Cherwell Maintenance and Support

The purpose of this document is to serve as a guide in outlining the features, processes and procedures associated with Cherwell's Maintenance and Support program based out of North America; for technical support outside North America, contact the Cherwell Software authorized Value-Added Reseller (VAR) in your region. Cherwell may update this document at any time to reflect changes in policies and business practices in support of continuously improving service to our customers.

Maintenance and Support – Generally

Use of Cherwell Service Management™, or any other software developed and/or licensed by Cherwell Software, requires an End-User License Agreement (EULA), End-User Subscription Agreement (EUSA) or similar agreement between Cherwell and its customer. If you do not have an existing EULA or EUSA, you should discontinue your use of Cherwell Service Management. If you would like a copy of your existing EULA or EUSA, please contact Cherwell at client.services@cherwellsoftware.com.

Cherwell Maintenance and Support is offered on an annual basis, the terms and conditions of which are included in your EULA or EUSA. In short, Maintenance and Support provides the benefits of telephone support; Cherwell Self-Service e-mail support; access to Cherwell Software's knowledgebase; automatic access to product updates; discounts on Educational Services, Professional Services and After-Hours Support; the Cherwell On-line Community Forum; and Cherwell newsletters.

You must prepay your annual Maintenance and Support fees to keep your account current. Cherwell's Accounting Department will automatically send you a renewal notice and invoice approximately sixty (60) days before the end of your current Maintenance and Support Agreement term. If your term lapses before payment is received, Cherwell will place your account on credit hold and suspend the benefits of maintenance and support until the account is in good standing; a reinstatement fee may also be charged. If you are unable to log into Self-Service or do not receive a response from a technician in a reasonable amount of time, please verify that your Maintenance and Support with Cherwell is current.

To discuss any aspect of the terms and conditions of your Maintenance and Support, please contact Cherwell Client Services at 719.386.7000 or client.services@cherwellsoftware.com.

Maintenance and Support Benefits

	Maintenance & Support Plan Benefits	Additional Services Available (Discounted fees apply)
Period of Support	12 months	12 months
Web Site Resources		
Cherwell Support knowledge base	✓	
Cherwell Newsletter	✓	
Support Services		
Telephone support, normal business hours ¹	6 A.M. to 6 P.M. MT	24/7 After-hours emergency support
Cherwell Self-Service Support	6 A.M. to 6 P.M. MT	
Priority Routing for Critical Issues	✓	
E-mail Support, normal business hours	6 A.M. to 6 P.M. MT	
Educational Services (discount)		✓
Professional Services (discount)		✓
On-line training	✓	
Product Maintenance		
Minor ² product releases	✓	
Major ³ product releases	✓	

Table 1: Maintenance and Support Benefits

¹ Excludes occasional downtime due to system and server maintenance, company events, observed U.S. holidays, and events beyond our control.

² Minor release is a dot release, patch release, or maintenance release of the product.

³ Major release is a version upgrade of the product.

Scope of Support

Cherwell Support is designed to assist customers with specific product issues resulting from the normal use of the Cherwell Service Management software on supported platforms, and to provide resolutions/answers to those issues or questions. Cherwell is dedicated to partnering with customers to answer questions and resolve issues. Customers are expected to properly install, implement and use the software and comply with reasonable troubleshooting tasks as recommended by the Cherwell Support team.

Cherwell Support's primary responsibilities are:

- Troubleshooting issues related to the Cherwell Service Management software when unexpected results occur
- Reproducing product defects and providing assistance in alternative solutions or workarounds to help maintain stability until such time as a defect is addressed/corrected
- Assisting with software maintenance updates and upgrades that offer solution fixes and minor or major product releases

Cherwell's support analysts are trained to support the licensed software and may not possess the qualifications to support Incidents outside the scope of Cherwell's licensed software (i.e., third-party integrations, environmental issues, etc.).

Our Pledge to Customers

Cherwell Support is dedicated to assisting customers to the best of our ability. In the event issues are encountered and the source of the error is unclear or difficult to identify as a product, operating system, or database issue, etc., Cherwell Support analysts may provide best-effort assistance to help resolve the issue, with the understanding that if the analyst determines the issue is a result of something beyond the scope of Support, charges for services provided may be incurred.

For issues resulting from or related to customizations such as reports and customer-specific configurations, Cherwell Support may elect to spend up to 15 minutes in an effort to provide suggestions, but will not develop customer-specific modifications or debug issues encountered.

Cherwell Support analysts are unable to provide assistance with:

- "Beta" versions of software and database products
- Cherwell products on workstations or servers using Beta-level operating systems
- API/implementation support for third-party integrations not certified by Cherwell Software
- Data correction (data corruptions or corrections not directly related to errors of Cherwell licensed software) or guidance, suggestions, techniques, or tips on current applications, integrations, or environmental issues

Hours of Operation

Cherwell Support hours of operation are:

6:00 A.M. – 6:00 P.M. Mountain Time, Monday through Friday (excluding holidays)

See below for information regarding After-Hours support.

Company Holidays

Support is not available on the following holidays which are subject to change:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

After-hours Support

We will provide After-hours support for Priority 1 Incidents only – i.e., for downed systems – for an additional fee and subject to staff availability. However, fees will be waived for Priority 1 Incidents where the failure is caused by the Cherwell Service Management software. Fees will apply for all other After-hours Support for Priority 1 Incidents and will be charged in ½-hour increments.

Contacting Support

Support for the Cherwell Service Management software is available through a variety of contact methods which include Cherwell Self-Service, Telephone Support, E-mail Support, Remote Access Support, Cherwell Scheduled After-Hours Support, and Cherwell On-call/ After-hours Support. We encourage customers to log Incidents through Cherwell Self-Service, the most efficient method which allows analysts to quickly begin the analysis and research required to resolve the issue.

- **Cherwell Self-Service:** A wide range of options for Cherwell Self-Service are available at www.cherwellsupport.com:
 - Product Documentation
 - Live sessions with Cherwell experts providing Web-based training
 - Access to Cherwell Knowledge
 - Ability to view and update Incidents
 - Access to product information
 - Ability to download product updates
 - Ability to submit feedback on Cherwell products and services
 - Your **User Id** and **password** were included in your welcome letter; contact Client Services at client.services@cherwellsoftware.com if you have misplaced the information.
- **Telephone Support:** Call 719.386.7000
 - M-F from 6 A.M. – 6 P.M. Mountain Time
- **E-mail Support:** Send e-mail to support@cherwellsoftware.com
 - M-F from 6 A.M. – 6 P.M. Mountain Time
- **Remote Access Support:** With advance permission, Cherwell Support analysts may remotely access systems associated with Cherwell Service Management to help analyze and resolve issues with the licensed software.

- **Scheduled After-hours Support:** You can prearrange or schedule After-hours Support, subject to availability. Reduced fees are offered with advanced notice of two weeks or more. Contact Client Services at client.services@cherwellsoftware.com for more information.
- **After-hours Priority 1 Emergency Support:** Call 719.386.7000, 24 x 7 for **Priority 1 Incidents only**—i.e., for downed system support.

Cherwell Self-Service, telephone, and e-mail support are available during regular support hours for supported versions of the licensed software, and only to customers with a current Maintenance and Support agreement. Cherwell Support may require that a customer upgrade to the current version to resolve a known problem or technical issue which likewise requires that a customer be current on Maintenance and Support. For more information related to supported versions, please refer to Cherwell's Version Support Policy (see below). Best efforts will be made to provide a workaround for a known issue; however, Cherwell Support does not guarantee resolution to all software issues requiring changes to the software.

Cherwell Support inquiries are classified as Incidents. An Incident is a single, reproducible issue, symptom, or error inherent in the licensed software. Cherwell Support may determine that an Incident is in fact related to how the licensed software was implemented and/or is being used and indicates that the customer requires additional training or Professional Services. Cherwell Support will work with you to determine the best plan of action for Professional Services or Educational Services.

Before Contacting Cherwell Support

To expedite the resolution of an Incident, the following troubleshooting techniques may prove useful:

1. Check Cherwell Self-Service On-line Documentation/Knowledge to try and resolve the Incident.
2. Check for obvious causes such as file locations, directories, and paths specified; insufficient access permissions; lack of disk space; and so on.
3. Verify that the issue is inherent to the Cherwell Service Management application. Because the Cherwell Service Management software operates within various environments, make sure the issue isn't something else such as your hardware, database, operating system or network software that could affect the performance of Cherwell Service Management. If the issue is because of another reason but is impacting Cherwell Service Management, Cherwell Support will use reasonable efforts to resolve the issue for you. However, please keep in mind that you may need to contact another manufacturer.
4. Check to see if the problem is recurring by reviewing your company's past Incidents. Your Open and Closed Incidents can be found in Cherwell Self-Service.
5. Attempt to reproduce the problem to ensure it is not just a simple misstep. Determine whether the problem occurs randomly or consistently.
6. If the problem is reproducible, check to see whether any changes recently took place in your environment, including:
 - Version changes of any product, database, operating system, network software, patches, etc.
 - Web or application server configuration changes
 - Security setting changes
7. Determine whether the Incident occurs on one, more than one, or all of your computers/client installations.

If, after taking these steps, the issue still exists, you will need to gather some information before logging an Incident to ensure your problem is resolved as quickly as possible.

Online Support Resources

Cherwell Software's Web site delivers 24/7 access to online Support documentation, knowledge base articles, and other problem-solving resources. These Web resources are available to provide you with timely solutions to the most common technical support issues. Customers with current Maintenance and Support agreements may also obtain further assistance by contacting Cherwell Support through e-mail or by telephone during normal business hours of operation.

Logging Incidents

Incidents can be logged through Self-Service, e-mail, or telephone. Each Incident you log is assigned an Incident ID number that enables you and Cherwell Support to track the Incident until the issue is resolved and afterwards for historical reference. It is important to record this number to expedite the follow-up process.

Information Required to Log an Incident

The following information is of great help to resolve the Incident as quickly as possible:

- Your name
- Company name
- Your phone number
- Your e-mail address
- The version of Cherwell Service Management you are using (to find this, select **Help>About** in the application)
- The version of the Microsoft® Windows® operating system where Cherwell Service Management is installed
- The version of the SQL database you are accessing
- A description of what you were doing when the issue occurred (error messages, steps to reproduce the error, product behaviors)
- A description of the frequency of the problem and predictability (for example, each time the function is used, intermittently, etc.)
- The text or screen capture of any error messages that appeared on screen
- The steps you already took to try resolving the issue

You may also be asked to upload your database to the Cherwell Support FTP site.

Logging Incidents through Cherwell Self-Service

1. Access Cherwell Support at www.cherwellsupport.com.
2. Enter your **User ID** and **password**.
3. Locate and click the **Create Incident** link.
4. Using the information above as a guide, provide as much detail about the Incident as possible in the description field on the **Incident** form.
5. Attach pertinent log files, screen captures, and other supporting files.
6. Click Submit the Form.
7. You will receive an automatic Incident Confirmation by e-mail that will provide the details of your Incident as well as your Incident ID number.

Logging Incidents by Telephone

1. Call Cherwell Support at 719.386.7000.
2. Please have all required information listed above gathered in advance.

Logging Incidents by E-mail

1. E-mail Cherwell Support at support@cherwellsoftware.com.
2. Using the information above as a guide, provide as much detail about the incident as possible.
3. Attach pertinent log files, screen captures, and other supporting files.
4. Send the e-mail.
5. You will receive an automatic Incident Confirmation by e-mail that will provide the details of your Incident as well as your Incident ID number.

Managing Incidents

The charts on the following pages serve as a guide to understanding how Cherwell Support assigns each Incident a Priority level along with the Initial Response Time, projected resolution time, and escalation process for each level.

Priority Level Classification

Priority is assigned based on a combination of the Incident's Urgency and Impact, as shown below. (Urgency and Impact are also described in more detail below).

		Impact		
		Major Operations	Minor Operations	Admin/Design
Urgency	Stopped	1	2	3
	Work Impaired	2	3	4
	Inconvenience	3	4	5

Table 2: Priority Classification

Urgency Levels

The table below displays the Urgency levels, along with descriptions and examples.

Urgency Level	Impact on Customer	Examples
1. Stopped	The customer cannot access or use the application. Labor and other resources are idled and operation of critical processes is suspended. The customer cannot recover the system through its own efforts, and no workaround is available.	The application (or associated systems for which Cherwell is responsible) is down and inaccessible by the customer.
2. Impaired	The customer's use of the application is substantially impaired, resulting in a significant interruption of client operations. Certain critical processes cannot be completed or certain classes of users cannot access the system. No workaround is available.	The application is not operating according to technical specifications. Performance may be sporadic and inconsistent.
3. Inconvenience	Similar symptoms to Severity Level 2 (Major), but in this case the customer can implement a workaround for critical business processes.	Similar to Severity Level 2 above.

Table 3: Urgency Levels

When screening reported Incidents, Urgency Level 1 (Stopped) is relatively easy to determine: from the customer's perspective, inability to access the Cherwell application is a critical problem requiring immediate attention. Levels 2 and 3 (Impaired/Inconvenience, respectively) require the Support analyst to determine the business and operational impact of the problem (as experienced by the customer) as well as the availability of workarounds. The availability of workarounds determines whether an Incident is an Impaired or Inconvenience Incident.

Impact Levels

The table below displays the Impact Levels, along with descriptions and examples.

Impact Level	Impact on Software	Examples
1. Major	A major component of the software prevents user from work from working.	Business Processes, Self-Service, etc.
2. Minor	A minor component of the software prevents the user from working.	One-Steps, Approvals, Field/Tab Visibility, etc.
3. Admin/Design	An aspect of the software's design is interfering with work.	Form design/layout

Table 4: Impact Levels

Priority Levels – Initial Response Times

The following table depicts the Initial Response Times for each Priority level of an Incident during normal support hours. Please note that "Initial Response Time" does not necessarily mean the amount of time it takes to resolve or close an issue; it does, however, reflect how much time it takes for Cherwell to acknowledge and provide an initial response to the issue.

Priority	Preferred Response	Target Response
1	Phone	2 hours
2	Phone	4 hours
3	Self-Service/E-mail	8 hours
4	Self-Service/E-mail	1 day
5	Self-Service/E-mail	2 days

Table 10: Proposed Response Time Frame Expectations

Priority Levels – Resolution and Escalation Time Frames

Priority levels are also used to guide internal and external expectations regarding the time frame in which to resolve Incidents. The charts below show the time frames during which Cherwell Support will use its best efforts and try to resolve each level of Incident. In most cases, Incidents are responded to and resolved according to these time frames; however, in cases where we exceed the projected time frame for resolving an Incident, the Incident is escalated within the Cherwell organization.

Projected Resolution and Escalation Time Frames

	Elapsed time from initial Incident report						
	Day 1 (hours)			Day 2	Day 3	Day 4	Day 5
	2	4	6 +				
Priority 1 Incidents							
Respond to customer							
Resolve							
Escalate to:							
Client Relations							
Director, Client Relations & Support Services							
VP Technology							
CEO							

Table 5: Priority 1 Incidents

	Elapsed time from initial Incident report					
	Day 1 (hours)		Day 2	Day 3	Day 4	Day 5
	4	12				
Priority 2 Incidents						
Respond to customer						
Resolve						
Escalate to:						
Client Relations						
Director, Client Relations & Support Services						
VP Technology						
CEO						

Table 6: Priority 2 Incidents

	Elapsed time from initial Incident report				
	Day 1 (hours)	Day 2	Day 3	Day 4	Day 5
	8				
Priority 3 Incidents					
Respond to customer					
Resolve					
Escalate to:					
Client Relations					
Director, Client Relations & Support Services					
VP Technology					
CEO					

Table 7: Priority 3 Incidents

	Elapsed time from initial Incident report				
	Day 1 (hours)	Day 2	Day 3	Day 4	Day 5
	8				
Priority 4 Incidents					
Respond to customer					
Resolve					
Escalate to:					
Client Relations					
Director, Client Relations & Support Services					
VP Technology					
CEO					

Table 8: Priority 4 Incidents

	Elapsed time from initial Incident report				
	Day 2 (hours)	Day 4	Day 6	Day 8	Day 10
Priority 5 Incidents	16				
Respond to customer					
Resolve					
Escalate to:					
Client Relations					
Director, Client Relations & Support Services					
VP Technology					
CEO					

Table 9: Priority 5 Incidents

For example, a Priority 2 Incident, according to Tables 5 through 9, is to be resolved within 12 business hours. If this Incident remains unresolved beyond 12 business hours, Client Relations is notified with a report of Incident status. If the Incident remains unresolved by the end of the third day following the Incident report, a similar status report is provided to the Director, Client Relations & Support Services, and so on. This escalation process ensures the proper level of senior management attention and, if necessary, resource allocation to resolve outstanding Incidents. Note that the account representative for the client is also notified throughout this escalation process as a courtesy, but is not expected to take any specific action during the resolution process. This information is provided in the event the client contacts the account representative directly about the Incident.

In the case of Critical Incidents affecting *all* hosted customers, all affected customers are notified along with all account representatives.

When Incidents are “closed” or resolved, all individuals (internal or external) previously notified of the Incident during the escalation process will also be notified of its resolution.

Finally, Incidents may be “fast tracked” to higher priority levels to ensure quicker resolution under certain circumstances. The authority to upgrade (or in some circumstances, downgrade) Incident priorities rests with Client Relations, who in turn consults with the Director of Services and Support and the VP of Technology as appropriate. In all cases, the decision to change the Priority status of an active Incident will be documented in Cherwell’s system.

Incident Update

After logging an issue, we encourage customers to regularly check on the status of the Incident for updates.

Updates through Cherwell Self-Service

1. Access Cherwell Support at www.cherwellsupport.com.
2. Enter your **User ID** and **password**.
3. Click the **Open Incidents** link.
4. Your Incidents will appear in the list, and you can view the current status of each. To view closed Incidents, click the **Closed Incidents** link.

Updates by Telephone

If you contact Cherwell Support by telephone for an update, you are asked for the Incident ID number to ensure you receive the correct update information.

E-mail Notification

In addition to the e-mails you receive directly from a Support analyst or anyone else within Cherwell Support dealing with your Incident, you will receive automatic e-mails in specific instances. These are usually triggered by the submission of a new Incident/Service Request or the resolution of an existing Incident.

Escalation of Incidents

An Incident may be escalated by you, Client Services or Support. If it is deemed that an Incident requires escalation, we will gather the necessary resources which may include Client Services, development, our Professional Services Organization, partners, and other resources as appropriate. You must also be prepared to make appropriate resources available to work with Cherwell.

Cherwell Support-initiated Escalation

Cherwell Support technicians, Client Services or Support may escalate an Incident at any time based on the perceived impact to your business, the age or complexity of each Incident, or other relevant factors. As a result of the escalation, each Incident will be reassigned or overseen by Client Services and/or Support. A note will be added to each Incident providing details of the escalation and the resources assigned.

Customer-initiated Escalation

You may escalate an Incident by telephoning Client Services at 719.386.7000 or e-mailing Client Services at client.services@cherwellsoftware.com and requesting that your issue be escalated. You must provide the Incident ID number(s) and the reasons why you believe the Incident(s) should be escalated such as the impact to your business, pending deadlines, your frustration with Cherwell's response, or issue age and severity. Your Incident(s) will be reviewed and when applicable, reassigned. Someone from Client Services or Support will contact you to work on an action plan to solve the issue.

Expectations

As noted above, your cooperation and effort are necessary in order to provide you with the quality of service you desire – it is only by working together that we can ensure our customers receive the most value from Cherwell Support.

NOTE: *If at any time during the resolution of an Incident a customer is unable to meet designated commitments or requirements, support may be suspended on the Incident until requirements can be met and a scheduled course of action arranged.*

Scope of Maintenance

In the course of using Cherwell Service Management, if you think of enhancements that would be useful to you and our customers, *we want you to submit them*. With each release, approximately 50% of the new content contains features and functionality that are based on feedback and suggestions from our valued customers.

Enhancement Process

1. **Submission:** Enhancements are handled differently than Incidents. To see an enhancement appear in a release, you must first submit your request to our Support team by e-mail (Support@cherwellsoftware.com) or through Self-Service.
2. **Request Logged:** After the request is received, the Support team will review it and create an Enhancement Request. You will be notified by e-mail of your Enhancement ID. With this ID you can track the resolution of the issue through Cherwell's Self-Service or by contacting Support.
3. **Reviewed:** Once a week, all enhancements are reviewed by a team comprising Development, Services and Support, and Sales staff for feasibility. They consider a number of factors when deciding on and prioritizing submitted enhancement requests:
 - **Resources required:** This includes the amount of time and number of developers required.
 - **Impact across products:** Whenever possible, Development focuses on enhancements that are “generic,” meaning, they can be used by any Business Object created.
 - **Maintenance requirements:** Development does not create “one-off” enhancements that would require a separate upgrade path for the customer.
 - **Product Improvement:** If the request will enhance the overall function of product, it is more likely to be considered.
 - **Customer demand:** How many customers are asking for this enhancement?
 - **Impact on existing code:** Enhancements that do not affect the fundamental way the software was designed are more likely to be included.
4. **Release Cycle:** After the enhancement is accepted and prioritized, it is entered into the release cycle. Cherwell uses an approach to development known as “agile development,” rather than the traditional “waterfall” approach, so the exact release date is not always known.
5. **Resolution:** Users are normally notified by e-mail when a resolution is achieved and in which Cherwell release the enhancement will be included.

Although we cannot guarantee that every request will result in an enhancement, we consider each request carefully because these requests help us improve our product.

Known Error Process

Even with a stable product, code errors may occur from time to time. In the event a code error is encountered, Cherwell has defined the following process to address the issue and assist customers.

1. **Submission:** Errors are handled differently than Incidents. Most errors start as an Incident. After Cherwell Support determines that the Incident is in fact a reproducible error, a Known Error will be created and the Incident closed. You will be notified by e-mail of the Known Error ID. With this ID, you can track the resolution of the issue through Cherwell Self-Service or by contacting our Support Desk.
2. **Reviewed:** If the Incident is a Priority 1, the Known Error is dealt with as soon as possible, including an emergency fix. For all other priorities, once a week all Known Errors are reviewed by a team comprised of Development, Quality Assurance, Support, and Client Services for feasibility. The team takes into consideration a number of factors when deciding on and prioritizing submitted Known Errors:
 - **General severity:** Errors that cause key features to stop working have a higher priority than errors that are an inconvenience.
 - **Does a workaround exist?** An error for which no workaround is available is prioritized higher than one that has an acceptable workaround.
 - **Resources required:** This includes the amount of time and number of developers required.
 - **Design vs. error:** At times, what is perceived to be a bug is actually a design of the software and should be converted to an Enhancement Request.
3. **Workaround:** If possible, a workaround is proposed until the Known Error can be resolved.
4. **Maintenance Fix/Release Cycle:** After accepting and prioritizing a Known Error, Cherwell Support will determine whether the fix will be a Maintenance Fix or included in an upcoming release. Determining factors include priority, resources, and timing.
5. **Resolution:** Depending on the severity, users are notified by phone or e-mail when a resolution is available and where to download the fix.

Software Maintenance and Releases

At Cherwell, listening to our customers is at the core of our corporate culture. Every department exists to help our customers get the most return on their investment in the Cherwell Service Management software. Unlike the traditional “waterfall” approach that sometimes leaves customers waiting years for an enhancement, Cherwell’s development team uses “agile development” to be able to quickly respond to the needs and requests of our customers.

Four different types of software releases are available, mostly through the Cherwell Auto-Deploy feature. Rather than requiring each user to manually install the Cherwell client application, a link is provided to automatically install the product, including configuring your connection to the server. In addition, when a new version of the product is installed, users are notified and prompted to install the new version.

All the releases shown below are provided only to our customers who are current on their Maintenance and Support agreement.

Release Types

Major Releases

Major releases feature new functionality and improvements in quality and performance as well as architectural enhancements. Major releases are signified by an increment in the major version number,

represented by the integer to the immediate left of the first decimal in the version number (e.g., Cherwell Service Management 3.0). Generally, one new release is made available each year.

Dot Releases

Dot releases feature new functionality and improvements in quality and performance. They typically include significant changes that Cherwell opts to make available before a new release, often at the request of our customers. Dot releases are signified by an increment in the minor version number, represented by the integer to the immediate right of the first decimal in the version number (e.g., Cherwell Service Management 3.4). Generally, one or two dot releases are made available each year.

Maintenance Releases

Maintenance releases are periodic and incremental changes to a new or dot release. They primarily address software problems or bugs reported by customers or uncovered through Cherwell's own efforts. In some cases, they may contain new improvements, but to a lesser degree than a new or dot release. Maintenance releases are represented by the letter to the immediate right of the integer after the decimal (e.g., Cherwell Service Management 3.40c).

Fixes

In the event Cherwell determines that a specific error needs an immediate release to solve a priority 1 or 2 Incident for a customer(s), they may create a specific Cherwell Service Management build, called a fix, containing the error correction. These releases are normally sent only to customers who reported the error. Fixes do not address customer enhancement requests, and not all error corrections are automatically considered fixes. Due to their urgency, fixes undergo only targeted testing of specific corrections. If your Incident is not related to the specific error the fix addresses, we recommend waiting for a maintenance release. Fixes are automatically included in the next maintenance release.

Supported Platforms

For information detailing currently supported platforms, server and client requirements, client operating systems, and web application server requirements, please refer to related documentation provided in Version Release Notes.

Version Support Policy

All products go through different phases during their life cycle; the length of each phase may vary according to the product. Phases include:

- **General Availability (GA):** Product that is actively shipping
- **Prior Release:** Previous product or release that is no longer shipping
- **Retired:** Products or releases where support has been withdrawn

The level of Support available for the licensed software depends upon its phase in the life cycle. Life cycle information for each product can be found in the support documents of Cherwell Self-Service.

Table 11 outlines the various support stages associated with product releases and the associated level of support. Generally, Cherwell provides support for any particular version of the Licensed Software only for 18 months following the first public release of such version or until release of a new version of the Licensed Software, whichever is longer, and provided in any case that the customer is party to a current Maintenance and Support term.

Support Stage	Product Phase	Technical Support	Code Correction
Current Major Release or Dot Release	GENERALLY AVAILABLE Actively shipping	Respond to use/usability inquiries with fully trained staff and lab-testing capabilities.	Respond to System Down and Critical issues with fully trained staff and lab-testing capabilities.
Prior Major Release or Dot Release	PRIOR RELEASE No longer shipping	Respond to use/usability inquiries. Limited lab-testing capabilities for up to 18 months after moving to Prior status.	Respond to System Down and Critical issues not addressed in subsequent release with trained staff and limited lab-testing capabilities for up to 3 months after moving to Prior status.
Inactive	RETIRED Last shipped more than 18 months ago	Respond to use/usability inquiries with BEST EFFORT.	None

Table 11: Product Release Support Stages

Best Practice Recommendations

System Administration

To obtain optimal results, Cherwell recommends two internal system administrators to manage and protect the integrity of the system and the company's data including:

- Documented system-management procedures
- Regular system backups and verifications
- Change management process to help track and manage changes to the system including the operating system, application environments, and database

Development and Testing Environment

A separate stand-alone test environment is an optimal way to reduce risk to the production environment. The development environment allows for the testing of upgrades, potential resolutions, isolation of issues, etc. Cherwell generally allows customers to install copies of the licensed software in non-production environments for purposes of testing, development, or disaster recovery, so long as such copies are not used for production purposes and the total number of concurrent users in the production environment does not exceed the number of concurrent users authorized under your EULA or EUSA.

Product Knowledge/Training

Cherwell requires system administrators to be equipped with product education and training on Cherwell Service Management. User training is also highly recommended. Cherwell's Professional Services Organization can provide educational options through classroom training at Cherwell's corporate headquarters or through on-site consulting and training options.

Performance Management and System Tuning

Cherwell recommends that system administrators monitor performance and disk space availability on a routine basis. As with any system, production environments, performance, and disk space may degrade over time and can result in performance problems or system failures.

Beyond the Scope of Maintenance and Support

Cherwell Professional Services Organization can assist with service issues arising from a need for training, implementation services, and customization services. Customers may be referred to the Cherwell Professional Services Organization where arrangements for appropriate services can be made.

Professional Service Requests include:

- **Education/Training:** Educational services are provided through Cherwell's Professional Services Organization. A support analyst can help determine if consulting or training is required and will help you develop the best course of action to address your needs.
- **System Setup:** Requests that relate to a new implementation, setup of business processes, configuration, or the installation of new products.
- **Operating System/Hardware:** Requests related to hardware configuration, database administration, or operating-system modifications.
- **Fine-tuning Application Performance:** Analyzing, testing, and improving overall performance of Cherwell Service Management.
- **Customizing/Configuring Business Objects:** Support provides assistance with Cherwell's standard "out-of-the-box" solution set. Support does not include the analysis and support of customizations. Incidents that relate to non-standard versions of the software are considered service requests and will be referred to Professional Services.
- **Developing Reports:** Cherwell Software Professional Report Writing Services specializes in the creation of reports and themes. Report writers are ITIL® Foundation certified and have a special certification from Cherwell Software in Report Writing.
- **Troubleshooting customer-developed Reports:** Cherwell Software Professional Reporting Writing Services can assist with troubleshooting issues that may arise in customer-developed reports by analyzing the report design to help determine the root cause of the issue.

Contact Information

Telephone:	719.386.7000
E-mail:	
Client Services:	Client.services@cherwellsoftware.com
Cherwell Support:	Support@cherwellsoftware.com
Self-Service:	www.cherwellsupport.com
Fax:	719.386.7001

About Cherwell Software

Cherwell Software is the developer of Cherwell Service Management™ – an integrated service management software solution for IT and support professionals. Cherwell Service Management was designed from the ground up using Microsoft's .NET technology and out-of-the-box ITIL® best practices. With fully integrated modules that have received PinkVERIFY™ certification such as Incident Management, Problem Management, Change Management, Release Management, Configuration Management, and Service Level Management – just to name a few, Cherwell Service Management provides a holistic approach to service management, allowing IT and support departments to align themselves with the businesses and customers they support. Cherwell Service Management offers enterprise power with mid-market prices and ease of use. Cherwell Software's customers include such companies as TV Guide, The Weather Channel, Ent Federal Credit Union, The University of Minnesota, Hallmark Services and Ohio State University.

Headquartered in Colorado Springs, with European offices in England, Cherwell Software was founded and/or is managed by a team of industry experts – including the former CEO of FrontRange Solutions, the former Chief Architect of FrontRange's HEAT® and ITSM™ product lines, and the original founder and past CEO of the Help Desk Institute (HDI). We are passionate about customer care and “innovative technology built upon yesterday values.” Please visit www.cherwell.com for more information about Cherwell Software.

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The information contained in this documentation is proprietary and confidential. Your use of this information and Cherwell Service Management is subject to the terms and conditions of the applicable end-user license agreement and/or nondisclosure agreement and the proprietary and restricted rights notices included herein.



719.386.7000
12295 Oracle Blvd., Suite 200
Colorado Springs, CO 80921
USA

www.cherwellsoftware.com

info@cherwellsoftware.com

April 8th,
2014

Avante Solutions, Inc.

Response to James Madison University
Request for Proposal # LBS-764
Information Technology Service Management
System
Dated February 21, 2014

Delivered to:
James Madison University
Procurement Services MSC 5270
752 Ott Street, Wine Price Building
First Floor, Suite 1023
Harrisonburg, VA 22807
Attention:
LeeAnne Beatty Smith
(540) 568-7523

Prepared By: Rich Clark
rclark@avantesolutions.com
(866) 282-6831x 2705
Avante Solutions, Inc.
738 W Jackson Blvd Suite 105
Chicago, IL 60661



Letter of Introduction

On behalf of Avante Solutions, Inc. (Avante), we are delighted to be given the opportunity to present James Madison University (the University) a response to your Request for Proposal # LBS-764 "Information Technology Service Management System". Please refer to the Table of Contents for an outline of our proposal.

In summary, our proposal includes Cherwell Software's Service Management technology and Avante's Professional Services team to provide related implementation/deployment Professional Services and support.

In order to effectively support the University in your evaluation of our proposal and solution, I have appointed Rich Clark to be your point of contact. Rich can be reached at (401) 301-9924 (mobile), (866) 282-6831 x2705 (direct office) or rclark@avantesolutions.com (email). Rich's primary goal is to ensure that the University's evaluation team's requests and questions are dealt with in a timely, knowledgeable and professional manner.

We would also like to highlight the following endorsement of Avante by Cherwell's CEO. "Avante continues to distinguish themselves through exceptional PSO offerings, stellar sales revenue, and their dedication to offer Cherwell Service Management as a best-in-class solution for customers." - Vance Brown, CEO Cherwell Software.

As per your Specific Proposal Instructions we confirm that Avante Solutions has not had any sales revenue during the past twelve months for any VASCUPP Member Institution.

My signature below indicates that all information contained herein is accurate. Please feel free to contact me directly and at any time. My contact details are outlined below.

Sincerely,



Steven Waxler
President
Avante Solutions, Inc.
O: (866) 282-6831

E: swaxler@avantesolutions.com

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Signature Page

REQUEST FOR PROPOSAL **RFP # LBS-764**

Issue Date: February 21, 2014
Title: Information Technology Service Management System
Issuing Agency: Commonwealth of Virginia
James Madison University
Procurement Services MSC 5720
752 Ott Street, Wine Price Bldg.
First Floor, Suite 1023
Harrisonburg, VA 22807

Period of Contract: From Date of Award Through One Year (Renewable)

Sealed Proposals Will Be Received Until 2:30 p.m. on April 8, 2014 For Furnishing The Services Described Herein.

SEALED PROPOSALS MAY BE MAILED, EXPRESS MAILED, OR HAND DELIVERED DIRECTLY TO THE ISSUING AGENCY SHOWN ABOVE.


All Inquiries For Information and Clarification Should Be Directed To: LeeAnne Beatty Smith, VCO, Buyer
Senior Procurement Services, smith2lb@jmu.edu, 540/568-7523, (Fax) 540/568-7936 not later than five
business days before the proposal closing date.

NOTE: THE SIGNED PROPOSAL AND ALL ATTACHMENTS SHALL BE RETURNED

In compliance with this Request for Proposal and to all the conditions imposed herein, the undersigned offers and agrees to furnish the goods/services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation.

Name and Address of Firm:

Avante Solutions, Inc.
728 W Jackson Blvd. Suite 105
Chicago, IL 60661

By: 
(Signature in Ink)
Name: Steven Waxler
(Please Print)
Title: President

Date: 04/04/14

Phone: (866) 282-6831

Web Address: www.avantesolutions.com

Fax #: (888) 501-4030

Email: swaxler@avantesolutions.com

ACKNOWLEDGE RECEIPT OF ADDENDUM: #1 RL #2 RL #3 RL #4 _____ #5 _____ (Please Initial)

SMALL, WOMAN OR MINORITY OWNED BUSINESS:

• YES; • NO; IF YES ⇒⇒ • SMALL; • WOMAN; • MINORITY

IF MINORITY: • AA; • HA; • AsA; • NW

Attachment A

Offeror Data Sheet

QUALIFICATIONS OF OFFEROR: Offerors must have the capability and capacity in all respects to fully satisfy the contractual requirements.

2. **YEARS IN BUSINESS:** Indicate the length of time you have been in business providing these types of goods and services.

Years 14 Months 7

3. **REFERENCES:** Indicate below a listing of at least five (5) organizations, either commercial or governmental/educational, that your agency is servicing. Include the name and address of the person the purchasing agency has your permission to contact.

CLIENT	LENGTH OF SERVICE	ADDRESS	CONTACT PERSON/PHONE #
College of William & Mary	4 years	221 Ironbound Rd, Williamsburg VA 23187	Brian Persinger (757) 221-2278
University of New Mexico	2 years	802 Yale Blvd. NE Albuquerque, NM 87106	Tammy Martinez (505) 277-0960
Texas State University	3 years	601 University Drive San Marcos, TX 78666	Ben Rogers (512) 245-2501
California State University, Fresno	5 years	5241 N. Maple Ave. Fresno, CA 93740	Filomena Fagundes (559) 278-1889
City of Lynchburg	6 months	900 Church Street Lynchburg, VA 24504	Terry Hutchens (434) 455-6028

4. List full names and addresses of Offeror and any branch offices which may be responsible for administering the contract.

Steven Waxler, Avante Solutions, Inc. 728 W Jackson Blvd. Suite 105, Chicago IL 60661

3. **RELATIONSHIP WITH THE COMMONWEALTH OF VIRGINIA:** Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the [CODE OF VIRGINIA](#), SECTION 2.2-3100 – 3131?

[] YES [X] NO

IF YES, EXPLAIN: _____

Attachment B

Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Offeror Name: Avante Solutions, Inc. Preparer Name: Rich Clark

Date: 4/7/2014

Is your firm a **Small Business Enterprise** certified by the Department of Minority Business Enterprise?

Yes ☐ No ☒

If yes, certification number: _____ Certification date: _____

Is your firm a **Woman-owned Business Enterprise** certified by the Department of Minority Business Enterprise? Yes ☐ No ☒

If yes, certification number: _____ Certification date: _____

Is your firm a **Minority-Owned Business Enterprise** certified by the Department of Minority Business Enterprise? Yes ☐ No ☒

If yes, certification number: _____ Certification date: _____

Instructions: *Populate the table below to show your firm's plans for utilization of small, women-owned and minority-owned business enterprises in the performance of the Collection Services contract. Describe plans to utilize SWAMs businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.*

Small Business: "Small business " means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years.

Woman-Owned Business Enterprise: A business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM**

Program, all certified women-owned businesses are also a small business enterprise.

Minority-Owned Business Enterprise: A business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified minority-owned businesses are also a small business enterprise.**

All small, women, and minority owned businesses must be certified by the Commonwealth of Virginia Department of Minority Business Enterprise (DMBE) to be counted in the SWAM program. Certification applications are available through DMBE at 800-223-0671 in Virginia, 804-786-6585 outside Virginia, or online at www.dmbv.virginia.gov (Customer Service).

Procurement Name and Number: Information Technology Service Management System RFP # LBS-764
Listing of Sub-Contractors, to include, Small, Woman Owned and Minority Owned Businesses
for this Bid/Proposal and Subsequent Contract

4/7/2014
Date Form Completed

Offeror / Proposer:
Avante Solutions, Inc.
Firm

728 W. Jackson Blvd., Suite 105, Chicago, IL 60661
Address

Rich Clark (866) 282-6831x2705
Contact Person/No.

Sub-Contractor's Name and Address	Contact Person & Phone Number	DMBE Certification Number or FEIN No.	Services or Materials Provided	Total Subcontractor Contract Amount (to include change orders)	Total Dollars Paid Subcontractor to date (to be submitted with request for payment from JMU)	Federal Employer Identification Number
Avante will not utilize any sub-contractors for this project.						

(Form shall be submitted with proposal and if awarded, again with submission of each request for payment)

Highlights of our Proposal

The purpose of this section is to highlight the **ADVANTAGES** of our proposed solution (Cherwell Software) as well as our (Avante Solutions) experience as a software consulting firm.

This decision is critical as you are selecting a tool you will most likely have in production for the next five (5) years. This means the solution must not only meet your requirements today but also meet those additional requirements as you continue to mature your IT service operations in the coming years.

We hope to have the opportunity to provide more details around these advantages, as well as the other items outlined in our proposal.

- 1. Leading Vendor in the SaaS Market.** Forrester released a report earlier in 2013 (Forrester Market Overview, SaaS IT Service Management Tool) that recognized Cherwell Software as 1 of only 3 Enterprise Service Management vendors to achieve significant or major success implementing SaaS solutions in enterprises.
- 2. Ease of Configuration, Administration & Maintenance.** In our opinion, and based on feedback from existing customers, Cherwell is easier to administer and maintain than other comparable technologies, especially a number of “Point Solutions” that provide Out-of-Box capabilities but lack configurability without custom programming.

Cherwell utilizes Codeless Business Application Technology (CBAT) which means you have ***full configuration and customization capabilities via wizard based, drag/drop functionality***. With Cherwell you will never need to write a script or a line of code! And you can even create an entirely new Business Object (example creating a Human Resources/Benefits Management Module). This is a significant advantage given the reality of organization’s needing to align the technology to growing maturity and changes in processes. We look forward to the opportunity of demonstrating the ease of administration and maintenance.

- 3. Higher Education Experience.** Avante and Cherwell both have extensive experience with Higher Education customers. Some examples of those customers include: the College of William & Mary, California State University Fresno, College of William and Mary, Des Moines University, Grand Valley State University, Texas State University, Texas Christian University, Ferris State University, Saginaw Valley State University, Western Carolina University, University of Colorado, University of New Mexico, and University of Wisconsin.

We have provided more detail on our Higher Education system on page 87 of this response.

- 4. Attractive Licensing Methodology.** Cherwell offers its customers a ‘CONCURRENT’ licensing module (versus named). The key advantage of a Concurrent model is in a vast majority of environments not every IT user is going to be in the technology 100% of the time, thereby making the concurrent licensing module much more cost effective. As an example (B/E Aerospace has 320 IT employees and operates on a 100 concurrent Cherwell system).

Furthermore there is no licensing cost at the application level, which allows customers to use the 11 ITIL out-of-box applications and create additional applications including those for use outside of IT, which we see becoming a major requirement for many of our clients.

5. ITIL Based Technology. Avante is positioning Cherwell Software's Service Management technology. Cherwell's Service Management is a web-enabled product built from the ground up using Microsoft .Net and is Pink Elephant ITIL 2011 verified for 11 ITIL Processes including: Incident, Problem, Change, Release & Deployment, Service Asset & Configuration, Knowledge, Event, Service Catalogue, Service Level, Service Portfolio, and Request Fulfillment.

6. Analyst Coverage - Recognized Leader. Cherwell Service Management is recognized by the industry analysts as a leading technology. These analysts include: Forrester and Gartner. Most recently Gartner named Cherwell to their Magic Quadrant for 2013 with very high marks. This and a number of other analysts reports can be found on the Cherwell website at www.cherwellsoftware.com

In addition we have provided the specific analysts you may contact for each:

Evelyn Hubbert with Forrester ehubbert@forrester.com

Jarod Greene with Gartner Jarod.Greene@gartner.com

7. Professional Service Expertise. In our opinion, the effectiveness of the Professional Service delivery will dictate whether or not the University achieves its expectations / objectives. (Even the best technology ... if not properly deployed, can have less than optimal results.) Consequently, we wanted to highlight the Quality of our Professional Service delivery.

We wish to confirm that all our consultants are trained and certified by Cherwell. Additionally each consultant goes through our internal technical orientation and training program. All consultants attend annual training, for both the Cherwell and Avante program, to ensure that the consultant's skills are in line with new versions of the software and Service Management applicable best practices.

When we (Avante) think of providing a QUALITY solution to the University we strive to achieve the following items:

- Have a **thorough and clear understanding** of our client's requirements, as well as, the criteria they intend to use in defining their initiatives success.
- Have presented **best practice recommendations** and **highlighted common pitfalls** to avoid.
- Have **reviewed alternatives** in how to best achieve our client's functional and operational requirements, as well as the initiatives desired results.
- Have **presented the optimal recommendation** to the client (along with explanations as to why other possibilities were not recommended). The optimal recommendation is based on usability, ease-of-maintenance and cost.
- **Extensive testing** is undertaken so the users are not confronted with unnecessary challenges that could negatively impact user adoption.
- Ensure the **project is delivered on time and on budget**.
- Have regularly scheduled status updates / configuration reviews to ensure the initiative is on plan and there are no surprises upon final delivery.

Expertise, Qualifications and Experience

The purpose of this section is to provide a narrative statement of our expertise, qualifications and experience of our firm as well as resumes for our personnel we expect to assign to your project (note we included staff resumes in our section Avante Professional Services Overview found on page 99 of this response). This is in response to page 17 Item B Specific Proposal Instructions number 3 of your RFP.

Avante is a leading IT Service Management technology and service provider. We have been in business for fourteen years and representing Cherwell's Service Management technology for four. Today, Avante is Cherwell's leading North American partner with over seventy-five Cherwell implementations. We are including the following quote from Cherwell's CEO "Avante continues to distinguish themselves through exceptional PSO offerings, stellar sales revenue, and their dedication to offer Cherwell Service Management as a best-in-class solution for customers." - Vance Brown, CEO Cherwell Software.

Our company and team's accomplishments go beyond our relationship with Cherwell. We are very proud to highlight the recognition of some of our Solution Architects:

- Co-founded the itSMF in Canada
- Support authors to Malcolm Fry's book "Step By Step Guide To Building A CMDB"
- One of our ITIL Consultants Won Service Desk of the year by Pink Elephant
- One of our ITIL Consultants Won Service Desk Practitioner of the year by Pink Elephant
- Recognized architect for ITIL within the Ontario Provincial Government – widely regarded as the largest and most successful ITIL implementation in the world. (Pink Elephant included her on a 15 country tour to discuss the success of the initiative.)

Regarding your specific initiative, we wish to confirm that we have extensive experience deploying Cherwell to meet the ITIL processes under scope, and have successfully deployed Cherwell at a number of Higher Education Clients (as noted in our References as well as in our Summary of Proposal. We have customers that have leveraged off Cherwell's "out-of-the-box" configurations, as well as customers that have required a more configured deployment of Cherwell to align to their specific process and data capture requirements. In addition we can also offer the University our Cherwell configured Higher Education system, you can find additional details on page 87 of this response.

Avante Response to IV Statement of Needs

I. STATEMENT OF NEEDS

James Madison University is seeking an Information Technology Service Management System that will assist IT in its support of customers through service offerings and support as well as project planning and management. The Contractor shall have available and be able to demonstrate the use and functions of the following components and/or features of an Information Technology Service Management System. Describe in detail the manner in which each item is addressed by the system.

A. Incident Management:

An incident is an unplanned interruption of an IT service or a reduction in the quality of an IT service. Incidents are categorized to be able to identify who should work on them and to more easily identify trends that may be developing. The Incident Management process focuses on restoring normal service as quickly as possible in order to minimize impact upon business operations.

We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

1. Describe the ability to populate the incident form based on certain rules (*e.g. client and customer information*).

The Incident form can be populated based on automated and manual entries. For example if an Incident is generated from an email the contact fields will populate and depending on the workflow the data in the body to the description field. If generated from the Self-Service portal the contact data and other files the user enters on the portal will auto-populate in the Incident record. Cherwell fully supports templates for creating Incidents, one example is a Password Reset where a majority of the fields auto-populate, and then the technician only needs to enter the contact data. Fields can be set as required, so when a technician is completing an Incident form they cannot save until all the required fields are completed. We would like to highlight that Cherwell offers significant out-of-box process AND is fully configurable. The ease of configuration and administration is a key advantage of Cherwell. We provided an example of the ease of configuration in our Appendix "B" Overview of Cherwell Workflow Builder on page 119.

2. Describe the ability to generate different workflows, including approvals (*with different subtasks*), for different types of incidents.

Cherwell provides the ability to configure workflow via the graphical workflow builder for all record types including Incidents. This includes approvals that can include tasks and activities.

As this question, and a number of your questions, ask about workflow and configuration we have provided an overview on Cherwell's Administration capabilities below:

One of Cherwell's key strengths is the ease-of-administration which is extremely robust you can create completely new business objects (applications/modules) yet simple to use (requires no scripting). Cherwell call's this Codeless Business Application Technology (CBAT). You can easily configure the user interface by dynamically adding all types of customizations including: windows, tabs, fields and more. Cherwell provides their One-Step capability, which is used to automate workflow and process throughout the system. These are easy to configure and easy to use where process actions can be configured and run providing the ability to execute actions such as: send email, print, copy / clone a record, update and create records and much more. An example of a configured one-step for use would be for quick calls where a one-step would be configured to automate the fill in of a service request for a password reset. In this case a standard description would be entered into the request record, the priority set to a value and the resolution information entered. The configuration of one-steps is considered a powerful user feature where users of the application would be trained as to how to configure one-steps using the drag and drop interface. The security features of the application allow you to define the context of when a one-step can be ran and who can create, modify and delete specific one-steps. As an example of the ease of Administration please see Appendix "2" Overview of Cherwell's Workflow Builder on page 55.

3. Describe the ability to provide automated status updates when an incident reaches specific points in the workflow.

Cherwell includes full notification capabilities. The Business Process engine monitors for triggers and auto-generates notifications to users (typically email) at set milestones. All this is fully configurable so you can decide when notifications will be sent at what milestones, and for what type of Incident (you can have different notification process based on the Incident classification).

4. Describe the ability to categorize and prioritize incidents, such as to prioritize "critical" incidents based on specific customers.

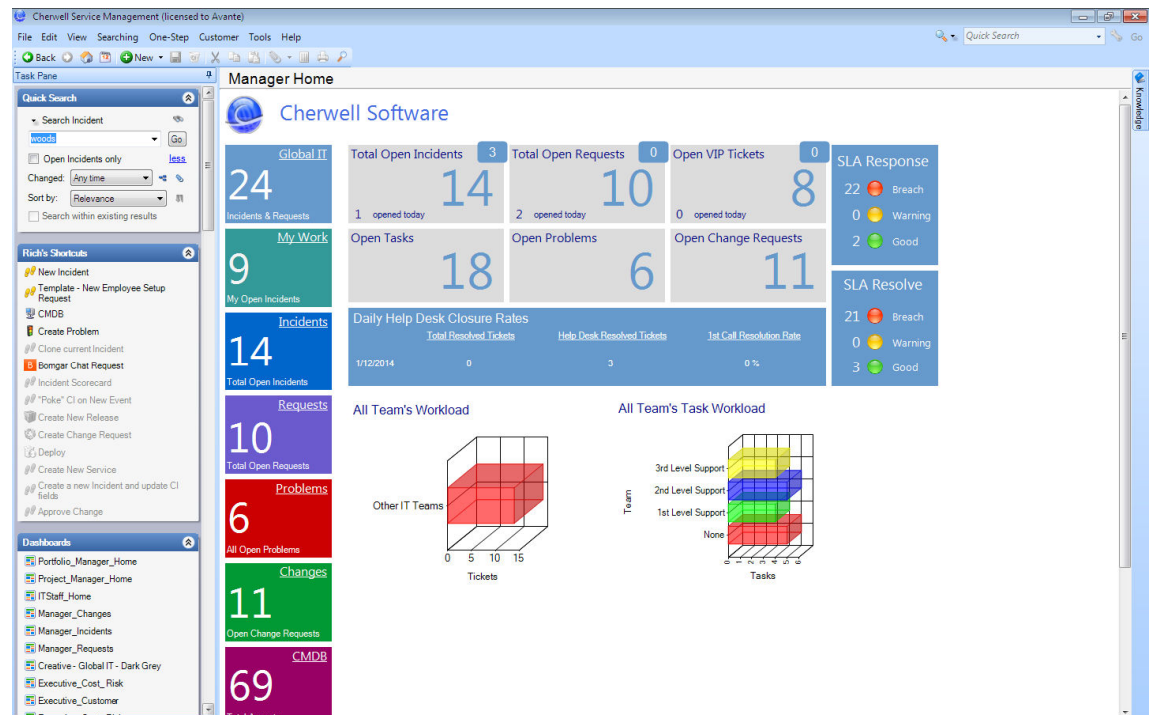
Cherwell offers an out-of-the box classification and prioritization that is fully configurable. The priority is driven by the impact and urgency, and can also be tied to the user's classification and Incident classification. For example a VIP can have all tickets classified as a P1, or only those that are for critical systems (Email, ERP, and CRM for example).

5. Describe the view capabilities for managers, technical staff and end-users.

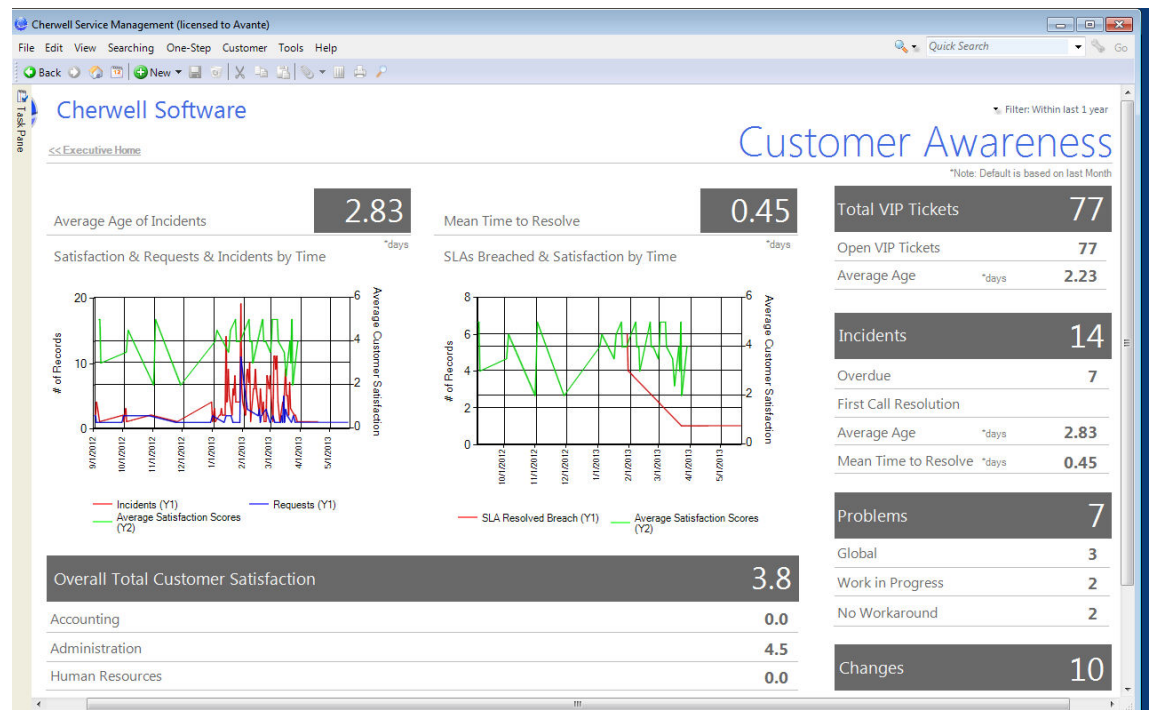
Cherwell provides role based security as well as different users experiences based on the users defined roles, which includes a number of different user types (managers, supervisors, technicians, end-users, administrators and more). If permission is granted, IT/Agent users have the rights to make modifications to their interface (we show a sample screen below). In addition, a user can be granted further permission to make administration type changes which can include the following: modify and create dashboards, modify can create reports, modify and create One-steps, and more (note any user can be granted some/all/none of these).

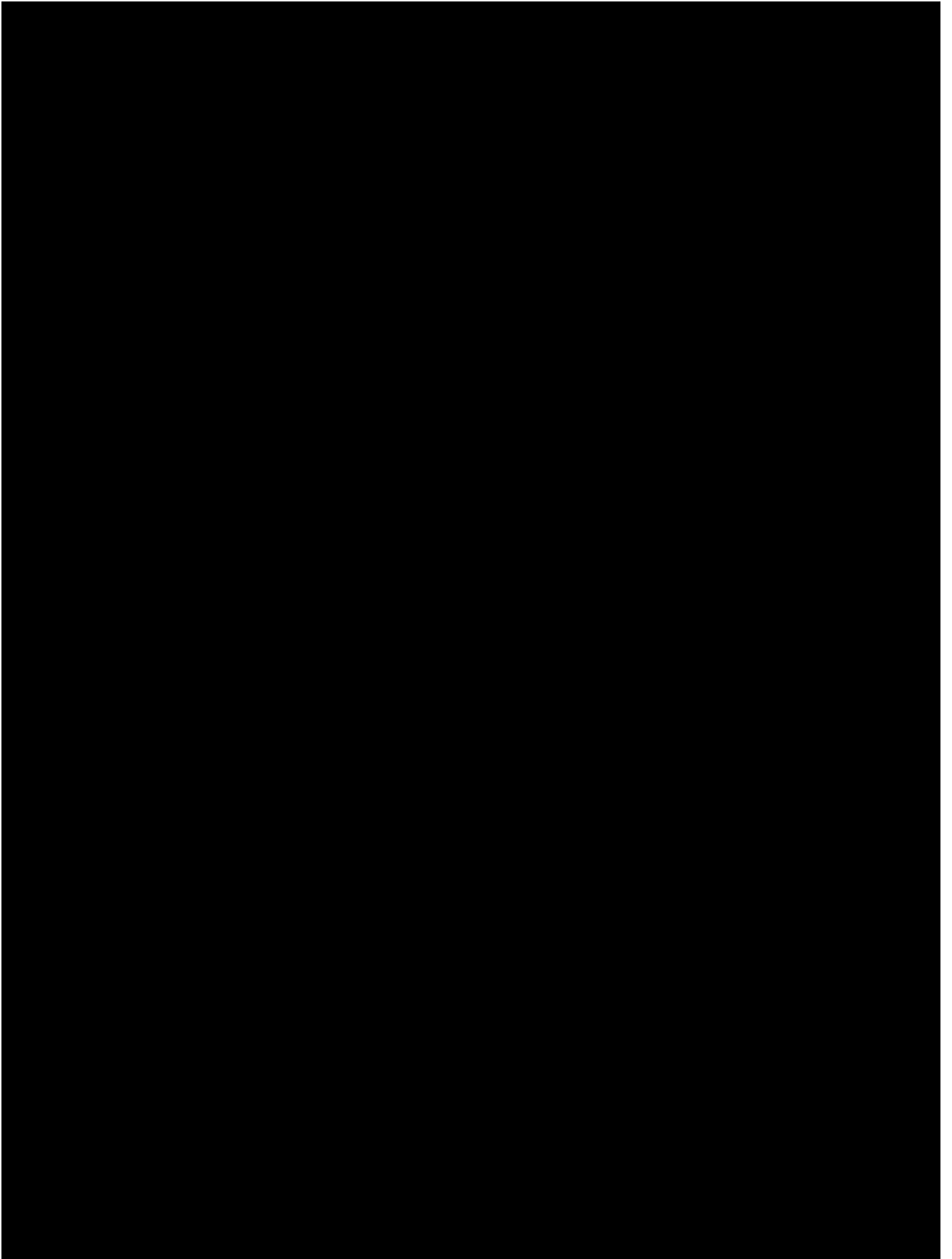
Below we have provided a number of sample screens showing how different users may interface with the system, as well as some of the different user interfaces:

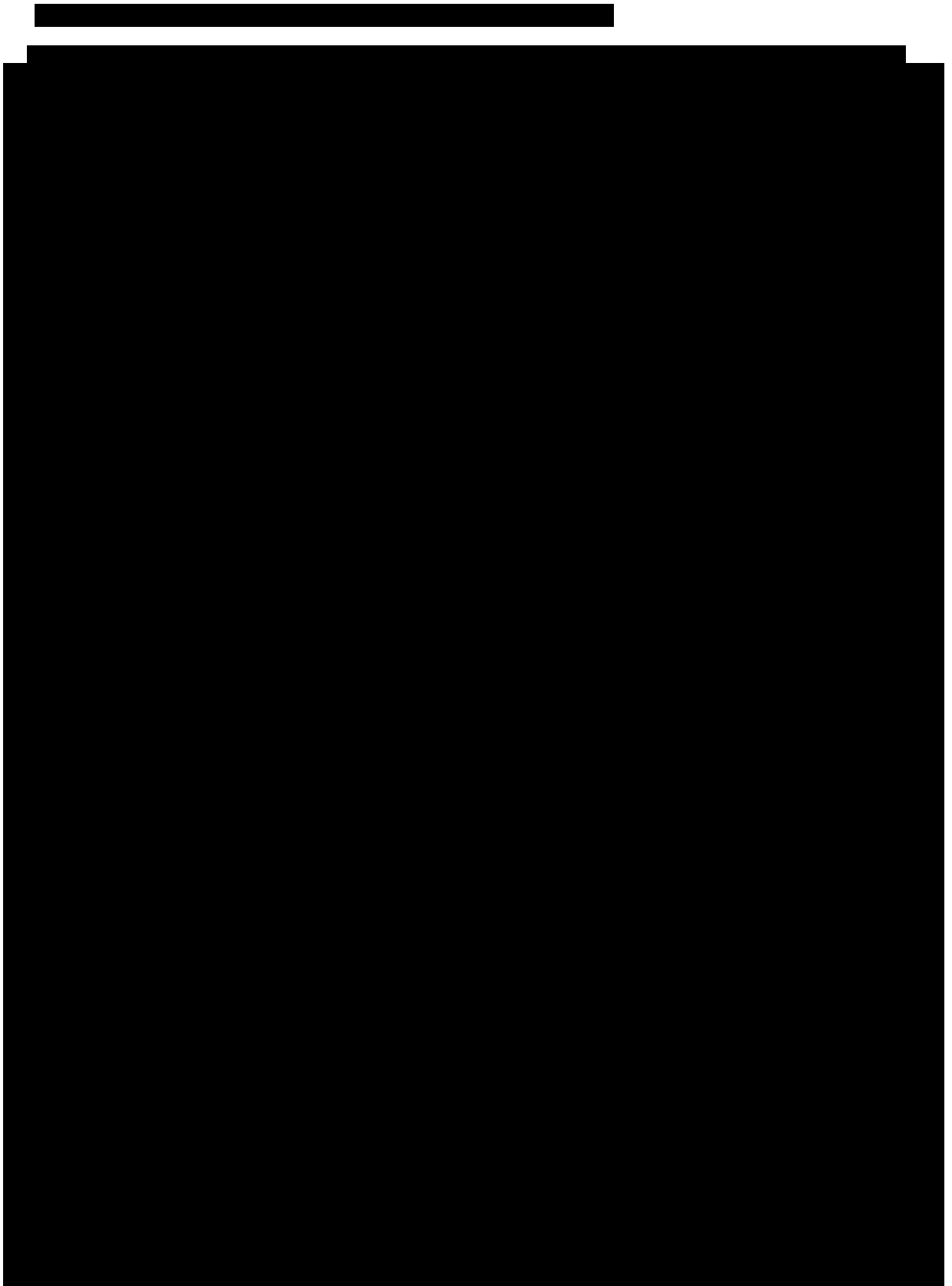
Sample Supervisor/Manager Dashboard.



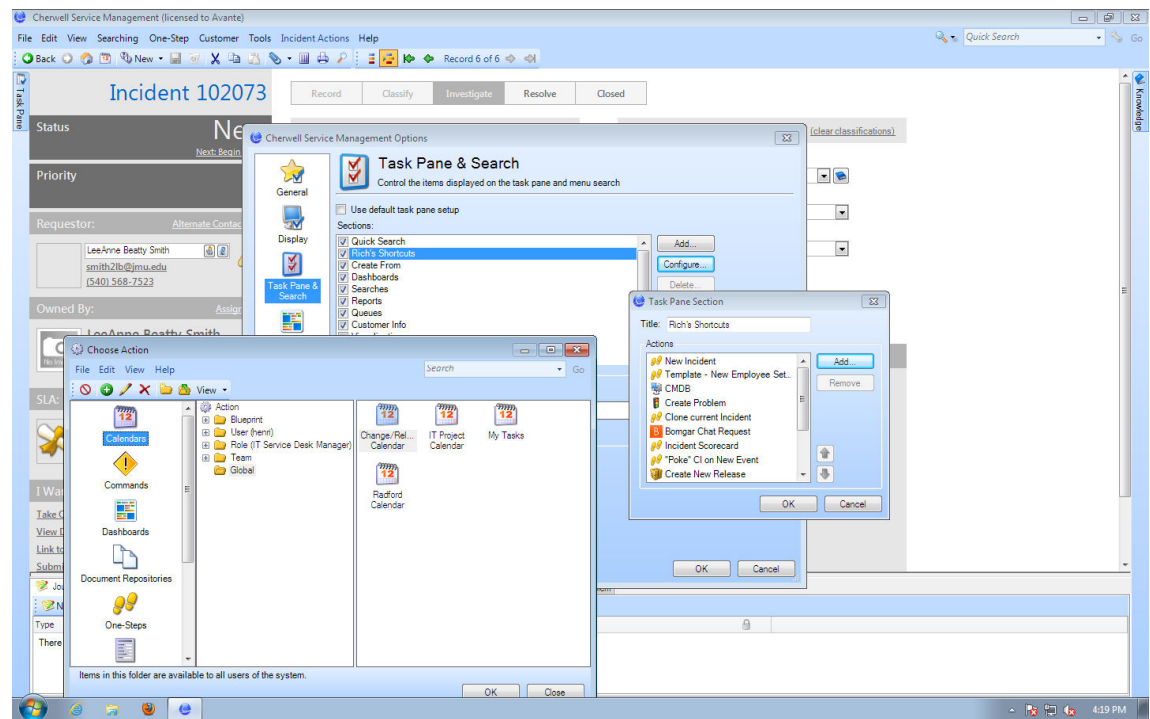
Sample Executive Dashboard.







Sample Technician screen – note in the example we are showing how a user can modify their view, in this case adding a shortcut to a calendar on their Task Pane.



Sample views from Mobile devices



6. Describe the levels of ownership that can be assigned to an incident.

Cherwell provides flexible ownership assignment capabilities for all record types including Incidents. An Incident can be assigned to a user or group of users manually or automatically based on routing workflow. Ownership can be reassigned if desired and if the user has permissions.

7. Describe the ability to restrict incident data by role based access controls and/or encryption.

Role based access applies to all processes including Incident. Role based security is configured via the Administrators interface in the Security module. Using the provided tools, administrators can create user groups to control access to modules and features including business object and field level security. By default the system promotes “least access” security, ensuring that only the minimum access necessary to perform an operation is granted, thus increasing data integrity by limiting access to the proper users only. This allows you to control who has the ability to create new, modify existing, and view Incidents.

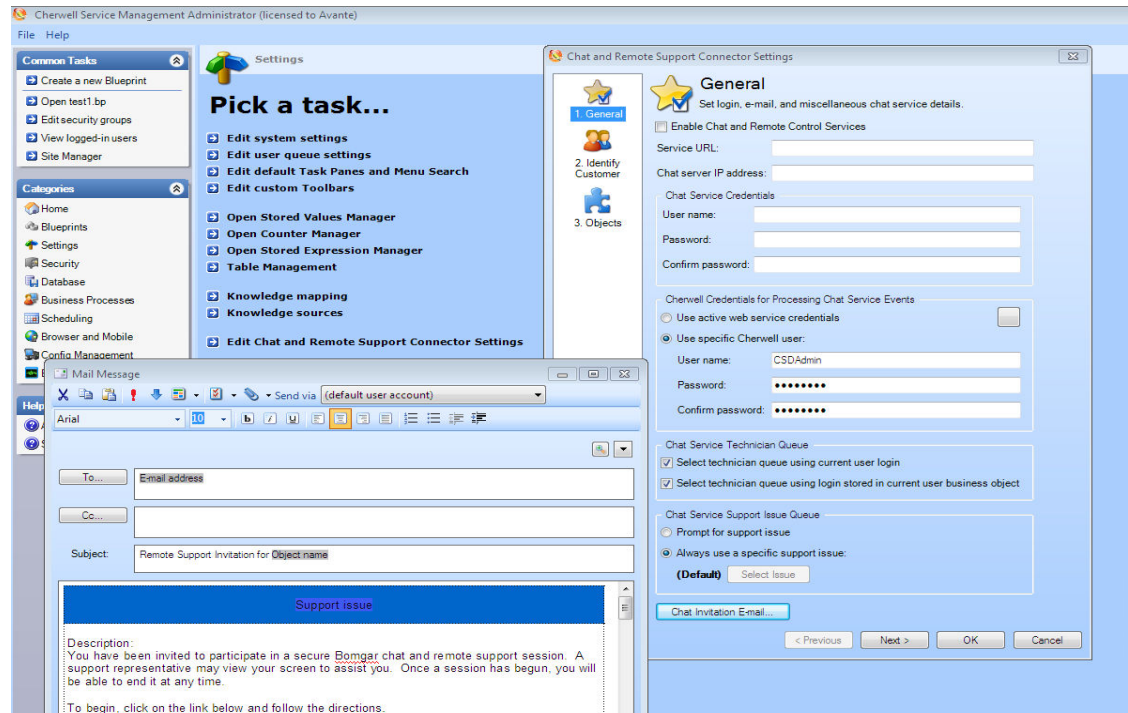
8. Describe the ability to integrate with Bomgar Remote Support to manage and capture interactions with customers.

Cherwell provides a very robust out-of-box integration with Bomgar. The integration allows for the ability to create a Remote Control session from within a record and automatically send the credentials for the user to connect. The integration also includes the ability to launch and manage Chat sessions from the technician side as well as Self-Service, and the communication is captured to the record associated with the Chat session. Chat session information can be stored back in the associated record (Incident / Ticket) for further review.

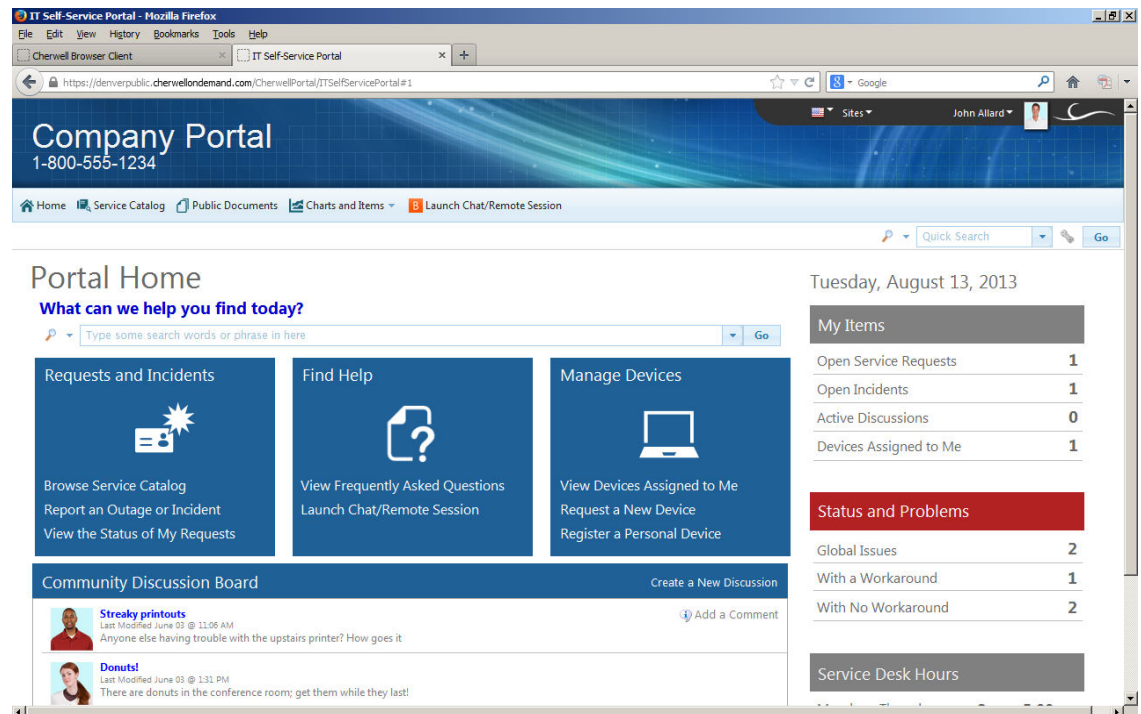
The integration is built into the system. Simply access the Administrator’s interface, under Settings select “Edit Chat and Remote Support Connector Settings” and follow the wizard.

We provided sample screens prints below:

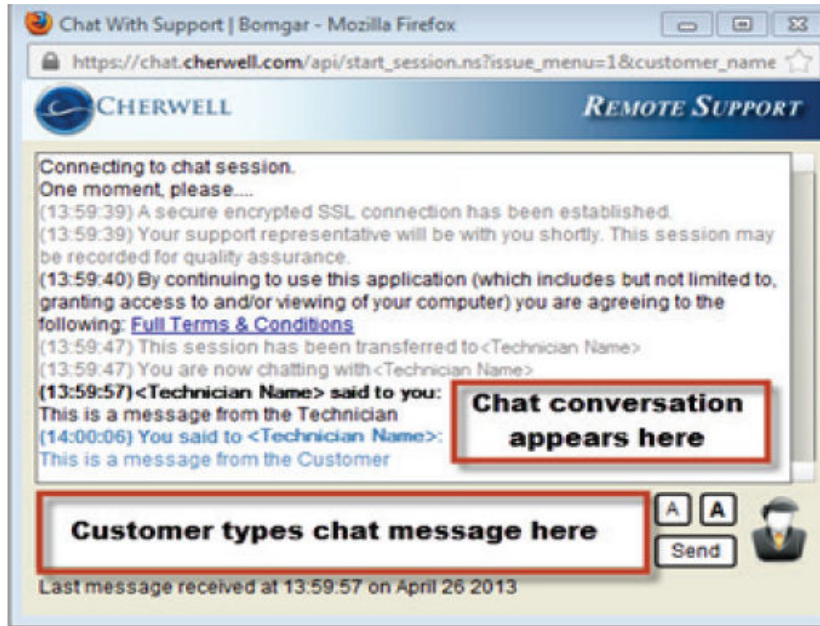
Below is screen print showing the Administrator's interface and Bomgar integration.



Self-Service - Showing Bomgar integration.



Below is a screen print from a Chat session in Cherwell via the Bomgar integration.

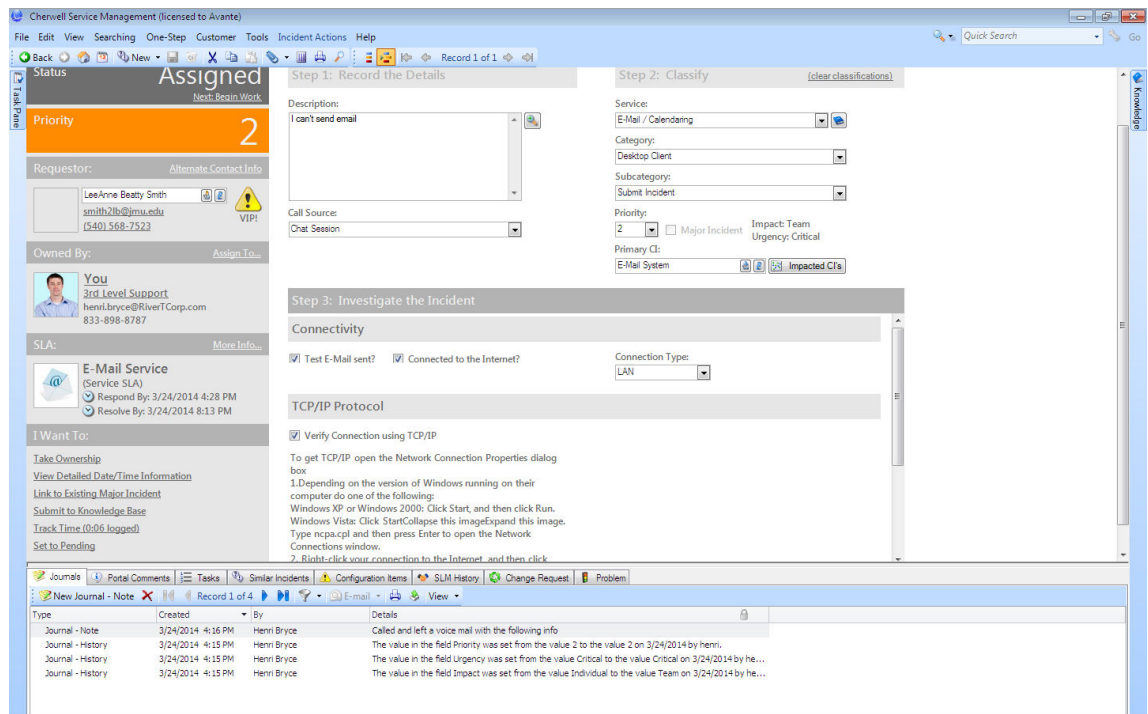


9. Describe the ability to support requests received through a variety of channels, such as email, chat, Twitter, etc., allowing the automatic creation of incidents without the need to monitor multiple channels.

Cherwell provides a number of out-of-box “listeners” for auto-generation of Incidents via multiple channels. These include: E-mail, Twitter, Bomgar Chat, Self-Service and Mobile interface. Incidents that come from these sources are auto-created and then routed and presented to your Service Desk based on your defined workflow. Please see item 1 above for a few more details.

10. Describe the ability for users in different roles to see all changes and history related to an incident without leaving the incident screen.

Cherwell provides tabs in the Incident form to capture all interactions users have with the record. In the screen print below note the Journal tab at the bottom left that shows all the changes and history for this Incident.



B. Problem Management:

A problem is a cause of one or more incidents. As the cause is not generally known at the time that a problem is created, the Problem Management process is responsible for further investigation. The primary goals of Problem Management are (1) to prevent problems from occurring, which reduces the number of new incidents that occur, (2) to resolve the causes of the existing incidents so that they do not recur, and (3) minimize the impact of incidents that cannot be prevented.

We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

1. Describe the ability to provide configurable problem process and categorization templates based on industry best practices.

Cherwell provides full Problem Management capabilities including configurable templates that are based on Pink Verification. Below is a sample out-of-box Problem screen with a standard template:

Cherwell Service Management (licensed to Avante)

File Edit View Searching One-Step Customer Tools Help

Quick Search

Problem 10208

Status: **Resolved** Next: Close

Priority: **4**

Linked Incidents: **3**

Owned By: **Henri Bryce** 3rd Level Support
henri.bryce@RiverT Corp.com
833-898-8787

I Want To:

- Take Ownership
- Remove from Top Issues List
- View more status options
- E-mail Update to Customer
- Resolve Attached Incidents

Published to Top Issues List in Portal

Classify Investigate **Known Error** Resolve

Step 1: Identify and Classify

Short Description: Email issue [Tweet](#)

Service: E-Mail / Calendaring

Detailed Description: Can't send and receive

Category: Desktop Client

Priority: 4

Step 2: Investigation and Analysis

Diagnosis: There is an available patch to address these issues

Impacted CI's

Step 3: Workaround and Known Error

Workaround: Have user log out, then log back in.

Workaround Exists

Submit Workaround to Knowledge Base

Publish Known Error in Portal

Tweet Known Error

Type	ID	Customer Name	Created Date Time	Status	Description	SLA Resolve By Deadline
Incident	102061	LeeAnne Beatty Smith	3/24/2014 4:13 PM	Pending	I can't send email	3/24/2014 8:13 PM
Incident	102057	Ken McClung	2/17/2014 12:38 PM	Assigned	I can't send email	2/17/2014 2:38 PM
Incident	102045	Trevor Woods	1/12/2014 1:56 PM	Assigned	Email not working	1/12/2014 5:56 PM

- Describe the ability to prevent closure of a problem before all assignments have been resolved.

Cherwell provides the ability to set fields as required, as well as tasks can be set as required to complete prior to resolving and closing the Problem. We provided a sample Problem screen below:

Cherwell Service Management (licensed to Avante)

File Edit View Searching One-Step Customer Tools Help

Quick Search

Problem 10208

Status: **Work in Progress** Next: Set as Resolved

Priority: **4**

Linked Incidents: **1**

Owned By: **Henri Bryce** 3rd Level Support
henri.bryce@RiverT Corp.com
833-898-8787

I Want To:

- Take Ownership
- Remove from Top Issues List
- Close this Problem
- Send E-mail Update to Customer
- Resolve Attached Incidents

Published to Top Issues List in Portal

Classify Investigate **Known Error** Resolve

Step 1: Identify and Classify

Short Description: Email issue [Tweet](#)

Service: E-Mail / Calendaring

Detailed Description: Can't send and receive

Category: Desktop Client

Priority: 4

Step 2: Investigation and Analysis

Diagnosis: There is an available patch to address these issues

Impacted CI's

Step 3: Workaround and Known Error

Workaround: Have user log out, then log back in.

Workaround Exists

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Incident	102045	Trevor Woods	1/12/2014 1:56 PM	Assigned	Email not working	1/12/2014 5:56 PM

Journals Tasks Configuration Items Incidents **Change Request**

New Task Record 1 of 1 View

Task 10140

Status: **New**

Next: Acknowledge
Decline this Task
Reassign this Task

Owned By: **Henri Bryce** 3rd Level Support
henri.bryce@RiverT Corp.com
833-898-8787

I want to:

- Add to my Outlook calendar
- Link to upstream Task
- Add downstream Task

Title: Check Server

Type: Work Item

Description: Check for patch and other items

Task is for a future date/time: 03/24/2014

Track time spent: 0.00 hours

Close Code:

Completion Details:

3. Describe the ability to automate the updating of the status of all related incidents upon updating of status of the problem.

Cherwell fully supports as this is an ITIL practice. All Incidents that are linked to a Problem record are automatically updated when the Problem record is updated. This also includes notifications that are auto-generated and sent to the customers for those Incidents.

4. Describe the ability to automate opening of a problem record from an incident record based on business rules and SLAs.

Cherwell fully supports the ability to manually or automatically create a Problem record from an Incident. This can be done via clicking a button from the Incident record to "Create Problem from Incident" where the relevant data from the Incident is ported to the Problem and the Incident is linked to the Problem. This can also be automated to take place based on certain thresholds, where once the Business Process engine recognizes the trigger, the same process takes place however on an automated basis where the system executes the creation of the Problem.

5. Describe the ability to integrate with event and alert monitoring tools, and allow for automatic creation, update and closure of tickets from these tools.

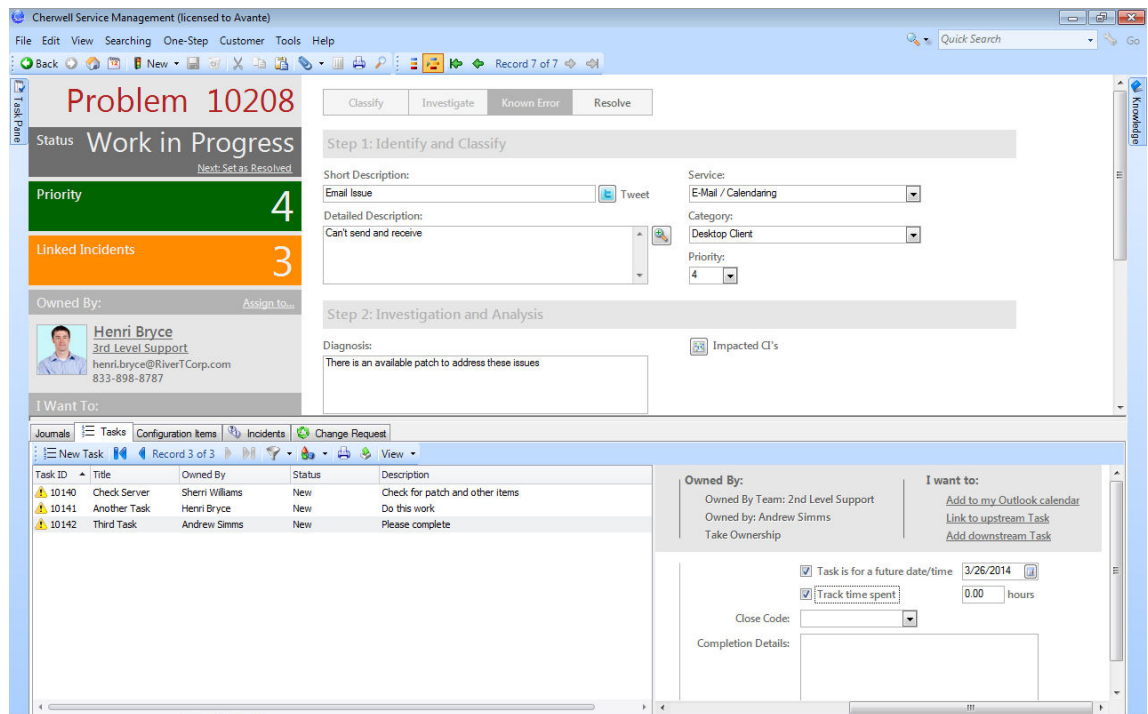
Cherwell is Pink Verified for Event Management so you can easily link to your System Monitoring tools and have a new record created in Cherwell (Event, Incident, Problem, or Change for example) based on receiving an event from your tools.

6. Describe the ability to differentiate between problems and known errors.

When a Problem record has been successfully diagnosed and has workaround or solution details, it will be flagged as a Known Error and can be published into the Knowledgebase. All flagged Known Errors can be searched and managed within the Knowledgebase. Known Errors and Problems are further displayed and managed within the Problem Management dashboard. A Problem will be considered still active when no successful diagnosis has been defined.

7. Describe the ability to create sub-activities or task records for a specific problem record for separate assignment to an individual, group or vendor.

Cherwell utilizes Tasks for all record types including Problem records. You can create multiple tasks, assign to multiple users or groups, and these tasks can also be linked so tasks can be dependent on the completion of another task. Please see the screen print below and note the task tab at the bottom of the record.



8. Describe the ability to make problem and known error details available to Incident Management for use in matching, troubleshooting and resolution.

Cherwell provides multiple ways a user managing an Incident can see Known Errors. All flagged Known Errors can be searched and managed within the Knowledgebase. There is a pre-defined saved search in Cherwell for Known Errors. In addition Known Errors and Problems are displayed on the Incident Management dashboard.

9. Describe the ability to route and assign problem records to pre-defined support staff or groups.

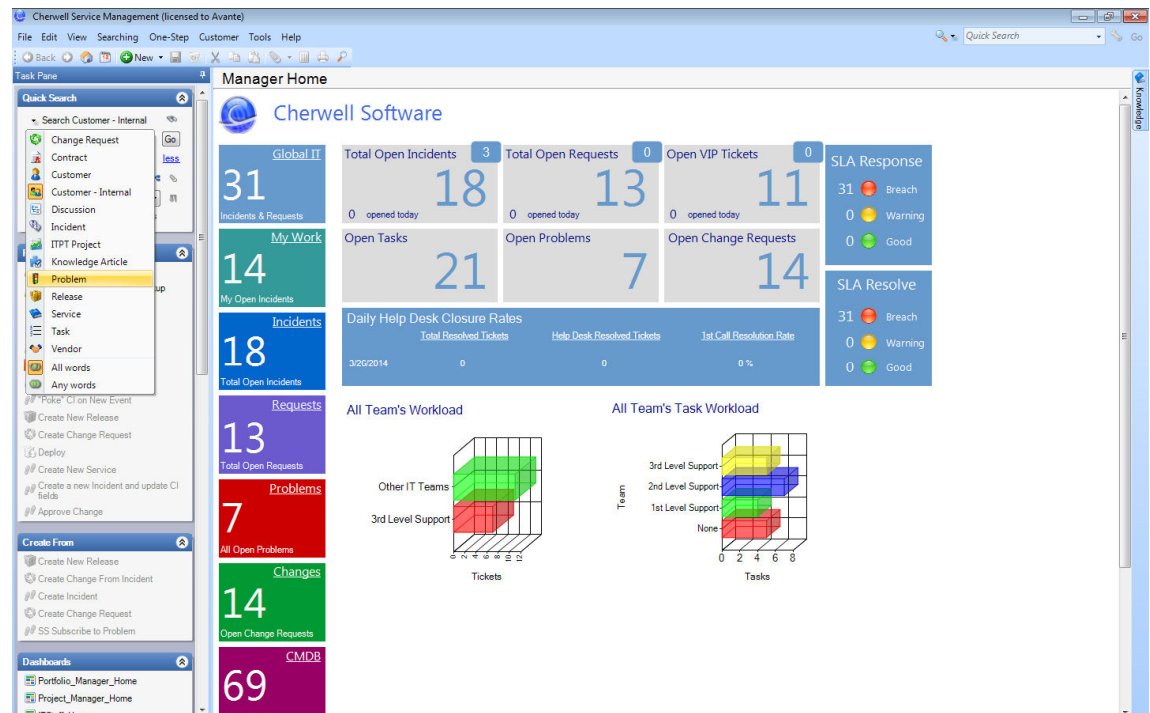
Cherwell provides full routing and queue management for all record types including Problem records. When a new Problem is created the Business Process Engine will monitor and route and assign the record to the appropriate user/group based on the classification (or other criteria).

10. Describe the ability for the problem management team to communicate status and progress reports, as well as temporary solutions and workarounds to the Service Desk staff.

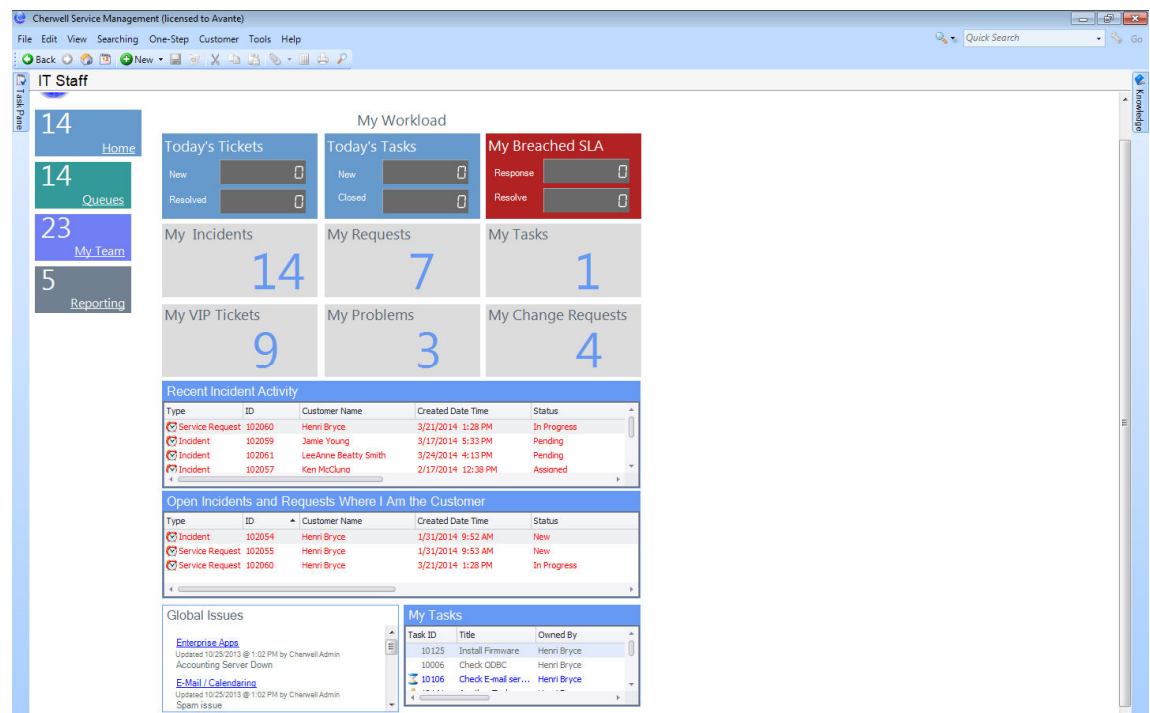
Cherwell provides multiple methods to communicate status and progress relating to Problems to the Service Desk, for example the main Dashboard contains Problem summary information, as we described staff can search the Knowledgebase for temporary solutions, workarounds, and known errors as well as use the general search features. Staff can also have access to the Problem summary dashboards, as well as Problem reports.

Below are a few sample screen prints where Service Desk staff can view Problem, Known Error and Workaround details:

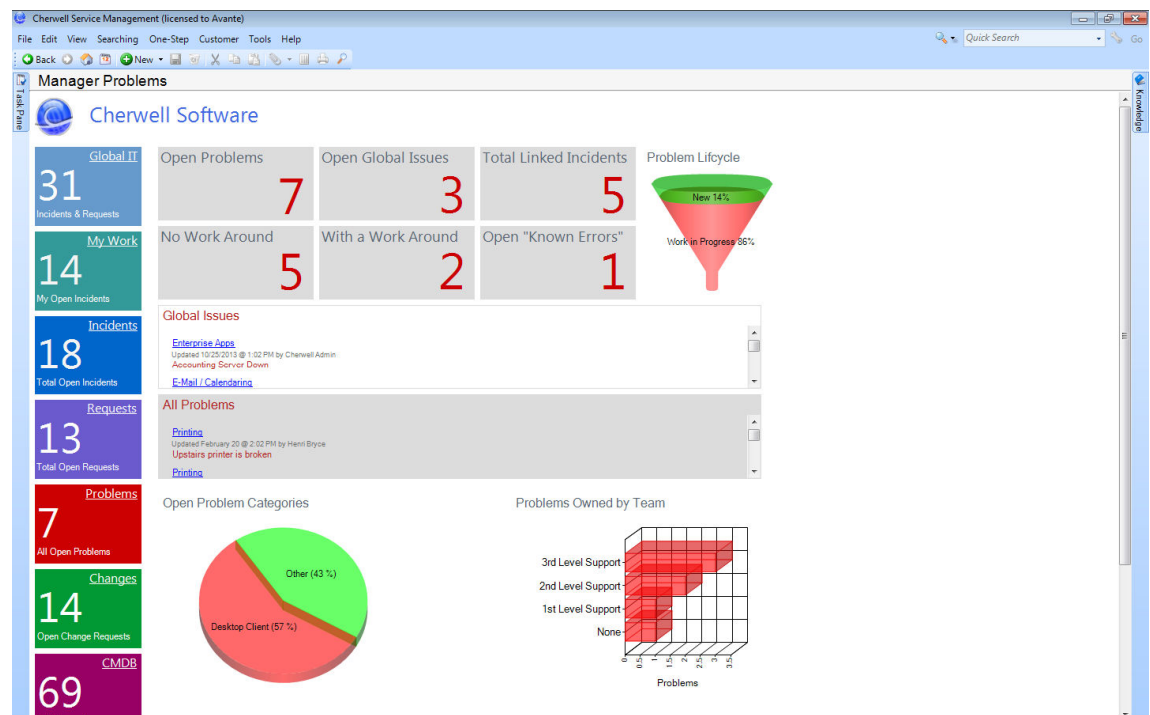
Sample Service Desk Dashboard, note searching upper left side.



Another sample Dashboard, note the Global Issues section bottom left.



Below is a sample Dashboard with Problem, Workaround and Known Error summary detail.



C. Change Management:

Change management is the application of the set of tools, processes, skills and principles for managing the people side of change to achieve the required outcomes of a project or initiative.

We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

1. Describe the ability to provide configurable change process and categorization templates.

Cherwell provides full Change Management capabilities including configurable process and workflow as well as templates that are based on Pink Verification. Below is a sample out-of-box Change screen with a standard template:

Change 10621

Type: **Normal**

Status: **Review** (Next Status: Closed)

Priority: **Normal**

Requestor: **Henri Bryce** (719) 386-7000, Henri.Bryce@RiverCorp.com

Owned By/Change Mgr: **Andrew Simms** (833-898-9039, andrew.simms@RiverCorp.com)

I Want To: ☐ Take Ownership, ☐ Assign to Team, ☐ Create PIR Questionnaire, ☐ Change to Reassign unsuccessful Status

Classify:

Change Type: **Normal** (Visible to Customer Portal)

Change Title: **Upgrade**

Priority: **Normal**

Describe:

Perform Upgrade

Identify Affected CI:

Primary CI: **Mail Server** (Impact Analysis)

Service Affected: **z-Mail / Calendaring**

Service Importance: **Mission-Critical**

Schedule:

Proposed Start Date: **3/2/2014 12:00 AM**

Proposed End Date: **3/2/2014 12:00 AM**

Planning:

ID	Status	Deadline	Approver	Details	Approver Comment
10983	Approved		Gina Mehra	Assessment Approval->>>>ccc	
10984	Approved		Gina Mehra	Implementation Approval->>>>ccc	
10986	Approved		Clair Wu	Implementation Approval->>>>ccc	
10987	Approved		Henri Bryce	Implementation Approval->>>>ccc	
10985	Approved		Bruce Robertson	Implementation Approval->>>>ccc	

- Describe the ability to reference a Change Model that clearly depicts the requirements and activities associated with the change process.

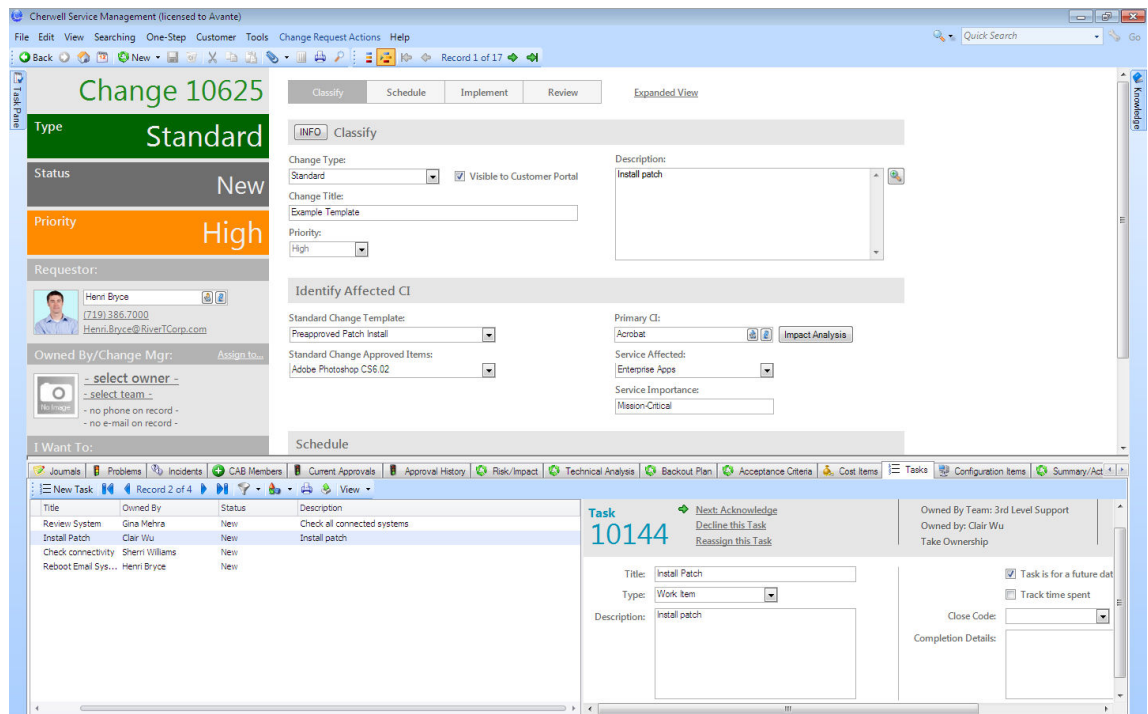
The Change process is modeled in a wizard format where the user is stepped through the progression of the Change process identifying the requirements for data capture and activities at each stage. The system uses on screen identifiers and a progress bar to indicate the current disposition of the Change and the next steps for completion of the Change.

- Describe the ability to relate post-implementation incidents and problems resulting from an implemented change.

Incidents or Problems that are the result of a completed/implemented Change can be classified as “Caused by Change” and linked to the offending Change record.

- Describe the ability to create sub-activities or task records for a specific change record for separate assignment to an individual, group or vendor.

Cherwell utilizes Tasks for all record types including Change records. You can create multiple tasks, assign to multiple users or groups, and these tasks can also be linked so tasks can be dependent on the completion of another task. Please see the screen print below and note the task tab at the bottom of the record.



5. Describe the ability to provide proactive notification to stakeholders and management for changes with critical business impact, collisions and compliancy issues.

Cherwell provides full notifications for all record types including Changes. Based on the classification of the Change or the service the Change associated with workflow can send notifications to specific stakeholders and management. Also reports can be auto-generated and sent to a distribution group regarding Changes in the same manner.

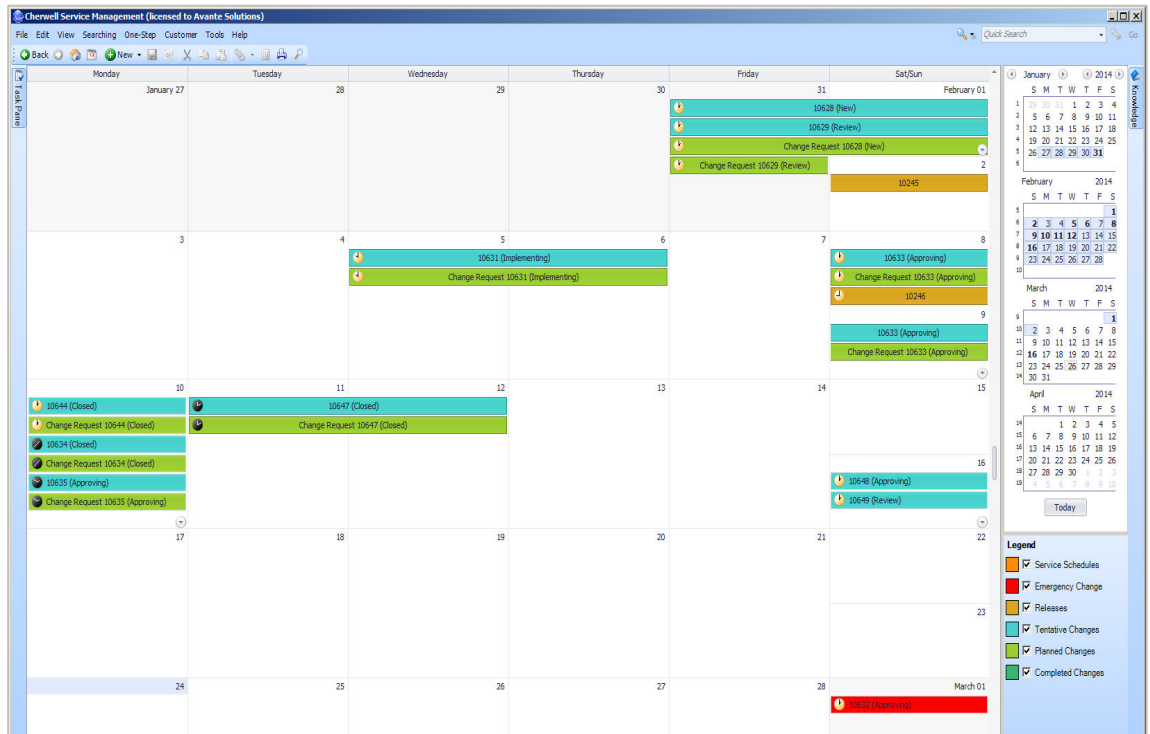
6. Describe the ability to provide role-based approval, retracting or rescheduling of requests for change (RFCs).

Cherwell fully supports role based permissioning that applies to the approval workflow. Based on the user's role and their permissioning they can grant approval, retract approval, as well as reschedule and cancel a Change.

7. Describe the capabilities around forward schedule of changes (FSC).

Cherwell provides full calendaring capabilities including out-of-box calendars including a Forward Schedule of Change (also Tasks, Release, Project Calendars for example) that can be modified/configured as well as a calendar wizard to create new, custom calendars. Based on the security permissions you control, you can allow any user the ability to create their own custom calendars or modify existing calendars.

Below is a Sample of the Forward Schedule of Changes calendar.



- Describe the ability to support maintenance, release and moratoriums (*locked status*) for freeze windows.

Cherwell fully provides calendaring for Change management that includes setting both restrictions and acceptable Change days/dates. In the screen below note we attempted to schedule a Change outside the acceptable date.

Classify

Schedule

Implement

Review

Expanded View

Change Title: Server Patch

INFO

Schedule

Proposed Start Date:

3/27/2014 8:38 AM

Proposed End Date:

3/27/2014 8:38 AM

Review Date:

5/8/2014

Planning:

Change Calendar

Collision Detection

⚠

Current Dates selected are not in the normal maintenance window for this CI or Service!

Propose New Date

Assess

Submit for Approval

29 | Page

9. Describe the ability to select and create "preapproved changes" from a list of predefined templates with prepopulated content, such as categorization, text, etc.

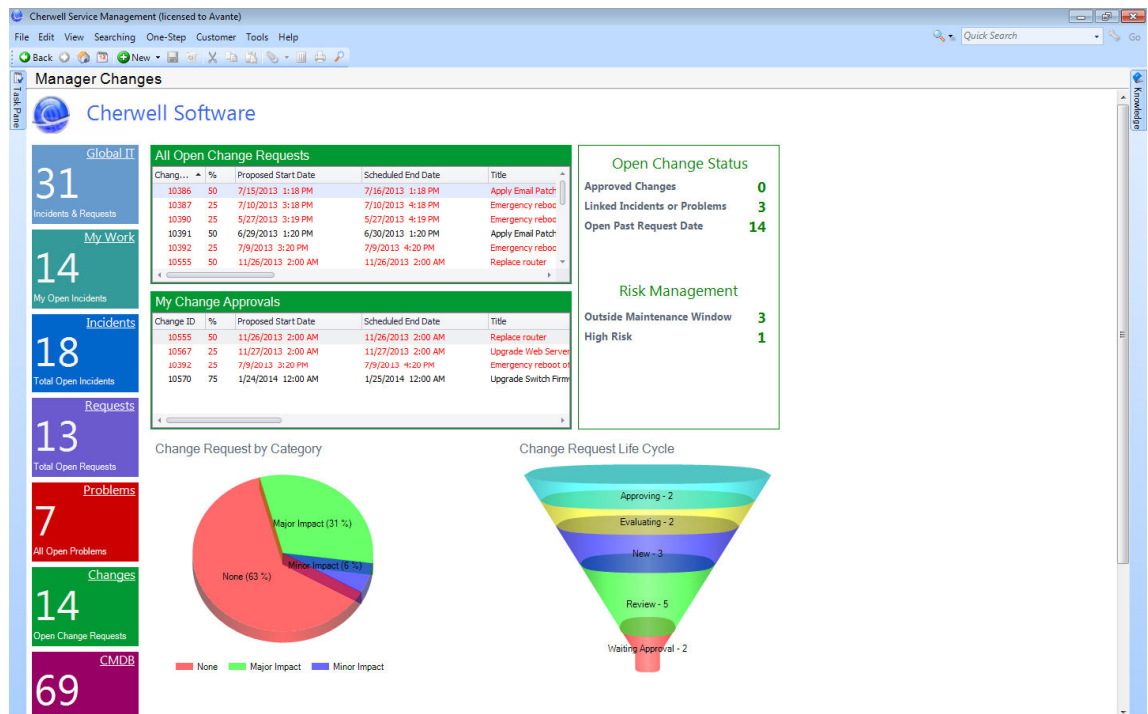
Cherwell fully supports templates for all record types including Changes. Cherwell includes out-of-box templates that can be modified also you can create new custom templates. The screen below is an example of a Change record using a system template; note the template drop down in the center of the screen.

The screenshot displays the Cherwell Service Management interface for a Change record (10625). The interface is divided into several sections:

- Header:** Shows the record ID "Change 10625" and tabs for "Classify", "Schedule", "Implement", and "Review".
- Left Sidebar:** Contains metadata for the record:
 - Type:** Standard
 - Status:** New
 - Priority:** High
 - Requestor:** Henri Bryce (71913867000, Henri.Bryce@RiverCorp.com)
 - Owned By/Change Mgr:** Assign to...
 - I Want To:** Take Ownership, Assign to Team, Create PIR Questionnaire, Change to Assessing Status.
- Main Content Area:**
 - Classify Tab:** Includes fields for "Change Type" (Standard), "Change Title" (Example Template), and "Priority" (High). There is a "Visible to Customer Portal" checkbox and a "Description" text area.
 - Identify Affected CI:** Features a "Standard Change Template" dropdown menu with options: "Preapproved Hardware Install", "Preapproved Patch Install", and "Preapproved Software Install". It also includes fields for "Primary CI", "Service Affected", and "Service Importance".
 - Schedule:** Includes "Proposed Start Date" and "Proposed End Date" fields, and buttons for "Change Calendar" and "Collision Detection".
- Bottom Section:** A table with columns "Type", "Created", "By", and "Details". It shows "No records" and a message "There are currently no records".

10. Describe the ability to monitor and track the lifecycle of a change request.

Cherwell provides multiple methods for tracking the lifecycle of Change records, typically via Dashboards, reports and notifications. In the screen below we have provided a sample Change Dashboard that provides a summary of all changes and where they are in their lifecycle.



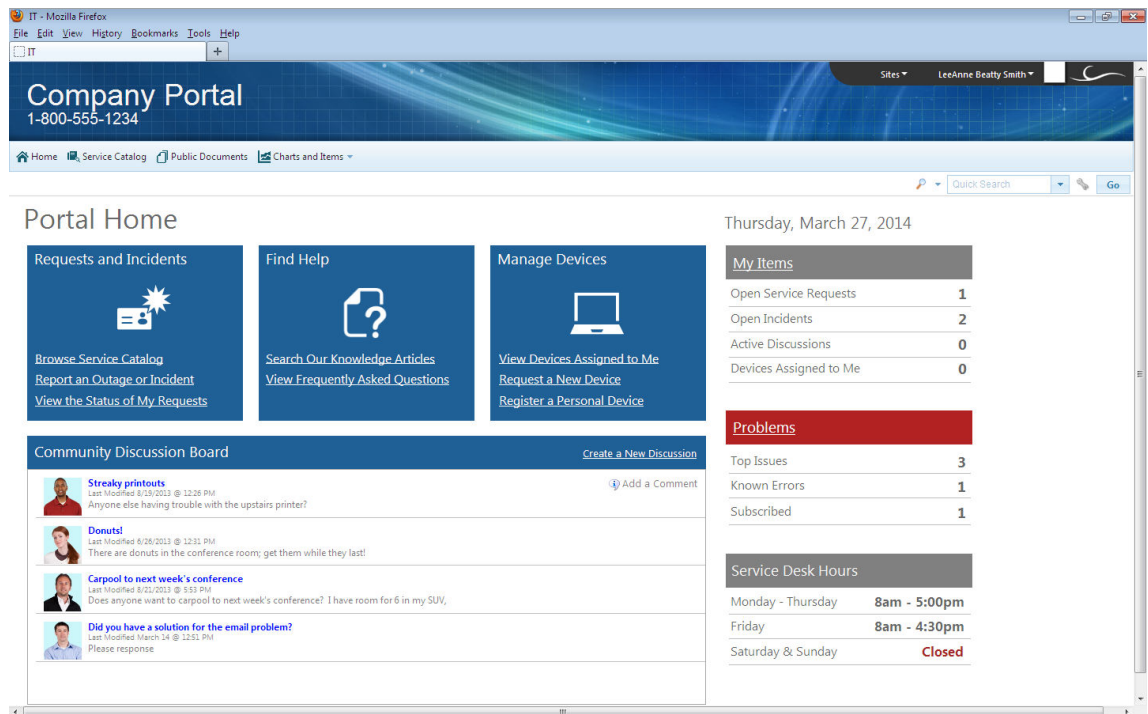
D. Service Request Fulfillment and Service Catalog:

A service request is a request from a user for information, for advice, for a standard change, or for access to an IT service. The purpose of Service Request Fulfillment is to enable the user to make such a request and receive these services; to provide information to users for how to request and obtain the services; to ensure delivery of the services; and to assist with general information, complaints, and comments. It includes tracking and logging progress on requests as well as the approval process required before fulfilling the request.

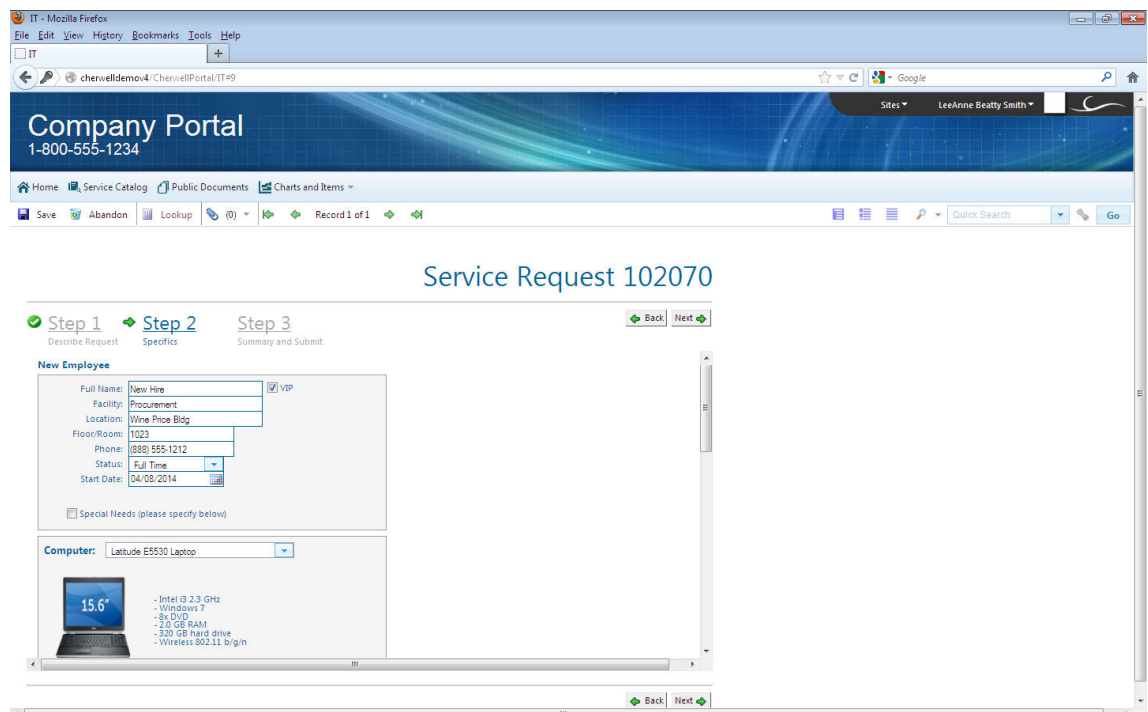
We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

1. Describe the ability to log and edit Service Requests, get the status of requests, and search the knowledge base via a portal.

Cherwell provides a robust Self-Service portal that includes the ability to log, view, update, edit, and review records including Incidents and Request, as well as access the Knowledgebase. In the screen below we have provided the out-of-the-box landing page:



In the screen below we have provided an example of a detailed Request to set up a new hire employee.



2. Describe the ability to generate different workflows (including multi-function with different subtasks) for different types of requests.

Cherwell provides the ability to configure workflow via the graphical workflow builder for all record types including Requests (we provided additional details in question 2 of the Incident section above on page 12). This includes approvals that can include tasks and activities. Request forms can be dynamic where depending on your classification and entries to other fields you will be prompted for more information and accordingly different workflow will apply (ex. a Request for a VIP user may have a different approval requirement than a standard user).

3. Describe the ability for service requests to initiate automated actions both within the system and in external systems.

Cherwell's workflow allows for the system to auto-generate tasks and approvals for Service Requests (as well as any record type). Users can receive notifications (typically email) of these task and approvals and can complete the requested action via email, the self-service portal, or by accessing the Cherwell system. In addition these approvals and tasks can be sent to external sources, and you have choices for how that can take place. Some examples include: Cherwell can send the task or approval via email link to the external system. You can create an integration where the task or approval is sent from Cherwell to the external system (ex. PeopleSoft), and that system (PeopleSoft) will then create a task or approval (or equivalent type of activity) and the user in that system can manage the task within that system and as they take action or complete the task or approval the corresponding task approval will be updated within Cherwell.

4. Describe the ability to support automatic sending, receiving and logging of approvals for requests.

Cherwell provides full approval capabilities which includes automated approval workflow that creates, forwards and allows the user to log the approval via email, portal, or within the system. This applies to all record types including Requests.

5. Describe the ability to provide automated status updates when a request reaches specific points in the workflow.

Cherwell includes full notification capabilities. The Business Process engine monitors for triggers and auto-generates notifications to users (typically email) at set milestones. All this is fully configurable so you can decide when notifications will be sent at what milestones, and for what type of Request (you can have different notification processes based on the Incident classification).

6. Describe the ability to route and assign service request records to pre-defined support staff or groups (*e.g. IT, HR, Procurement or other business functions*).

Cherwell provides full routing and queue management for all record types including Requests. When a new Request is created the Business Process Engine will monitor and route and assign the record to the appropriate user/group based on the classification (or other criteria). The Request can be routed to any group including IT, HR, Procurement etc.).

7. Describe the ability to market available services via a portal.

[REDACTED]

[REDACTED]

8. Describe the ability to provide different views of the Service Catalog, such as Technical Service Catalog and Business Service Catalog.

Cherwell provides full flexibility to display the Service Catalog. You can have a unified view for both technical and business services or provide separate views for both. In the screen prints above you will note both technical and business Services are presented.

9. Describe the ability to support distributed, role-based Service Catalog management and use.

Cherwell provides full Service Catalog capabilities as we have described throughout this section. This includes role based access where the user's login credentials will determine their functionality and access to catalogs. We provided a number of screen prints above that show examples of this functionality.

10. Describe the ability to customize service definition templates and pre-packaged Service Catalog content.

As we described the Service Catalog is fully configurable and includes out-of-box templates to define services. These templates are fully configurable, you can create new custom templates, service definitions, services offerings etc.

E. Knowledge Management:

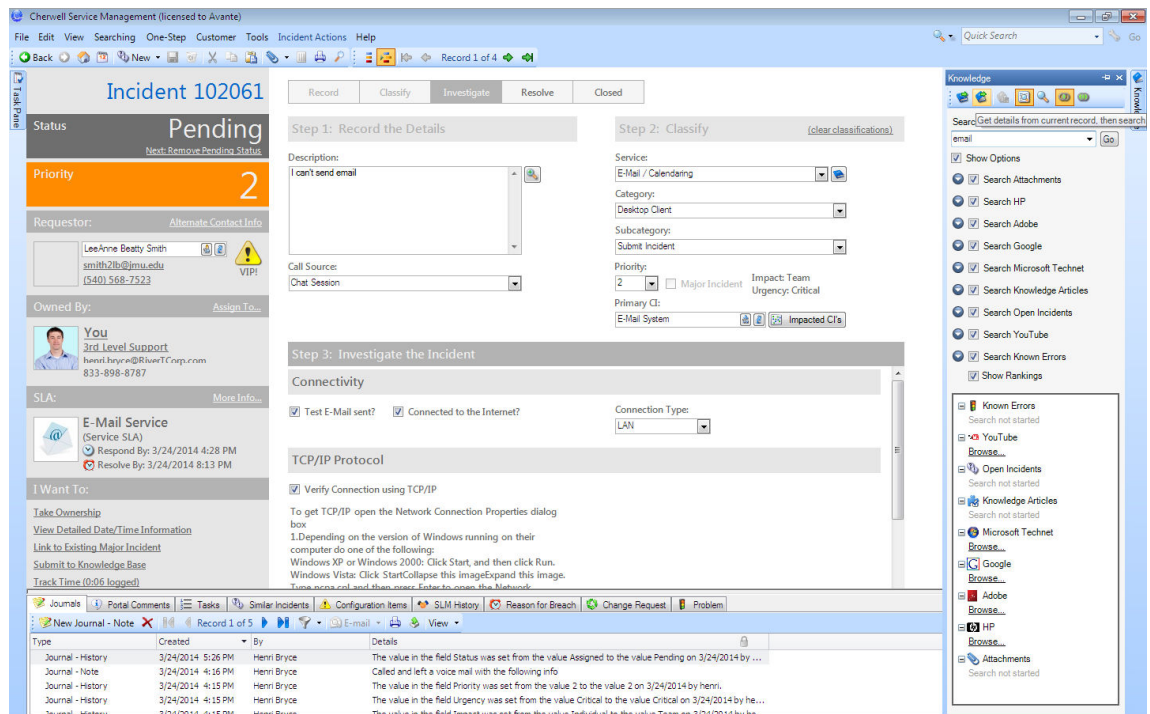
Knowledge management comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences.

We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

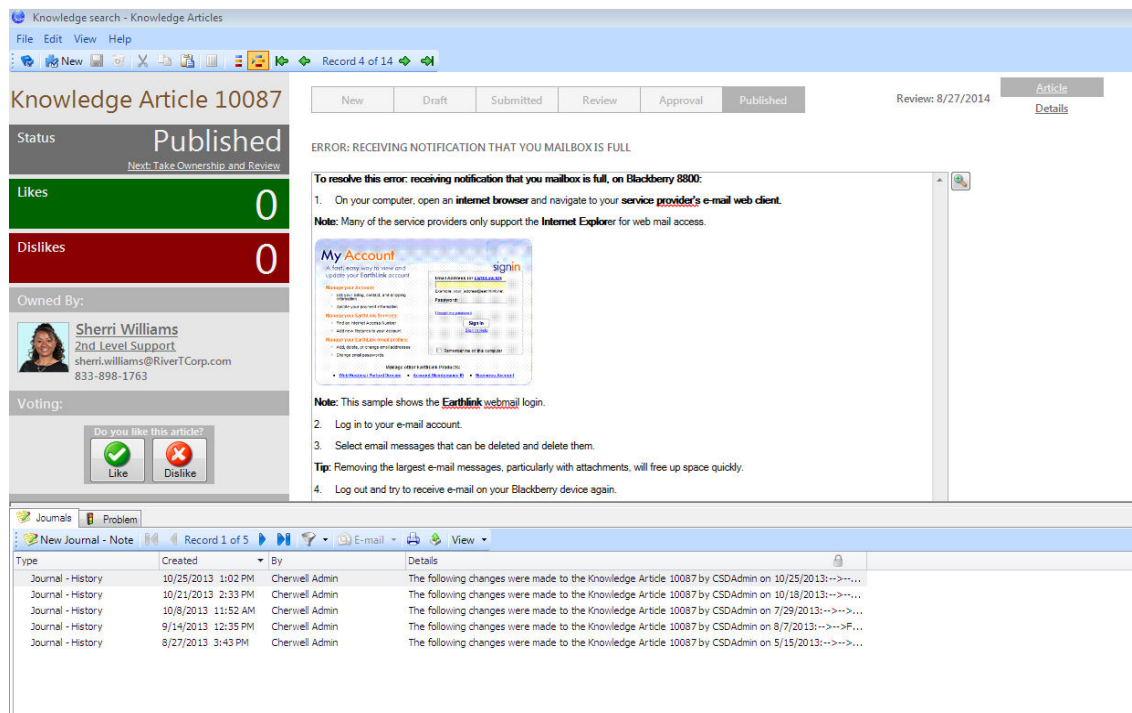
1. Describe the ability to create, maintain and monitor a knowledgebase.

Cherwell provides a Pink Verified Knowledgebase as part of the core application. You can create data imports from existing sources (SharePoint for example) as well as create connections to external data sources (MS TechNet, Google for example). The Knowledgebase can be set to search a number of sources (Incidents, Known Errors, Knowledge Articles, Google, You Tube, HP, and Adobe as examples). Information in the Knowledge base can be marked for access either just internal or to external customers via the Self-Service Portal. We have provided a number of screen prints below showing some of the Knowledge capabilities:

In the screen below note the user can search the Knowledge base from an Incident, also note the sources they are searching.



Below is an example of a Knowledge Article.



2. Describe the ability to integrate with third-party knowledge bases and document storage solutions (e.g. SharePoint, file shares).

Import capabilities for Knowledge are the same for importing data from other sources. Typically importing data for Knowledge consists of importing files (PDF, Word, XLS, and HTML) which can then be searched and accessed via the Knowledgebase. In addition Cherwell has an out-of-box integration with KnowledgeBrokers.

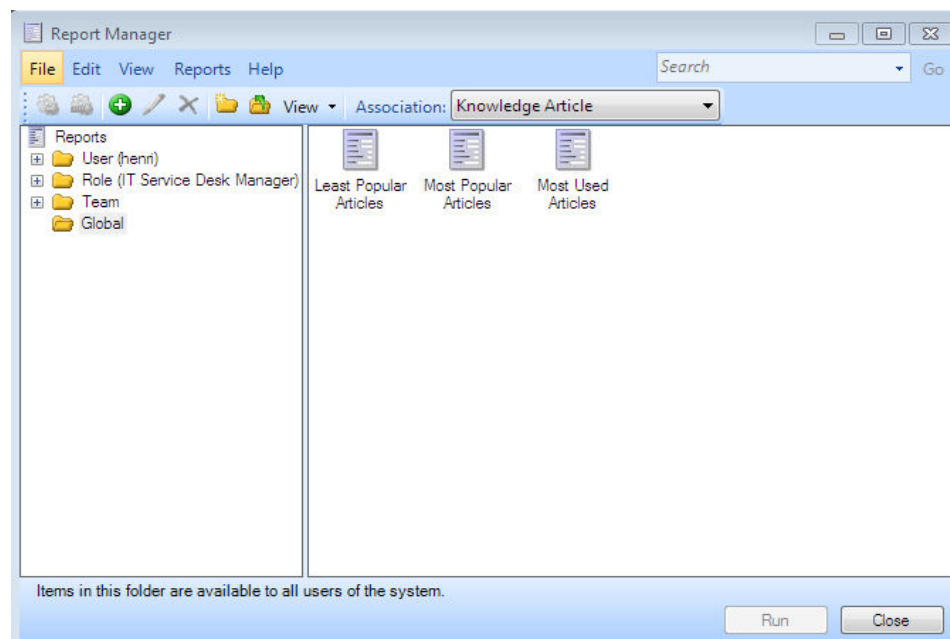
Integration with Cherwell and third party systems is fully supported and can be achieved using various methods depending on the integration requirements. This includes integration to third party data sources where depending on your requirements Cherwell can be configured to launch an external search to that data source, or you can create a data import so the external data is brought into Cherwell and is presented as a Knowledge article.

The overview below addresses integration capabilities as a whole, in addition to API and Web Services.

Cherwell provides a documented and published API for application to application integration as well as the means for communication such as SOAP, Message Queues, XML, HTTP and TCP. Integration can also be achieved at the data layer level where the ability to connect to externally attached data sources and schedule imports is available. Alternatively externally connected data sources can be accessed in place without the need for imports. Bi-Directional data updates are also supported.

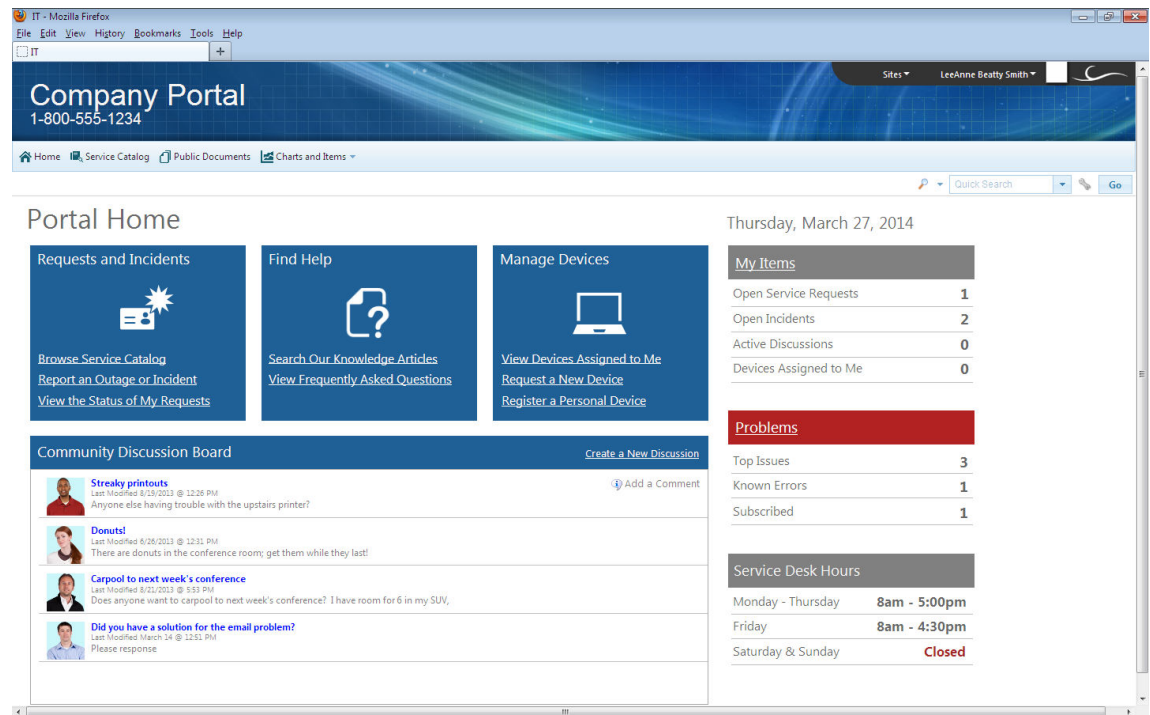
3. Describe the ability to report on the number of proposed solutions, most used solutions, and least used solutions in the knowledgebase.

Cherwell provides reports and dashboards that give visibility into the usage statistics for Knowledge entries. Below is a screen print that shows some sample Knowledge reports.



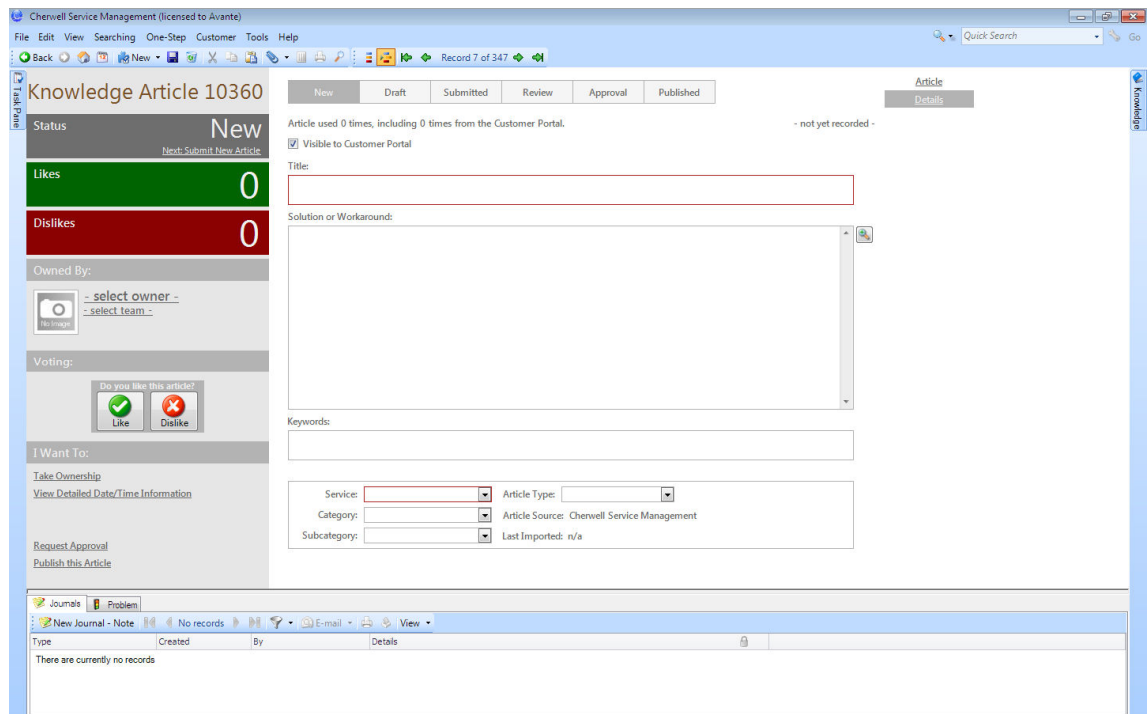
4. Describe the ability to publish FAQs and supporting reference documents in the knowledgebase to be accessible by end-users.

As we have described Knowledge can be made available to end-users via the Self-Service portal. This includes the ability to manage what articles can be viewed by end users. The data can come from many sources and be easily presented to the end users. In the screen print below note the “Find Help” box on the center of the screen, showing how a user can search Knowledge as well as Frequently Asked Questions.

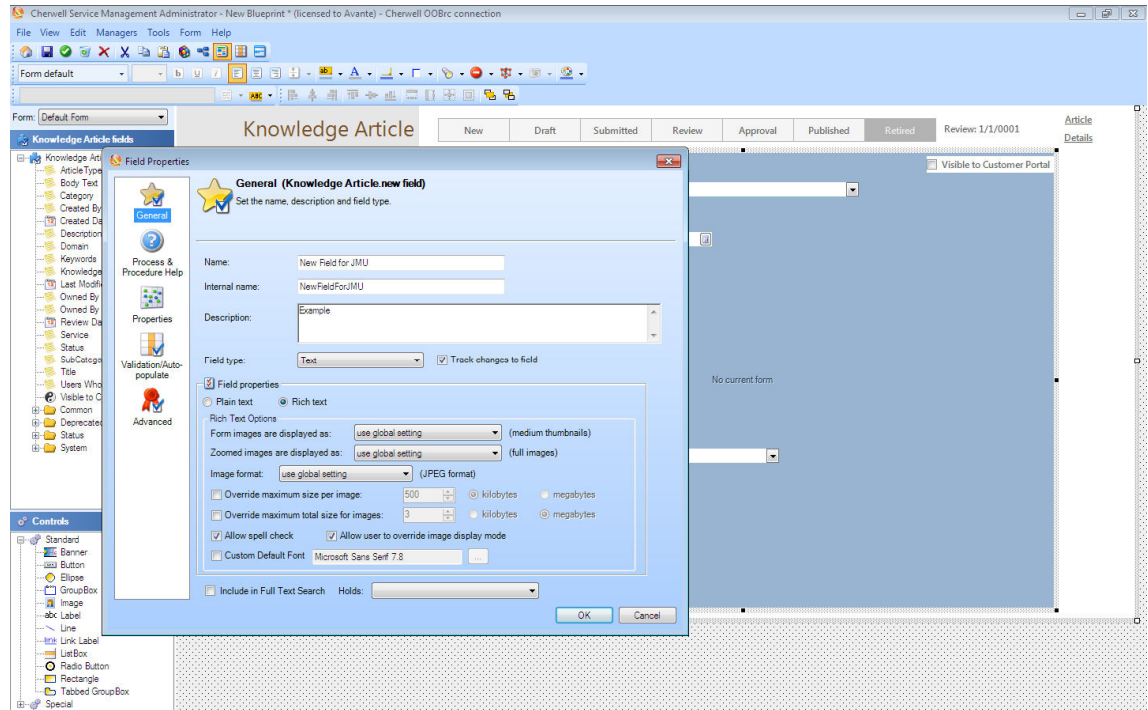


5. Describe the ability to provide configurable knowledgebase input templates.

Cherwell provides out-of-box Knowledge templates that like all other forms can easily be modified to meet your criteria. Below is an example of a Knowledge Article template.

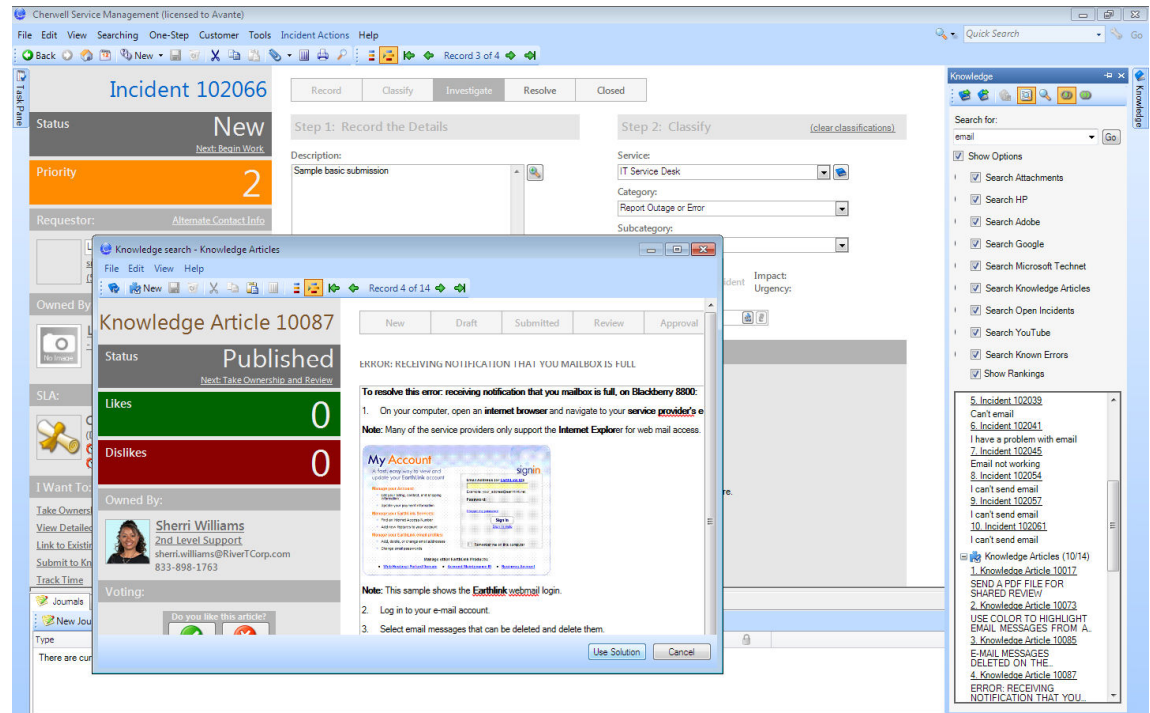


In the screen below we have provided an example of the ease of creating a new Knowledge Article template via the Administrators interface, showing the ease of adding a new custom field.



6. Describe the ability to populate a knowledge article into an incident, problem or change record.

From any record type when you select a Knowledge Article as a resolution or wish to attach the Article to the record (Incident, Problem, Change) simple click the “Use Solution” button on the bottom right of the Knowledge Article and it will populate that within the record (Incident, Problem, Change). See the sample screen print below.

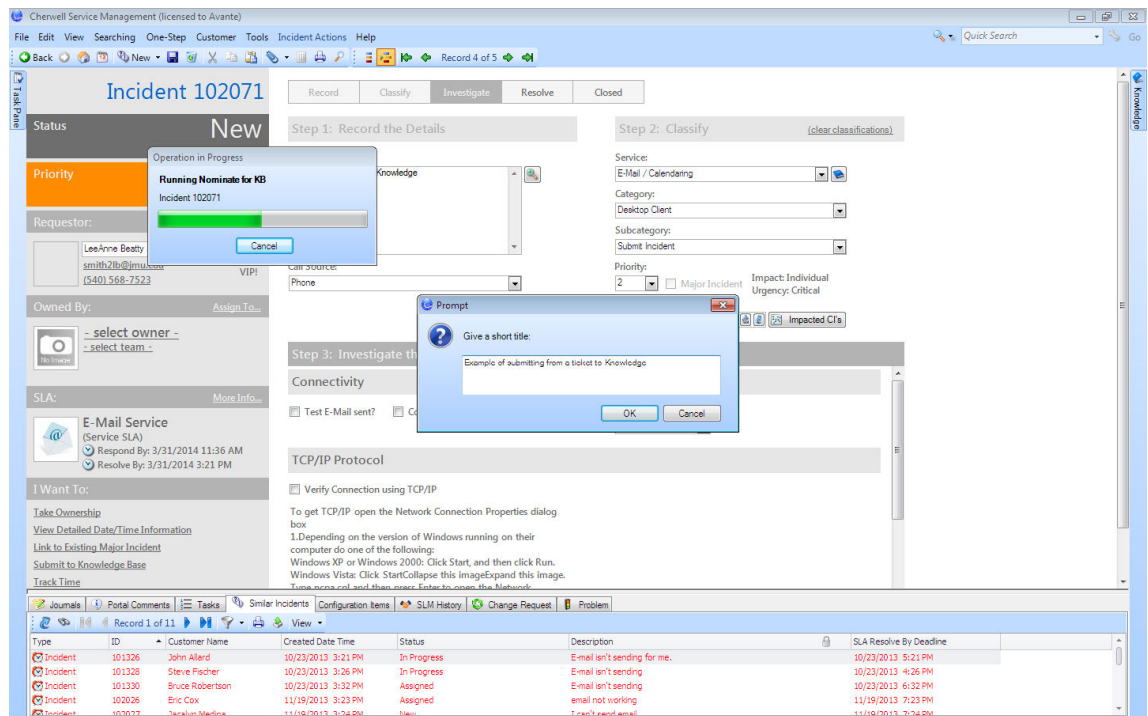


7. Describe the ability to support role-based knowledge items (e.g. a technical role can access either technician-facing or customer-facing articles).

As we described in Item 1 above, you can manage who has access to Knowledge (internal user, customer, both etc.). In addition the Role Based Security can also provide more granularity as to what users can have access only concerning Knowledge.

8. Describe the ability to create knowledge management entries from existing incidents, problems and changes.

From within a record (Incident, Problem, and Change for example) you can select the “Submit to Knowledge base” on the lower right side and that will run a One-Step action that will submit your solution from the record and nominate as an entry to the Knowledgebase. Please see the screen print below where we have executed that action from an Incident record as an example.



- Describe the ability to support a variety of search methodologies (e.g. metadata, fuzzy searching, hierarchical/drill-downs, cross-references, attribute queries, category, web and file system external library searches, natural language, stemming, Boolean search).

Cherwell fully supports a variety of search methodologies as out-of-box capability.

- Describe the ability to allow user feedback to rate/score content for usefulness related to the inquiry.

Cherwell provides voting features so users can rate the usefulness of Knowledge.

F. Project Management:

Project management is the discipline of planning, organizing, motivating, and controlling resources to achieve specific goals. A project is a temporary endeavor with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value.

We would like to confirm that Cherwell has IT Project Management included in their core out-of-the-box application.

- Describe the ability to support requesting and managing project inventory.

Requesting items and managing items associated to a Project can be supported using relationships that would see a request be granted inventory and that inventory then related as well to the Project. When the project is over all the related items would then be accounted for and then made available again in the CMDB.

2. Describe the ability to add user-defined fields to capture and report various information about a project including: cost benefit analysis information, multiple associated systems and applications, dates and classifications.

Cherwell fully supports the ability to add custom fields, which is accomplished via the Administrators interface. Many of the fields listed above are standard out-of-box fields for Project; below we have provided a sample screen. In addition regarding custom fields, please see our overview of Cherwell's Administration capabilities on page 48 in item 4 Section H.

The screenshot displays the Cherwell Service Management interface for Project ITBV01. The interface is divided into several sections:

- Project Info:** Includes fields for Project ID (ITBV01), Name (Replace Media Server), Description (The media server is too slow and needs to be upgraded), Priority (2), Portfolio ID (ITCS2013), and Location (Buena Vista, CO Office).
- Effort/Cost Info:** Shows Estimated Effort (24.00 hours), Actual Effort (0.00 hours), CapEx Budget (\$6,675.00), OpEx Budget (\$0.00), Total Cost (\$104.98), and Budget Remaining (\$6,510.02).
- Schedule Info:** Includes Planned Start Date (3/15/2013), Planned End Date (3/29/2013), Actual Start Date (3/15/2013), and Actual End Date.
- Portfolio ITCS2013:** Shows ITPT Portfolio ID (ITCS2013), Name (IT Project Portfolio for Colorado Springs, CO office for 2013), Department (IT), Portfolio Manager (Gina Mehra), Start Date (1/1/2013), End Date (12/31/2013), and Budget (\$75,000.00).

The interface also features a sidebar with project status (Low Risk, Active), a list of requestors (Melanie Daniels), and a section for the project manager (Sherri Williams).

3. Describe the ability to designate low priority projects that do not need to follow timeline.

Cherwell provides classification for all Projects including low priority. If you do not want to monitor or assign a timeline, you can set the workflow to support. Below is an example of a low priority Project with no "complete by" date.

Chervell Service Management (licensed to Avante)

File Edit View Searching One-Step Customer Tools Help

Back New Record 2 of 9

Quick Search Go

Project JMTes01

Risk: **Low**

Status: **New**
Next: Assign to PM

Priority: **5**

Requestor: Lee Anne Beatty Smith
(540) 568-7523
smith2lb@jmv.edu

Owned By/Project Mgr: Susan O'Connor
(719) 386-7000
Susan.O'Connor@RiverTCorp.com

I Want To: Send a Project Health Update

Initiation Awaiting Approval Execute Closing

Budget Remaining: **\$0.00**

Project Info

Project ID: JMTes01

Name: Low Priority Project

Description: Sample example

Priority: 5 (1 High - 5 Low)

Portfolio ID: ITBV2013

Portfolio Manager: Kate Usher

Location: Corporate

Effort/Cost Info

Estimated Effort: 0.00 (Hours)

Actual Effort: 0.00 (Hours)

CapEx Budget: \$0.00

OpEx Budget: \$0.00

Total Cost: **\$0.00**

Budget Remaining: \$0.00

Schedule Info

Planned Start Date: 4/4/2014

Planned End Date:

Actual Start Date:

Actual End Date:

Business Case Deliverables Cost Items Project Members Risks/Issues Tasks Journals Portfolio

Deliverable ID	Name	Description	Requirements	Start Date	End Date
Test01	Test Deliverable	Do something	Not defined	4/5/2014	

4. Describe the ability to associate requirements to key project deliverables.

This is a standard feature as displayed in the screen below. You can add a number of deliverables to a project and define the requirement for each deliverable.

Chervell Service Management (licensed to Avante)

File Edit View Searching One-Step Customer Tools Help

Back New Record 1 of 9

Quick Search Go

Project ITBV01

Risk: **Low**

Status: **Active**
Next: Approve Closing

Priority: **2**

Requestor: Melanie Daniels
(719) 386-7000
Melanie.Daniels@RiverTCorp.com

Owned By/Project Mgr: Sherri Williams
(833) 898-1763
sherri.williams@RiverTCorp.com

I Want To:

Initiation Awaiting Approval Execute Closing

Budget Remaining: **\$6,510.02**

Project Info

Project ID: ITBV01

Name: Replace Media Server

Description: The media server is too slow and needs to be upgraded

Priority: 2 (1 High - 5 Low)

Portfolio ID: ITCS2013

Portfolio Manager: Gina Mehra

Location: Buena Vista, CO Office

Effort/Cost Info

Estimated Effort: 24.00 (Hours)

Actual Effort: 0.00 (Hours)

CapEx Budget: \$6,675.00

OpEx Budget: \$0.00

Total Cost: **\$164.98**

Business Case Deliverables Cost Items Project Members Risks/Issues Tasks Journals Portfolio Approvals

New IPT Deliverable Record 1 of 1 View

Deliverable 001

Deliverable ID: 001

Name: Replace Media Server

Description: The current media server at the Buena Vista, CO office is antiquated and needs to be replaced.

Requirements: The new Media Server will require a faster switch

Customer Accepted

Start Date: 4/10/2013

End Date: 5/3/2013

5. Describe the ability to manage milestones.

Project phases, gating and milestones are supported. Usage of task based milestones is a default feature in the system.

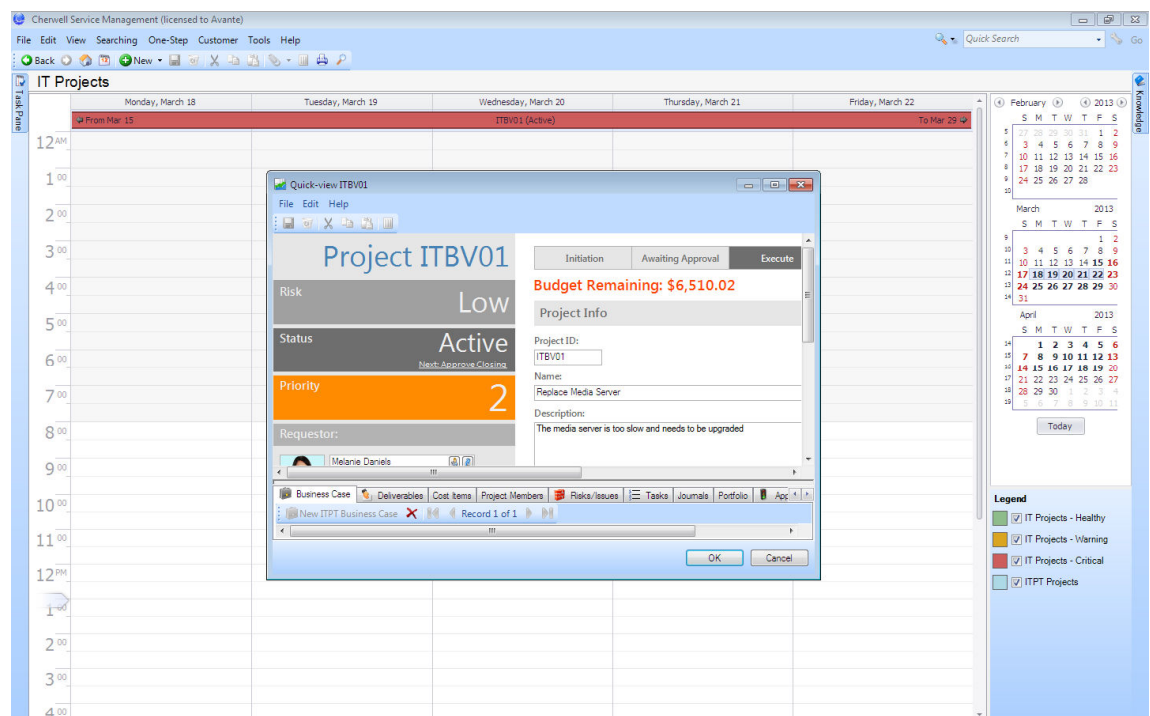
6. Describe the ability to link projects to a service, product or asset.

Cherwell fully supports relationships between records so any record can be associated or linked to a Project including a Service or Asset.

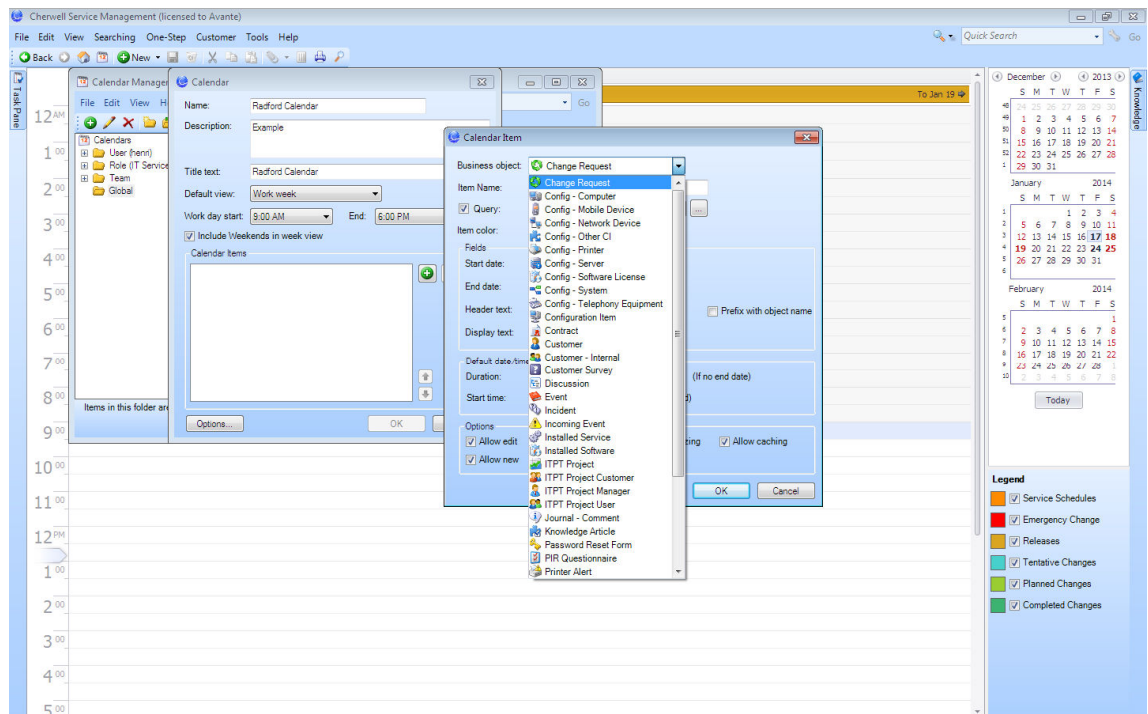
7. Describe the ability to see impacts and dependencies of projects across the portfolio of product/services/assets.

Cherwell provides Dashboard and Calendars for Project and Portfolio which provides visibility into impacts, dependencies, conflicts and overall management of the active Projects.

In the screen print below we show the out-of-box Project Calendar, and to confirm the calendars are actionable we clicked the project for this date range and the record has opened on the screen.



The screen print below shows the Calendar Manager Wizard, in this example we created a new Calendar, and note in the center when we select the business object drop down we can create a calendar based on any business object in the system, including Project Calendars.



8. Describe the ability to connect releases/incidents/changes to a project.

Cherwell fully supports relationships between records so any record can be associated or linked to a Project including a Release, Incident, Change etc. This can be done via a field on the Project form or via a Tab.

9. Describe the ability to associate and report on projects relationship to corporate strategic goals and objectives.

Fields would be added to provide the ability to report / describe and associate the project to incorporate strategic goals and objectives. As well if that strategic information was in file form, the files could be attached to the project.

G. Asset Management:

Asset management is a systematic process of operating, maintaining, upgrading, and disposing of assets cost-effectively.

We would like to confirm that Cherwell has received PinkVERIFY® certification for 11 ITIL® processes including: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

1. Describe the concept of an asset's lifecycle and the system's ability to support and manage that lifecycle.

Asset lifecycle management is a standard feature of an asset record in Cherwell. The Status field notates the stage of the assets' lifecycle, in the screen below note the asset is in an "Active" state. Cherwell supports a number of lifecycle states, which can be configured, including: Inventory, Assigned, Active, In-repair, Missing and Retired for example.

The screenshot shows the Cherwell Service Management (licensed to Avante) Configuration Management Database (CMDB) interface. The main window displays details for a Computer asset with the following information:

- Status:** Active (Next: Bring Down)
- Open Incidents:** 0
- Primary User:** LeeAnne Beatty Smith (smith2b@jmsu.edu) (540) 568-7523
- Owned By:** - select owner - IT Management
- I Want To:** Take Ownership, View Detailed Date/Time Information, Create a New..., Visualize CI/Network Map, Mark as "In Repair", View more status options
- Details:**
 - Asset Tag: 4356
 - Computer Type: Laptop
 - Serial Number: 8643235878115
 - Primary Use: Individual Workstation
 - Manufacturer: Dell
 - Model: Latitude E5530 Laptop
 - Building: A
 - Floor: 2
 - Room: 212
- Network:**
 - MAC: EB E1 76 75 7B 5F
 - Host Name: leanne-lap
 - User Name: lbamth
 - Friendly Name: leanne-lap
 - IPv4 Address: 10.10.2.110
 - IPv6 Address: 0:0:0:0:0:0::a0a26e
- Operating System:**
 - OS: Microsoft Windows 7 Professional
 - OS Family: Windows NT
 - OS Group: Professional
 - OS Service Pack: 1
 - OS Version: 6.1.7600
- Properties:**
 - BIOS Version: 1.81
 - CPU Type: x64
 - CPU Speed: 2300
 - Memory: 8,388,608
 - Virtual Mem: 7,384
 - Video:
- Financial:**
 - Vendor: Dell Inc.
 - Purchase Date: 3/13/2013
 - Invoice ID: 1179
 - Purchase Price: \$519.00
 - Purchase Type: Purchased

The bottom of the screen shows a table of related records:

Product	Vendor	Version	Install Date
Adobe Reader	Adobe Systems Incorporated	9.1.0	4/20/2013
PeopleSoft	Oracle	3.0	4/20/2013

2. Describe the variety of assets the system can manage.

Cherwell offers complete flexibility to manage all types of assets including IT and non-IT. Some examples of out-of-box asset templates include: Server, Laptop, Mobile Device, Network Device, Telephony Device, Printer, Software License, etc. In the screen print below we show a search for all asset types as an example, note the column on the left with the multiple types of asset records.

CI Type	Asset Tag	Hostname	IP Address	Manufacturer	Model	Location - Floor
Config - Printer	4147				3938	1
Config - Printer	4148	exec-printer	10.10.2.5	Hewlett-Packard	LaserJet CP4005	1
Config - Printer	4149	main-printer	10.10.2.10	Hewlett-Packard	LaserJet 3600	2
Config - Printer	4150			Dell	Color Laser 3115	3
Config - Network Device	4319	isp-rv.local	10.10.0.1	Cisco	ASA 5500	0
Config - Computer	4354	leeanne-lap	10.10.2.109	Dell	Latitude E5530 Laptop	3
Config - Mobile Device	4355	Steve's Phone	10.10.2.203	Apple	iPhone 5 32GB	
Config - Computer	4356	leeanne-lap	10.10.2.110	Dell	Latitude E5530 Laptop	2
Config - Software License	4372			Microsoft		
Config - Software License	4374			Adobe Systems Inc.		
Config - Computer	4380	melenie-lap	10.10.2.111	Dell	Latitude E5530 Laptop	1
Config - Computer	4382	tracy-desk	10.10.2.112	Dell	OptiPlex 9010 Desktop	1
Config - Network Device	4383	fv-main.local	10.10.0.2	Cisco	ASA 5500	0
Config - Network Device	4384	hpsv1.local	10.10.0.3	Hewlett-Packard	8120	0
Config - Server	4385	malinrvr	10.10.1.25	Dell	PowerEdge C6220	0
Config - Server	4386	mandc	10.10.1.20	Dell	PowerEdge C6220	0
Config - Other CI	4388	files	10.10.1.22	Netgear	BD44000	0
Config - Server	4389	apserver	10.10.1.30	Dell	OptiPlex 9010 Desktop	0
Config - Server	4390	rvvertes.com	10.10.1.40	Dell	PowerEdge C6220	0
Config - Server	4391	mainfiles	10.10.1.31	Dell	OptiPlex 9010 Desktop	0
Config - Network Device	4392	sn01	10.10.2.77	Dell	PowerConnect	1
Config - Network Device	4393	RiverTeesWiFi	10.10.2.1	Cisco	AP541N	0
Config - Computer	4394	eric-desk	10.10.2.113	Dell	OptiPlex 9010 Desktop	0
Config - Computer	4395	christine-desk	10.10.2.114	Dell	OptiPlex 9010 Desktop	1
Config - Computer	4396	josee-lap	10.10.2.115	Dell	Latitude E5530 Laptop	1
Config - Computer	4397	steve-lap	10.10.2.116	Dell	Latitude E5530 Laptop	3
Config - Computer	4398	steve-desk	10.10.2.117	Dell	OptiPlex 9010 Desktop	3
Config - Computer	4399	tom-desk	10.10.2.118	Dell	OptiPlex 9010 Desktop	1
Config - Computer	4400	klein-lap	10.10.2.119	Dell	Latitude E5530 Laptop	1
Config - Computer	4401	molly-desk	10.10.2.120	Dell	OptiPlex 9010 Desktop	2
Config - Computer	4402	michael-desk	10.10.2.121	Dell	OptiPlex 9010 Desktop	2
Config - Computer	4403	eric-lap	10.10.2.122	Dell	Latitude E5530 Laptop	4
Config - Computer	4404	marco-desk	10.10.2.123	Dell	OptiPlex 9010 Desktop	1

- Describe the system's ability to manage leases, depreciation schedules, warranties, and service provider contracts.

These are all standard items that Cherwell supports for an asset record.

- Describe the system's ability to support both flexible data import/export, and simple points of integration for associated tools.

Cherwell fully supports the ability to import and export all data (provided data imports are in a standard file format). The Administrators interface provides a Scheduler that allows you to automate and schedule data imports and exports. Cherwell provides robust integration capabilities that are very easy to configure as well as flexible in how the integration is required. For an integration with a third party system you can create a one-time data feed to import data, you can create a scheduled data import where the initial import brings in the data then you can schedule regular imports to bring in any new data from the source, or you can create an active database link.

- Describe the system's ability to interface with and make use of barcode scanners.

Cherwell supports integration with Bar Code scanning systems as well, so asset data can be imported, records created and updated. We can discuss your requirements and provide more information how your Bar Code system can be linked to Cherwell.

Cherwell can search the system based upon a barcode scan from a tethered scanner or Bluetooth scanner connected to a windows system running the Cherwell Rich Client. You can also use the iPhone and Android Cherwell apps to scan and record the barcode of a scanned device. Barcode tags can be printed to barcode printers via a 3rd party integration.

H. Application Technology:

1. Describe how the modules function as an integrated whole and detail any limitations in their ability to function independently from other modules.

Cherwell is a single application with a single underlying database where all processes (modules) are fully integrated, which includes all the processes/modules we have described: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, IT Project and Event Management.

2. Describe the application security features for data, for each module, and for the system. Describe all row-level security options as well as any field-level encryption available.

Role based access applies to all processes, as Cherwell is a single application where all processes/modules are the same system. Role based security is configured via the Administrators interface in the Security module. Using the provided tools, administrators can create user groups to control access to modules and features including business object and field level security. By default the system promotes "least access" security, ensuring that only the minimum access necessary to perform an operation is granted, thus increasing data integrity by limiting access to the proper users only. This allows you to control who has the ability to create new, modify existing, and view reports.

3. Describe any transactions or functions that are not done on a real time basis and list batch jobs required for this function.

Scheduled data imports and report generation are not done on a real time basis but they can be scheduled to happen based upon a schedule you determine. The system processes transactions real time and near real time and does not require the use of any batch job.

4. Describe how menus are used within the system and if menus are customizable and/or configurable. Define what customizable and configurable mean for your application.

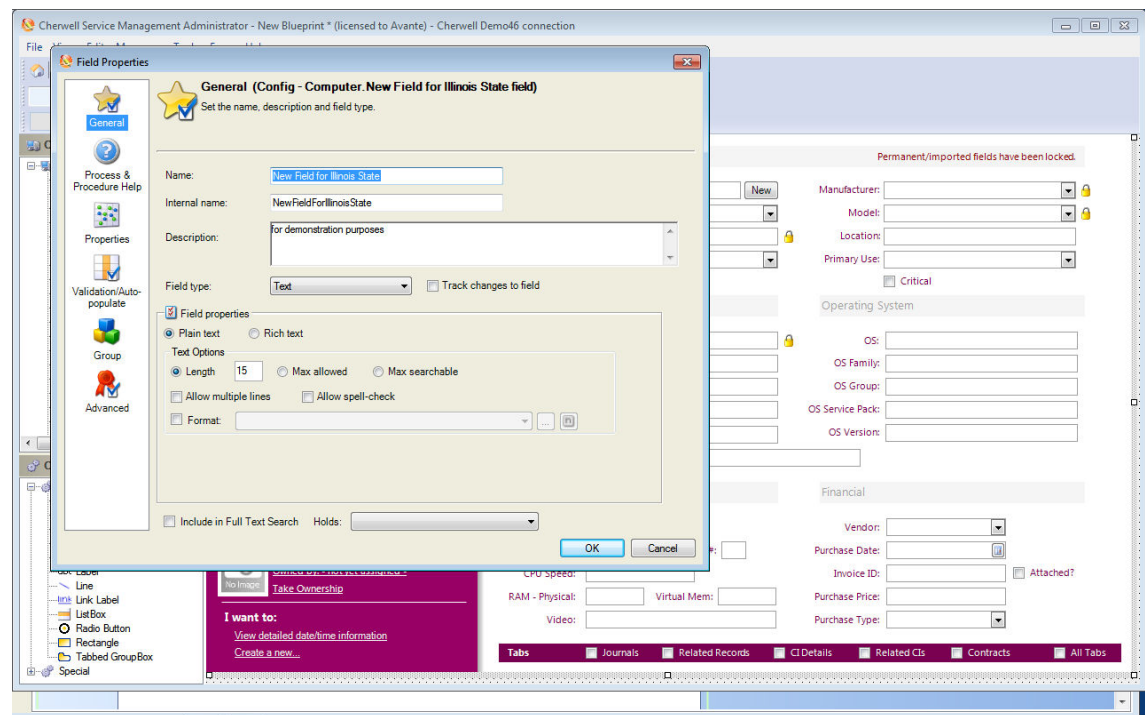
Menus are user throughout the system to present options for users as well as Administrators. A majority of menus are fully configurable. All modifications within Cherwell are defined as Configuration (or Configurable) as you are never required to write any code or scripting to make changes to the system. Below is an overview of the Administration and Configuration capabilities of Cherwell, which is a major differentiator to other ITSM system in the market:

One of Cherwell's key strengths is the ease-of-administration which is extremely robust (you can create completely new business objects (applications/modules) yet simple to use (requires no scripting). Cherwell call's this Codeless Business Application Technology (CBAT). You can easily configure the user interface by dynamically adding all types of customizations including: windows, tabs, fields and more. Cherwell provides their One-Step capability, which is used to automate workflow and process throughout the system. These are easy to configure and easy to use where process actions can be configured and run providing the ability to execute actions such as: send email, print, copy / clone a record, update and create records and much more. An example of a configured one-step for use would be for quick calls where a one-step would be configured to automate the fill

in of a service request for a password reset. In this case a standard description would be entered into the request record, the priority set to a value and the resolution information entered. The configuration of one-steps is considered a powerful user feature where users of the application would be trained as to how to configure one-steps using the drag and drop interface. The security features of the application allow you to define the context of when a one-step can be ran and who can create, modify and delete specific one-steps. As an example of the ease of administration please see Appendix "B" Overview of Cherwell's Workflow Builder on page xx.

5. Describe the extent to which the user can configure or customize all forms, reports, input/output screens, formats, etc. to brand the application for JMU. Define what modifiable, customizable and configurable mean for your application.

Please see our response above. As an example via the Administrators interface you can access the form designer and add a new custom field via a wizard driven menu. In the screen print below note we are adding a new field to a CI record:



In addition to the Administration capabilities we have outlined in this section we would also like to highlight another configuration capability that is a major advantage versus other system, which Cherwell calls One-Steps.

Cherwell provides their One-Step capability, which is used to automate workflow and process throughout the system. These are easy to configure and easy to use where process actions can be configured and run providing the ability to execute actions such as: send email, print, copy / clone a record, update and create records and much more. An example of a configured one-step for use would be for quick calls where a one-step would be configured to automate the fill in of a service request for a password reset. In this case a standard description would be entered into the request record, the priority set to a value and the resolution information entered. The configuration of one-steps is considered a powerful user feature where users of the application would be trained as to how to

configure one-steps using the drag and drop interface. The security features of the application allow you to define the context of when a one-step can be ran and who can create, modify and delete specific one-steps.

6. Describe the tools and expertise which university technical staff would use to support, troubleshoot, configure or customize the application.

Cherwell requires very little maintenance once the application is in production. Our standard recommendation is that customers have two trained system administrators (one primary and one back-up). Ideally, these administrators would be responsible for supporting all of the areas, departments, and teams leveraging the technology. The system administrators should have a skill set where they are somewhat familiar with database concepts, form design, and security.

We wish to highlight that a key advantage of Cherwell is that the administrative effort, for the most part, will require less time and no programming when compared other enterprise technologies competing in this market place. Cherwell uses Codeless Business Application Technology (CBAT) which means you will not need any scripting to administer the system.

Once the system is in full production, we typically see minimal utilization of the administrators. Another advantage of Cherwell is that many of the usability and productivity capabilities can be set-up and modified at a user level (if they have permissions that you set via the security setting in the administrators interface). These areas include: Navigation, Dashboards, Calendars, Reports, Pre-Defined Searches and Macros (referred to as One-Steps). Most teams will have a Super-User to set up and support usability and productivity capabilities rather than relying on the administrators.

The application provides the capability to create a completed system backup using the Administrator application and this can be scheduled no differently than an industry third party backup technology. It is recommended that for disaster recovery purposes, an industry standard backup solution is utilized. Anti-virus procedures would be consistent with other server based systems the University has in production.

7. Describe other customizations available and associated cost, i.e., hourly and fixed fee.

We have explained the configuration capabilities of Cherwell and have indicated that once you are trained you can be self-sufficient to fully manage and configure the system. If desired you can utilize Avante's Professional Services staff in place of your internal resources at the rates we describe in our pricing section.

8. Describe how configuration and customization will affect future releases of software.

Configurations are not affected when Cherwell makes new releases available. We have provided an overview of the upgrade process below:

The upgrade process requires the installing of the new version and connecting to the application database. The new version of the application will check the version of the application database and note that a schema and Meta data change may be required. The data will be backed up and the upgrade will initiate. Where required the schema and Meta data will be updated. All customizations will be preserved and will not need to be

reapplied. The upgrade will not change any customization however it may provide a new feature that could be added to the system and utilized where deemed necessary. The application is not available during the upgrade process; however there is minimal downtime for any upgrade (typically no more than 20 minutes for a major release). The typical interim upgrade takes a minimal amount of time to apply, typically less than 10 minutes. A major version upgrade requires little outage time as well; however it could be approximately 20 minutes depending on the changes in the system made as part of the upgrade. Major upgrades usually require a client upgrade as well, however if the Cherwell auto deploy feature is used, the upgrade for the client will occur when the user launches the application after a server upgrade.

9. Describe workflow functionality included with the application and provide a list of any function for which workflow is already built and delivered.

Cherwell provides pre-configured workflow for all the processes included in the application: Incident Management, Request Fulfillment, Service Portfolio Management, Service Level Management, Service Catalog, Problem Management, Knowledge Management, Change Management, Release Management, Configuration Management, and Event Management.

Cherwell provides a Graphical Workflow builder which requires no development time, effort or expertise. Workflows are developed and deployed using the Administrative interface. Workflows typically consist of using a feature called a “One-Step” which is then utilized by the graphical business process designer feature that is part of the Administrative interface. Based upon security, the One-Step feature can be accessed via the client side application where required.

Cherwell provides the ability to automate all processes including; Change, Problem and Incident. Some examples where automation is provided include: templates, pre-populating fields, approvals, automated notifications, automated escalations, and more. These are accomplished typically by the Cherwell feature called One-Steps.

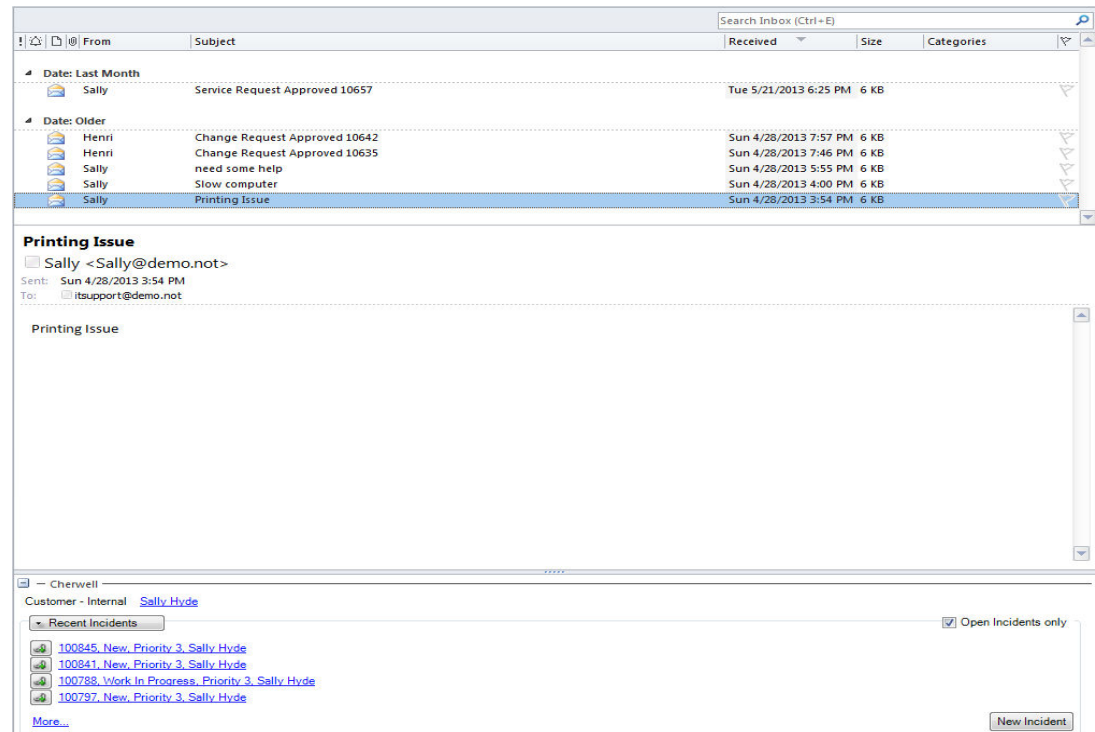
One-Steps are used to automate workflow and process throughout the system. These are easy to configure and easy to use where process actions can be configured and run providing the ability to execute actions such as send email, print, copy / clone a record, update and create records and much more. An example of a configured one-step for use would be that for quick calls where a one-step would be configured to automate the fill in of a service request for a password reset. In this case a standard description would be entered into the request record, the priority set to a value and the resolution information entered. The configuration of one-steps is considered a power user feature where users of the application would be trained as to how to configure one-steps using the drag and drop interface. The security features of the application allow you to define the context of when a one-step can be ran and who can create, modify and delete specific one-steps.

10. Describe how JMU’s email systems would be incorporated with your system’s operation. (Faculty/Staff – on-premise Exchange and students – Office 365).

The Cherwell Email and Event Monitoring Service provides a level of integration where incoming messages can initiate action within the application. Protocols such as POP3, IMAP, and SMTP are supported as well as a native Integration with MS Exchange 2007, 2010, 2013. Actions such as creating new or updating existing records can be done based

upon a specific set of rules that are defined to manage your integration needs and are based upon the sources being monitored.

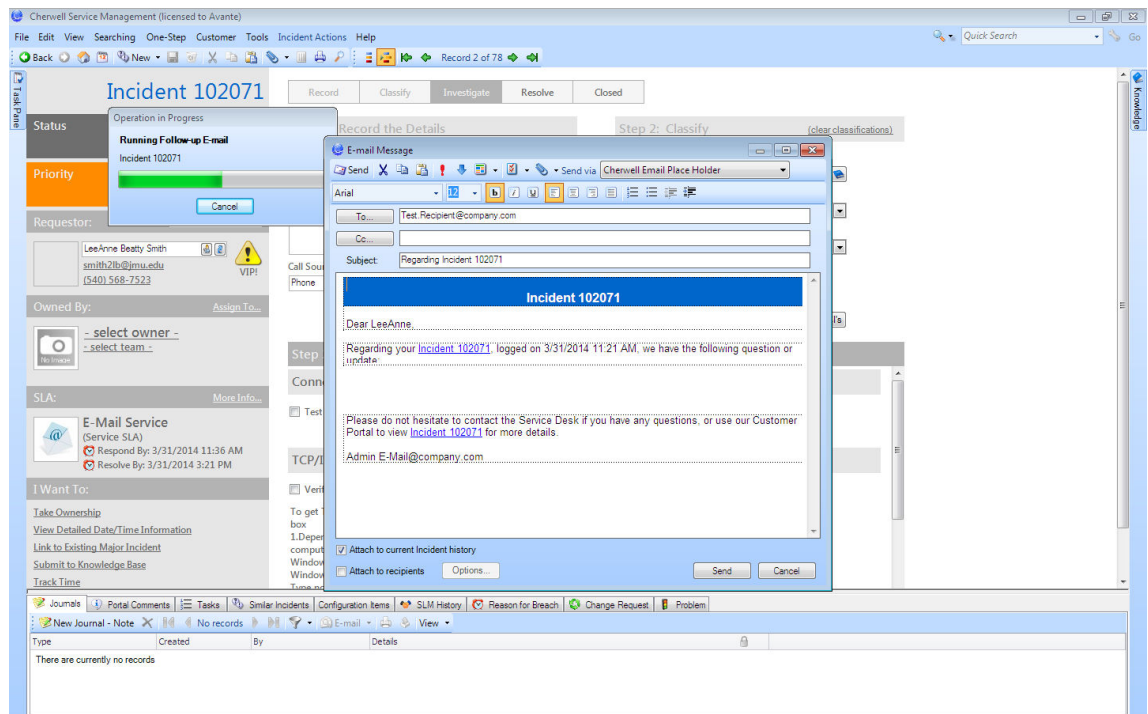
In addition Cherwell also offers a Plug-in integration with Outlook that allows users to manage tickets via Outlook, below is a sample screen.



11. Describe third party emailing, if this functionality is part of your solution. What messaging service is utilized by your system?

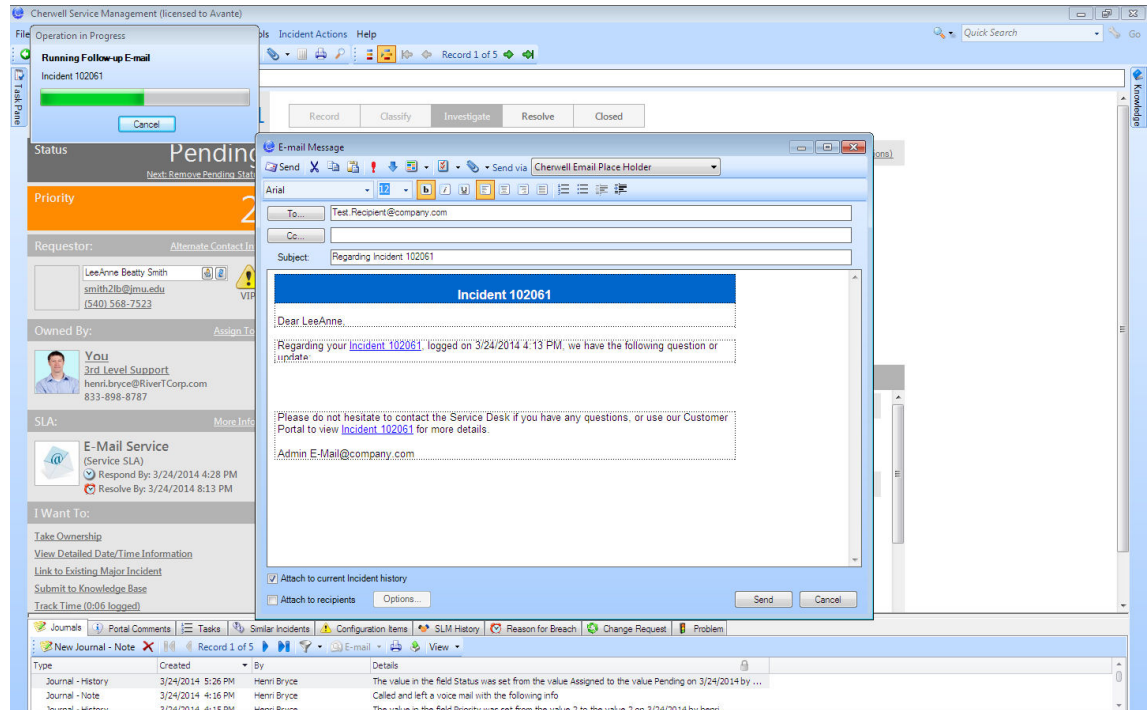
Cherwell fully supports the ability to integrate with email as well as send emails directly from the system as both automated notifications as well as manual emails. The notification emails are managed by the configurable workflow, so you can manage what conditions/milestones dictate when an email notification is sent, to what user, and what information is included in the email.

Cherwell's email capabilities also include configurable templates for all types of emails. In the screen below we show an example of an email being sent from an Incident record. Please note some of the following: the format of the email is an example of a standard template, the email will be attached to the Journal section of the Incident, you can edit the email in addition to what is included in the template and you can add recipients.



12. Describe details of how messages look and can be customized (to, from, body, etc.)

Cherwell provides configurable email templates that can have a variety of formats. In the screen below we show an example of a “Follow-up” email send from an Incident ticket.

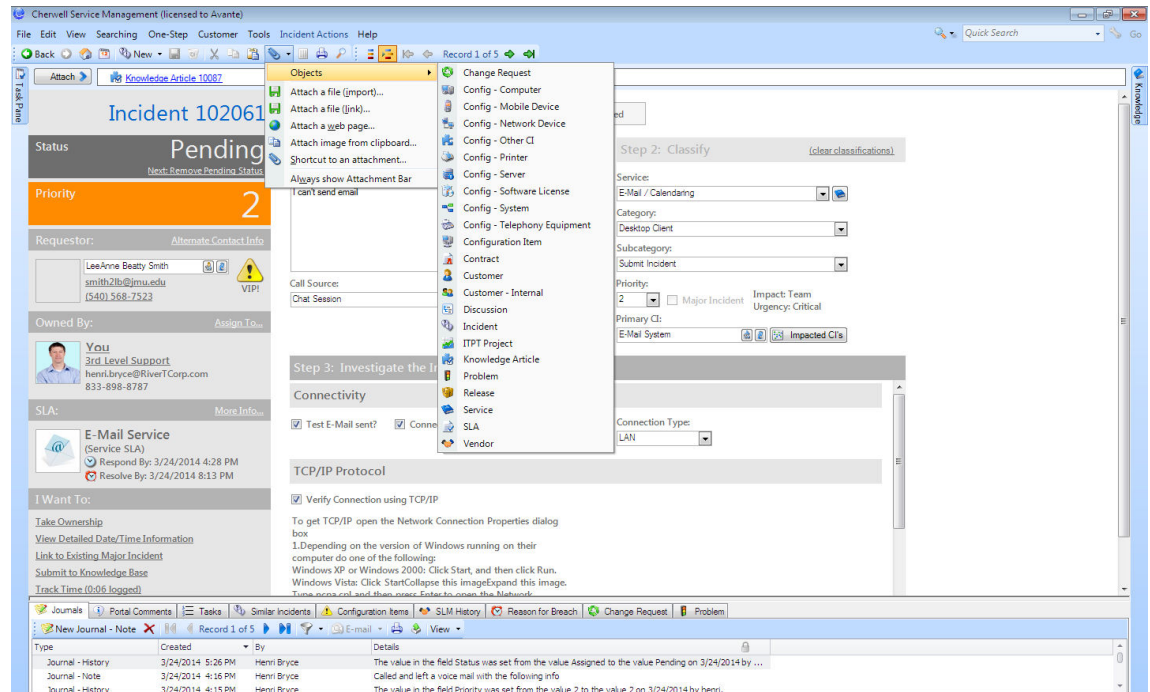


13. Describe the modules' ability to enter free form text, screen captures, and file attachments.

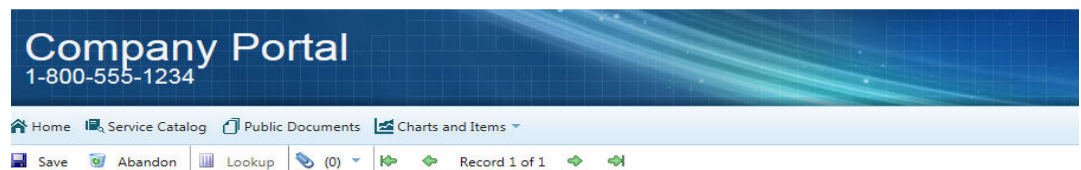
Cherwell fully supports the ability to enter free form and rich text to all record types, this

includes screen captured and file attachments. This applies to all user types including technicians and Self-Service users.

In the sample screen below note we selected “Add Attachment” from the menu bar and have several attachment options including: other records, files, web pages, images etc.



In the sample screen below a Self-Service user is adding a screen capture to an Incident.



Incident 102073

Step 1 Describe Incident Step 2 Describe Urgency Step 3 Summary and Submit Next

Please describe your issue in detail*

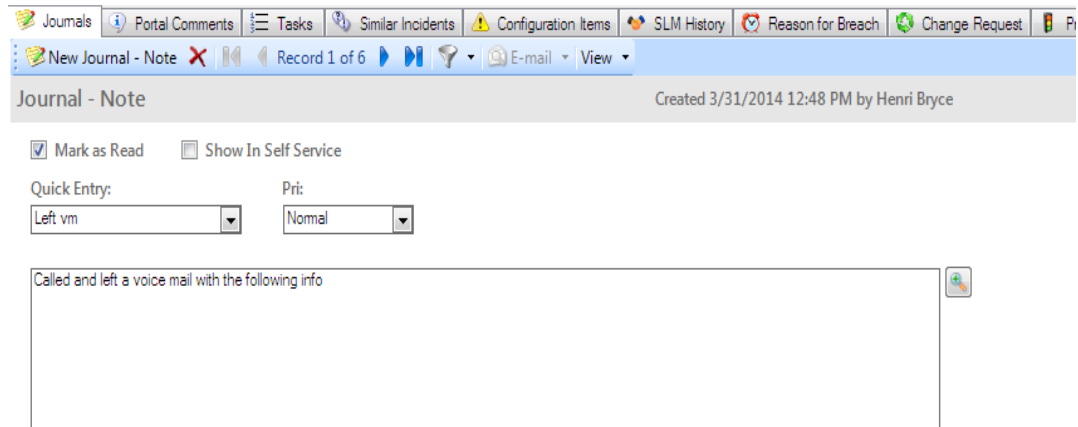
Example of submitting a screen print from Self-Service

The screenshot shows a screen print of the Self-Service interface for Incident 102073. The screen print displays the incident details and the user's description of the issue. The interface includes a navigation bar with links for Home, Service Catalog, Public Documents, and Charts and Items. At the bottom of the screen print are buttons for Save, Abandon, and Lookup, along with a status bar showing 'Record 1 of 1'.

14. Describe the ability for support staff to make private notes.

Technicians can create a Journal entry to add a note which can be checked as not visible to Self-Service thereby private. Also Cherwell has a Discussion feature where you can post a question or item and have a technician or other person respond. These communications can be secured so that only specific individuals would be able to see or respond to specific posts.

Below is a sample screen of a technician adding a Journal entry that is not visible to the end user.



15. Describe the ability to track the total amount of time of effort expended.

Cherwell fully supports time tracking. In the action section for all records you can click the track time button to add time spent on the ticket. Also in Tasks there is time tracking capability. All the time fields can be aggregated and reported on for total time spent, and time by user, time by action, etc. depending on your use of the time tracking capabilities.

I. Reporting:

1. Describe application approach/strategy for reporting including the approach to ad-hoc reporting for power users as well as the occasional user.

Cherwell provides extremely robust Dashboard and Reporting capabilities. The system provides extensive out-of-box reports that can be modified to meet numerous reporting requirements. In addition the system includes the Cherwell Report Writer, a wizard based report creation tool that provides the capability to create custom reports based on the criteria you define. Cherwell's built-in report writer is designed to use your existing Cherwell Search Groups. This means you do not need to write SQL statements in order to create your report. Cherwell does the SQL behind the scenes to make your reporting experience as easy as possible. In addition Cherwell also has connectors to Crystal Reports and MS SQL Reports providing additional reporting flexibility. All the data for reporting is stored in the system's MS SQL database. Also to note Cherwell provides full dashboard and calendaring capabilities including out-of-box dashboards that can be modified/configured as well as a dashboard wizard to create new, custom dashboards. Based on the security permissions you control, you can allow any user the ability to create their own custom dashboards or modify existing dashboards.

2. Describe all reporting tools supported and how they integrate with the product. Does application licensing include any of the products?

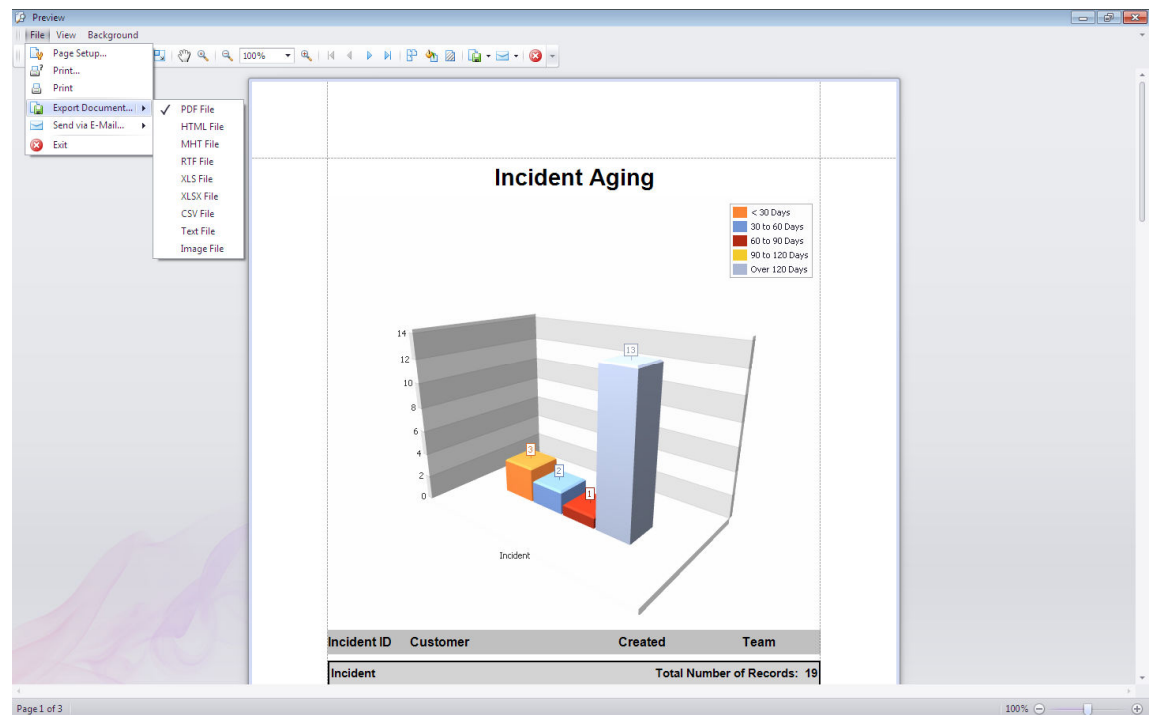
See above response, all the reporting capabilities described are included in the licensing cost of Cherwell, as we describe in the Pricing Section. There are no additional licensing costs for Reporting.

3. Provide a list of all reports delivered as part of the base product including a short description of each. Also include a sample of several reports for review.

We have provided the list of out-of-box reports as Appendix “G” on page 149.

4. Describe reporting output formats available.

Reports can be exported to multiple formats including: PDF, HTML, MHT, RFT, XLS, CSV and more. We provided a sample report below; see the export options on the upper left.



5. Describe the types of reporting that would typically require Information Technology staff support.

As Cherwell provides the Cherwell Report Writer (as we described in item 1 above) which is an easy to use and intuitive tool, any user can be trained in reporting. This would be IT staff and can also be business users. Based on who is trained in reporting, IT staff would not be required to support the business' reporting requirements. This also applies to Dashboards.

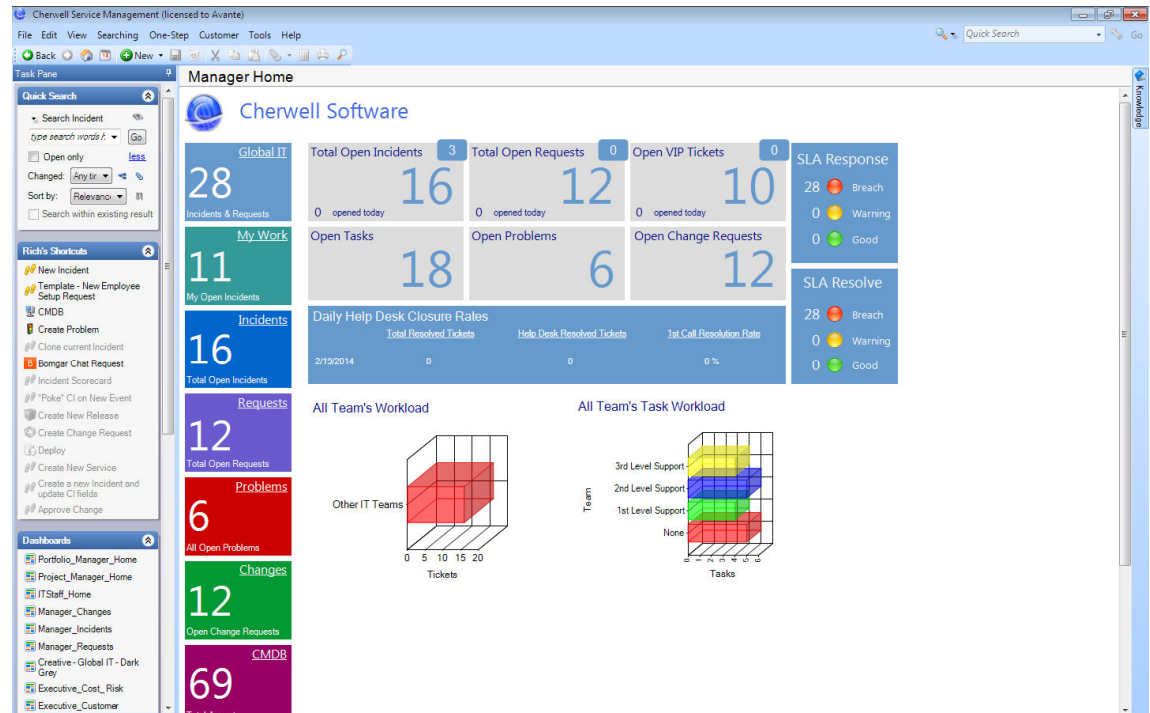
6. Describe the ability to provide automated repeatable metrics.

Reports can be scheduled to run on a reoccurring basis based upon your schedule and report requirements. For example, Monthly reports could be scheduled to run the first or

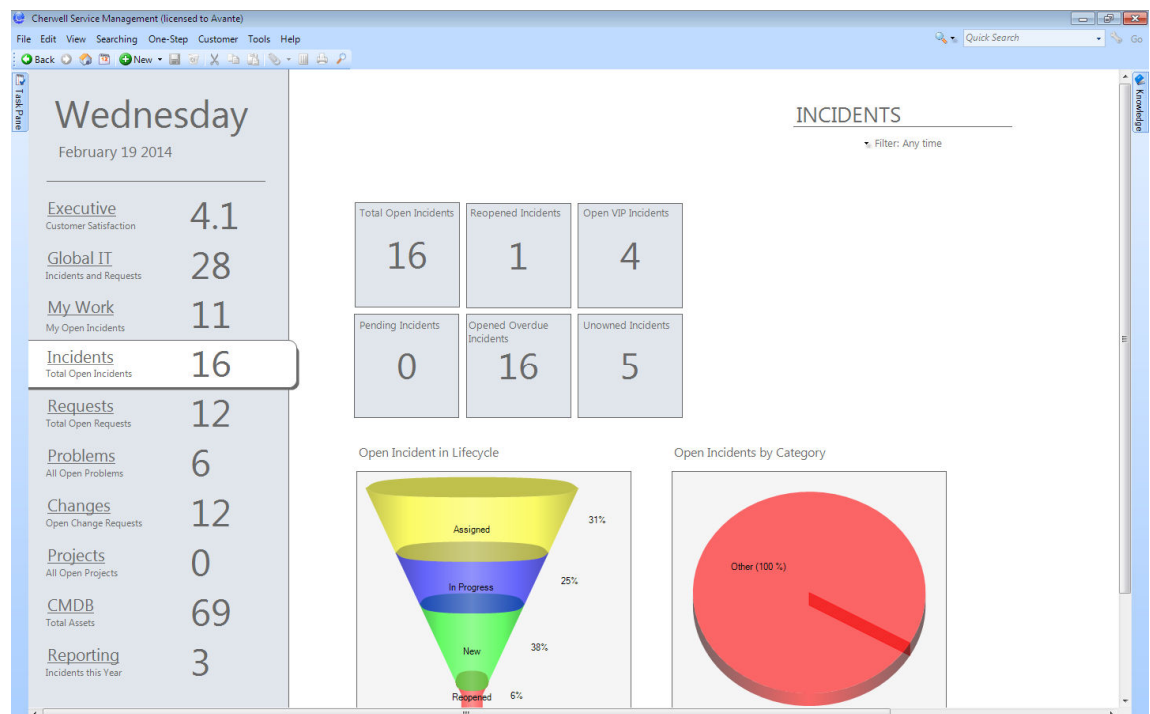
last day of the month. Further to this, the reports then could be distributed via email to specific individuals as part of the monthly reporting requirements.

7. Describe the ability to provide real-time dashboards.

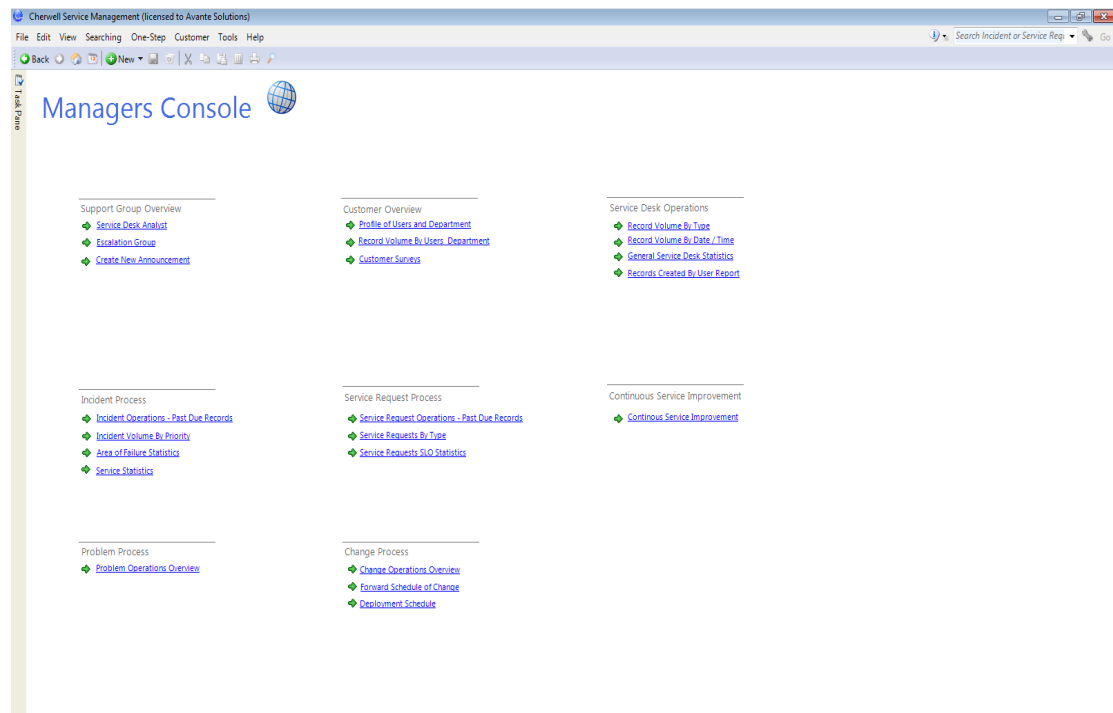
See item 1 above. We have provided sample Dashboards below, the first is a sample Managers Dashboard.



Sample Incident Manager Dashboard.



Managers Console designed to easily launch and view a series of supporting dashboards, this is an example of an Avante provided Dashboard.



8. Describe the ability to access raw data for further analysis.

[Redacted text block]

[Redacted text block]

9. Describe the availability of a bulletin board frame function for current major problems, such as outages and scheduled downtimes.

Cherwell provides a “Global Issues” and a “Discussion Board” on the home page for Self-Service as well as on Dashboards for IT users and Management, to alert users to major outages and issues. This also provides a forum for notifications such as planned outages, upgrades, meetings, etc.

Below is an example from Self-Service showing Global Issues.

The screenshot displays the 'Company Portal' interface. The header includes the company name, phone number (1-800-555-1234), and navigation links like Home, Service Catalog, Public Documents, and Charts and Items. A search bar is also present. The main content area is titled 'Top Issues and Known Errors' and is dated 'Friday, March 28, 2014'.

Top Issues

- E-Mail / Calendaring**
Last Modified 10/25/2013 @ 1:02 PM by Cherwell Admin
E-mail isn't sending
Affects Me Too
- Printing**
Last Modified 10/25/2013 @ 1:02 PM by Cherwell Admin
Printer not printing
- E-Mail / Calendaring**
Last Modified Tuesday @ 3:39 PM by Henri Bryce
Email Issue

Known Errors

- Printing**
Last Modified February 20 @ 2:02 PM by Henri Bryce
Upstairs printer is broken
Affects Me Too

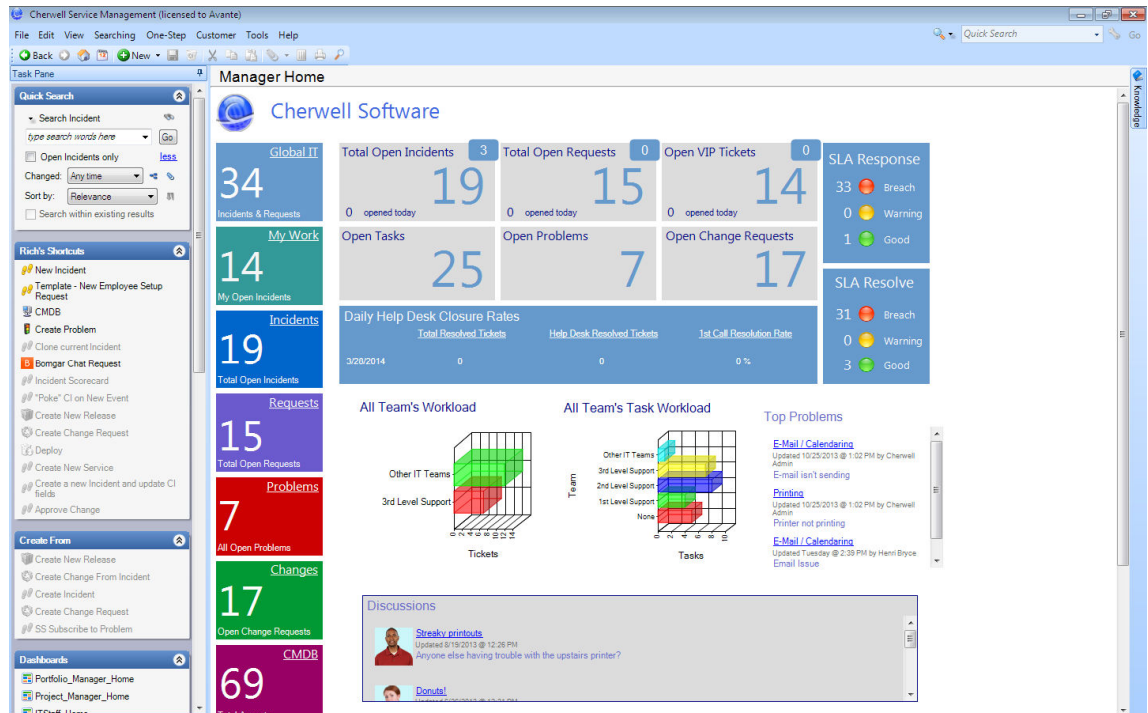
Problems

Subscribed 1

Service Status

	Incidents	Threshold
Account Management	5	Green
Conferencing/Presentation	2	Green
Desktop Management	13	Yellow
E-Mail / Calendaring	16	Yellow
Employee Support	7	Green
Enterprise Apps	11	Yellow
IT Service Desk	5	Green

Below is a sample Dashboard showing Global Problems and Discussions.



10. Describe abilities to automatically detect, notify, and report on incident and problem anomalies and thresholds.

The Cherwell Business Process Engine monitors the system for all types of thresholds, and anomalies for all record types including Incidents and Problems. Based on the workflow notifications will be sent to designated users, Dashboards will present data, and reports can be scheduled, generated and distributed to set users. This also applies to Request, Changes and other processes.

J. Services:

1. Describe the training options and include a catalog of training offerings and their associated costs. Response should include differentiation between technical staff and end-user training.

To support the successful deployment and on-going support of the Cherwell Service Management technology for the University, Avante suggests two types of training: Administration Training and End-User Training. For **Administration Training** Avante typically delivers this on-premise as part of our Implementation plan. Optionally you can send your System Administrators to Cherwell's public training in Colorado Springs, Colorado. For **User Training** there are two types that Avante provides, Avante performs the User Training session, or you can leverage a Train-the-Trainer approach. For your deployment we are recommending the Train-the-Trainer approach. Below we have provided some additional details regarding each approach to training.

Administrator Training

Based on our experience, Avante recommends the Administration Training be conducted toward the end of your engagement. The advantage to this approach is that your administrators will better retain the knowledge they have learned, and will be able to put that knowledge to practical application quickly in terms of system administration and configuration. This approach will better equip your admin team to provide effective support and service following “Go-Live”. Avante is able to deliver Administration Training on-site. There is no limit to the number of participants. The charge is based on the daily professional services rate. We recommend that you budget five (5) days per session. Based on the size and scope of your deployment as well as our experience with other clients similar to the University, you will find this to be a very effective method for ensuring successfully trained system administrators. We will deliver an Administrator Training Manual for each student that participates in the Administrators training session.

The advantages of on-site Administration training include: sessions do not need to be consecutive, travel and expenses for participants to Colorado Springs, Colorado are not applicable and sessions are specific to your deployment and the needs of your administrators. (Alternatively, the University can opt to send their administrator(s) to Cherwell’s Public Administration Training Classes in Colorado Springs, Colorado. Cherwell offers a four and one-half (4 1/2) day training course for administrators and technicians who are responsible for managing, maintaining, and configuring Cherwell Service Management software.)

User Training

End-User Training is typically delivered twice. The first is to support User Acceptance Testing (UAT). The second is to support Go-Live. We recommend the University utilize a Train-the-Trainer approach for your deployment. Avante will conduct a user training sessions as example, as well as support remote user training via webinar / conference facilities. We also suggest that at least one user training sessions be recorded and made available on an on-demand basis. UAT is performed to a test group, typically one (1) session 1-3 hours in duration. The result from this session is feedback that may lead to some minor configuration adjustments. End-user training is conducted in support of Go-live and is delivered in a class like environment, 15 to 20 participants for a duration of 2 ½ - 3 hours per session. Avante will provide customized User Training Manuals for each student that participates in the User training session.

Note Avante does not provide training for end customers for the Self-Service portal; there are a number of resources including YouTube videos and other recorded materials.

2. Describe services available from your company and/or partners including pricing information that may be included in the final contract. Examples of services that could be included are:
 - a. Implementation
 - b. Development
 - c. Project Management

- d. Architecture and Design
- e. Capacity Planning
- f. Installation and Configuration
- g. Performance and Scalability
- h. Conversion
- i. Monitoring, administration and upgrades
- j. Operations metrics

We have provided complete details on our standard delivery services in the section “Avante Professional Services Overview” on page 99. In addition we have provided a “Professional Services Cost Estimate” on page 93 which includes details on the scope and assumptions we have made specific to your engagement.

3. Describe the support options available through your company including on-going support of the application. Describe what portions of support are to be performed by IT, the customer versus the vendor.

As the Manufacturer, Cherwell will provide the ongoing Maintenance & Support for University. The program entitles organizations to all product upgrades as well as telephone technical support. Cherwell’s technical support center is available Monday through Friday, 6:00 a.m. to 6:00 p.m. MST. After hours support is available in emergency situations for downed systems, as defined in the Cherwell Support Guide. Customers have 24/7 access to a Self Service portal which offers new communication submittal, review the status of existing communications, access to a knowledge base and other training facilities. Maintenance & Support is based on a per license fee for the perpetual model and is included in the cost of the subscription model. Cherwell offers a single support program that includes both product support (web, email, phone etc. questions and assistance) as well as product upgrades (all including major, patch and point). Support is based in Colorado Springs, is staffed with Certified Cherwell experts, and offers a schedule for escalation procedures based on priority levels. We can provide the Cherwell Support Guide that includes full details of the program upon request.

4. If support is provided to end-users directly as part of your services, provide the SLA under which you would operate.

As described above, Cherwell provides the on-going Maintenance & Support services to the designated contacts at the University. You can review the Support section of the Cherwell Sample Agreements we included as Appendix “C” on page 124.

K. General:

1. Describe typical implementation timeline and project plan and include examples of previously used project plans.

We have provided a Project Timeline and Sample Project Plan in our section “Avante Professional Services Overview” beginning on page 99.

2. Describe your approach to test and production environments including licensing requirements and any additional costs.

Cherwell has No Limit and No Licensing Costs on the number of Non-Production (i.e. development and test environments) systems you may have for On-premise deployments.

For SaaS deployments Cherwell provisions one (1) non-production environment. You can elect to install an unlimited number of non-production environments on your premises. You can also request Cherwell to provide additional non-production environments in their hosting facility for a fee, which we have included in our Pricing section on page 89.

3. Describe how product(s) addresses accessibility to ensure the application is accessible to people with disabilities. Describe testing for adherence to accessibility guidelines and standards. Provide documentation of the testing performed and results of that testing including the Web Accessibility and Template Guide (WATG located at <http://www.vadsa.org/watg>).

Cherwell was designed with accessibility considerations in mind, but there has been no formal assessment or certification. Color and images can be turned off on a per user group basis, allowing for a larger audience taking advantage of aesthetic options, with the ability for those that cannot use these options being presented with text only versions of forms. Web pages are completely accessible using keyboard navigation only, without the use of a mouse: Cherwell’s browser client makes use of the same tab stops as does the rich client, allowing for the tabbing through fields to complete information. Menus can be accessed in the browser client as well, using keyboard controls. All information conveyed with color is also conveyed without color: Color and images are often used in Cherwell as indicators, however this could just as easily be done with text, or another method. Font size can be made larger or smaller: Form design, Portal layout etc. is 100% configurable. Font size is completely up to you. Text can be accessed using assistive technologies that provide audio output, highlighting, etc.: Cherwell is mostly compatible with JAWS. Customers are encouraged to test their specific assistive technologies with Cherwell. Headings are used to indicate hierarchy within a web page: Web pages within Cherwell are 100% configurable, and as such headings may be used to indicate hierarchy within a page. Link text uniquely indicates the target of the link: Cherwell can either render a link as the actual address, or use friendly links to enhance the user’s experience while using the form. All form controls and fields have associated text label elements: Each control/field on the form can be associated with a label. Cherwell’s form designer will default to the field name as the label when adding fields to a form, but this can be easily modified. Further, labels/text can be used as standalone items on the form itself if desirable. Data tables use row and column headers: Cherwell’s grid views have column headers that reflect either the field name, or a custom name assigned by the administrator. Rows are identified typically by the unique ID (Incident ID, Problem ID etc.) and use color and images to highlight rows within the display (Red for breached SLAs, Badges for VIP customers etc.) Text equivalents are supplied for all non-text elements: Cherwell’s form design is 100% configurable, allowing you to include text instead of using color/pictures to guide navigation. Foreground and background color combinations provide sufficient contrast for people with low vision, including elders: Cherwell’s forms are 100% configurable, allowing you to choose the appropriate colors for the user community. Further, you can create as many different

forms as desirable in Cherwell, allowing you to present different user communities with forms tailored to their specific needs.

Cherwell is currently working on accessibility compliance and anticipates to have completed Section 508 compliance this year.

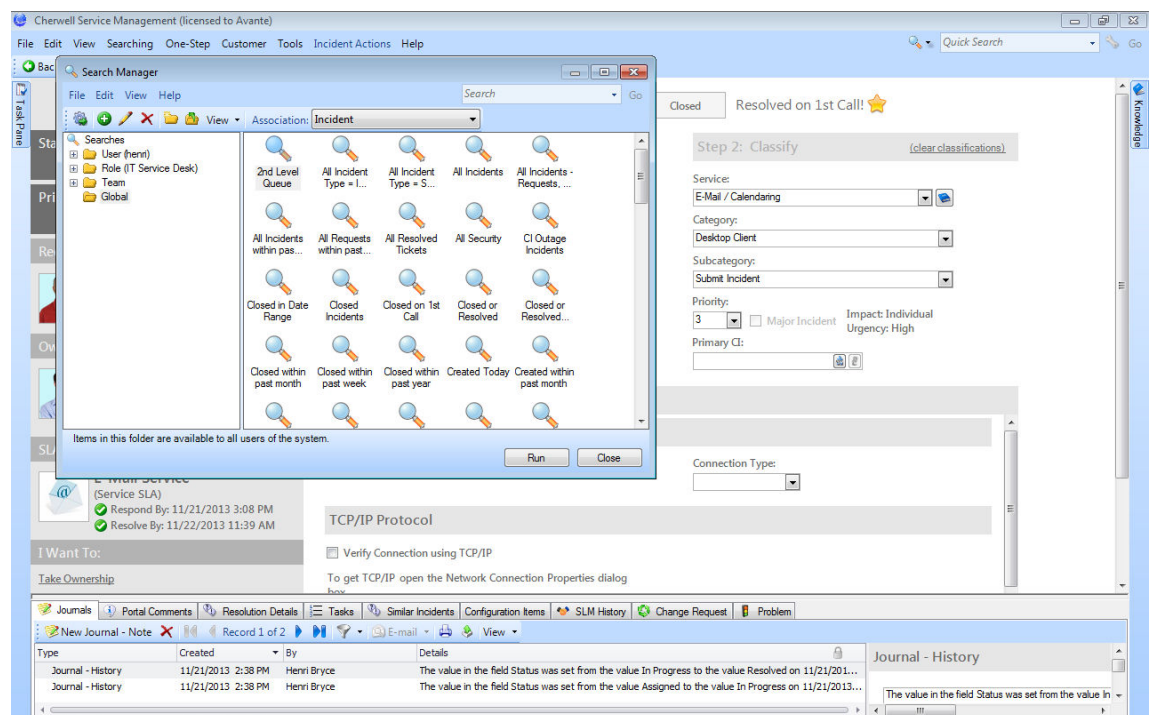
4. Describe the Help system(s) and how it can be modified.

Cherwell provides on-line help documentation for both the Technician and the Administrator interfaces. The help documentation is managed by Cherwell and is not user modifiable. Cherwell does provide the ability to store a repository of documents for all user types, so you can post documents related to the use of Cherwell as desired.

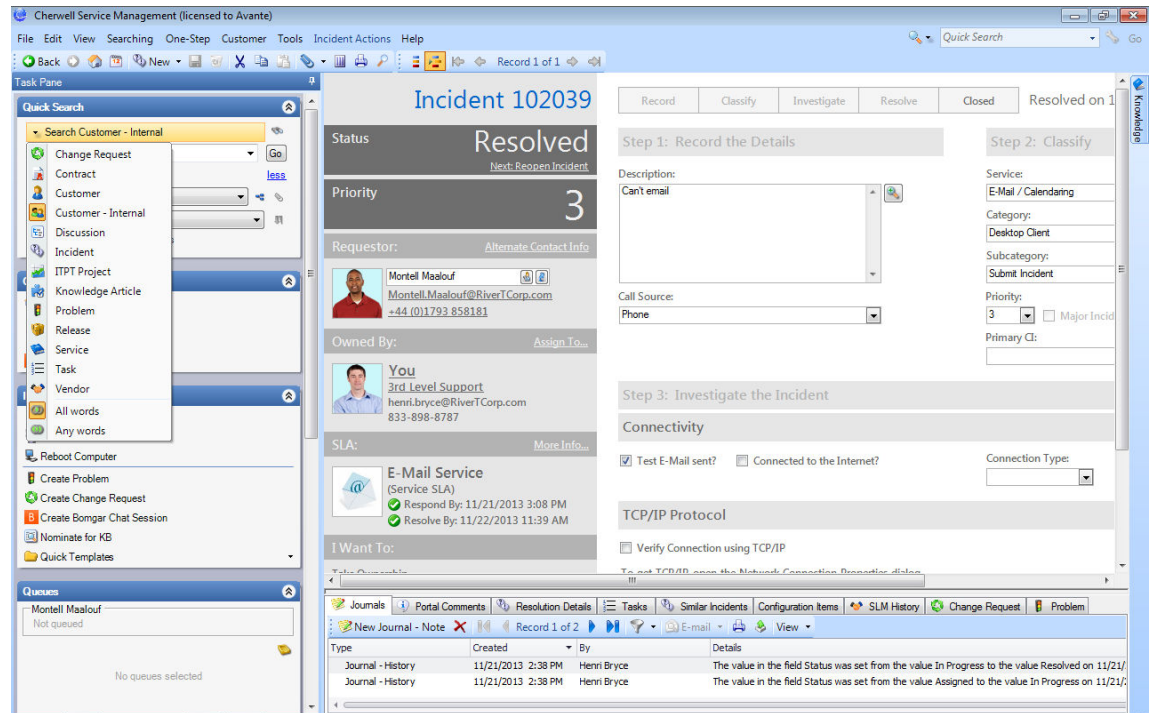
5. Describe the system's search capabilities.

Cherwell includes robust search capabilities, specifically quick search and search builder for options to retrieve issues. All data can be subject to a full-text index for easy retrieval. Search capabilities apply across all ticket/record types. Searches can be ad hoc as well as saved for reuse (saved searches can be permission for a single or multiple users). The screen prints below show some examples of the search capabilities:

Sample screen showing Search Manager - note the number of predefined searches.



Quick search from any ticket, note the left side.



- Describe your relationship with the vendor(s) of any third party tools (i.e. reporting tools, application server and DBMS vendors, etc.) included in this proposal including licensing, costs, support for the product(s), and versions (e.g. full or modified).

There are no third party tools proposed.

- JMU is interested in developing a strategic relationship with the successful vendor. Provide information regarding ideas on how such a relationship can prove mutually beneficial.

Avante is entering our fifteenth year of business implementing service management software for our clients. Forging a strategic relationship is a key element in the Service Management space as typically once clients make an investment in a technology, they will maintain ownership for several years. This common quote from ITIL “this is a journey, not a destination”, well describes the reason a strategic, and mutually beneficial relationship is an important factor. As an example of this we have included the comment below that one of our customers has provided:

According to Allan Furman of Madden Communications Inc., “The Avante differentiator was their understanding that the biggest risk in change was not technology-based, but rather effectively engaging our people in the process. Avante focused on educating the IT team on how processes and system design must be aligned specifically to the outcomes and objectives that are defined by key stakeholders – only then would a “win win” for the IT department and the employees / business operations being supported. In the absence of upfront planning and education, we would have run the risk of IT members reverting back to earlier behavior and biases towards how things were done in the past or their previous place of employment.”

For even more information, please see our Value Add section on page 113 of this response.

8. Describe active user groups and how they function.

Cherwell offers a number of customer and user groups, below is a summary for each:

Cherwell hosts their annual Global User Conference called "Empower IT" at the Broadmoor Hotel and Resort in Colorado Springs, Colorado. This year the event is scheduled for September 24–26, 2014. All Cherwell customers are invited to attend. Here is the link for the conference website:

<http://www.cherwellgc.com/>

In addition to the annual user conference Cherwell, has a number of on-line User Groups which provide the advantage of constant communication with other users of Cherwell Software. These groups include the "Cherwell User Community" and the "Cherwell LinkedIn User Group". Below are the links to access each group.

Note that within the "Cherwell User Community" local user groups exist for Education customers as well as a South East group that includes Virginia.

<http://cherwellcommunity.com/>

<http://www.linkedin.com/groups?gid=1830740>

In addition Cherwell also has a Twitter feed and a public blog, below are the links to both:

https://twitter.com/cherwell_csm

<http://hub.cherwell.com/blog>

9. Describe licensing. If licensing is based on number of users, describe the models used to obtain numbers both for current and future usage.

Cherwell is based on a concurrent user model for all Agent/Technician licensing. Cherwell Self-Service is included with unlimited access at NO charge. A concurrent license entitles the user to access all "out-of-the box" applications. (This includes: Incident, Service Request, Service Catalogue, Service Portfolio, Problem, Change, Release and Deployment, Configuration, Service Level, Knowledge, Event Management and IT Project Tracking). Also to note, the Administrator's interface does not consume a license in Cherwell. In addition no licenses are required or consumed by any user to log into the system and view reports or dashboards, via the Dashboard Viewer interface.

L. Technical:

1. Provide a detailed diagram of the typical architecture/technical environment required for the system. List all protocols and ports used for communications and indicate which components are clients and which are servers and whether the communications are fully, partially, or not encrypted. Specify any communications paths where unencrypted authentication or other sensitive data are passed. List all third party dependent

integration points and data paths including any web content included from or sent to outside parties.

In response to this item we have include a complete overview of the Cherwell technology in Appendix "A" on page 115.

2. Describe the toolset from which your application is derived.

The system was designed and architected to utilize the MS .NET framework written using C#. The system is a client server and n-Tier architecture where an application server is used for application / system processes and web servers can be deployed for Browser and Mobile client access. The system utilizes a MS SQL database for management of all data including the overall system configuration.

3. Describe hardware and software requirements for the proposed system(s) along with any sizing assumptions made to arrive at those requirements.

Below are the system requirements as outlined by Cherwell.

Server hardware requirements: Intel Core Duo or equivalent, 4 GB (6 GB or more recommended) Note that if you have SQL Server® installed on the same server, more RAM is recommended. Server operating system and database requirements: Microsoft Server® 2008, 2008 R2, 2012, Microsoft .NET 3.5 SP1; Microsoft .NET 4.0 (required for Browser Applications), IIS 7.0+ (required for Browser Applications), Microsoft SQL Server® 2005 SP4, Microsoft SQL Server 2008 SP2, Microsoft SQL Server 2012 (can be on a separate server), Note: Requires SQL Standard Edition, either a Processor License or a Server License with sufficient number of Client Access licenses. Please see Cherwell's SQL Policy, to be provided.

Workstation hardware requirements: Intel® Core™ Duo or equivalent, 1 GB (2 GB or more recommended). Workstation operating system requirements: Microsoft® Windows® XP, Windows Vista®, Windows® 7 x86 or x64 editions, Windows® 8 x86 or x64 Pro or Enterprise editions, Microsoft® .NET 4.0 (Full version), 1024x768 or better screen resolution, Internet Explorer 7-10, Mozilla Firefox 8.0+, Safari 5.0+, Google™ Chrome™ 18+ (required for Browser Applications).

Smart phone and tablet requirements: iPhone®/iPad®/iPod Touch® (iOS 5+), Blackberry® 4.7+, Android®

4. Describe supported server hardware and/or virtualized platforms. Describe support for the following operating systems: Linux and Windows. If virtualization is supported, what virtualization technologies are supported including what components can be virtualized?

We provided details on hardware and platform specifications above. Cherwell fully supports Virtualization technologies including: VMware and MS Virtual Server, current and supported releases.

5. Describe support for load balancing and system failover including any and all vendor specific preferences. Also include any vendor specific configuration guides.

For SaaS deployments Cherwell manages all load balancing and system failover. For on-premise third party load balancers are commonly used for the web server / web client interfaces where traffic can be distributed between multiple servers. We recommend you back up all data according to your in-house strategy and follow your recovery guidelines.

6. Describe how scalability is accomplished as the criticality of the system(s) and number of users increase.

Cherwell is architected so there are no limitations for scalability. Cherwell currently has customers with several hundred active concurrent Technician/Service Desk Support users who are accessing the Technicians interface and tens of thousands of end-user customers accessing the Self-Service portal. Typically if you drastically increase your user levels you can scale your infrastructure to segment certain services across multiple servers.

7. Describe the system capabilities and options for the backup and restoration of the system components (*example: database*).

The data is backed up by industry standard technologies. Full or transactional backups can be done. A full restoration can be achieved by recovering from either back up strategies. Specific tables can be restored based upon requirements. The application also provides the capability to create a completed system backup using the Administrator application and this can be scheduled no differently than an industry third party backup technology. It is recommended that for disaster recovery purposes, an industry standard backup solution is utilized.

8. Describe the average client response time for all the various functions of the proposed system.

Client response times depend on your infrastructure, bandwidth, configuration etc. Cherwell has undergone independent scalability testing and we have included a sample of the results below. We can provide the entire report upon request.

Percent of Testers Used	Description	Number of Operations per Second
40%	Create an Incident	2
60%	Read an Incident	60

9. Describe services not available during scheduled maintenance.

Typically the entire system is unavailable during scheduled maintenance for SaaS deployments.

10. Describe any standard and proprietary APIs, integration/connection resources, and development languages and tools that extend your toolset.

The fully documented and published API provides 100% of all application functionality which includes application features that would not be applicable in a Web Service. The Web Service is documented and published. It provides 100% of all core transaction based features, including but not limited to the following: Query, Create, Update, Delete,

Execute Action, Get Dashboard and Mobile Access. Security is also enforced via login and credential passing.

11. Describe the client operating system and browser requirements for your toolset. List any additional client-side software required for development/management of your toolset.

See item 1 above.

12. Describe any aspects of your application that do not support the Macintosh. Describe any changes to default browser or client security settings.

The Cherwell Rich Client and Administrators client are Window's only. All browser clients support Safari.

13. Describe any functionality loss, installation problems, upgrade problems, or other difficulties if client applications are run using a regular user account.

Installation for the desktop (Rich) client would require special privileges in order to install the client software. However, once installed the user will have no issues in utilizing the software. In these cases where the desktop (Rich) client is utilized, the installation of the software would require someone or process with Administrator rights to install the software. For the Browser interface there would be no issues.

14. Describe your support for mobile technologies including technology used, distribution method, functionality, integration and development toolset and security.

Cherwell fully supports mobility; see item 3 above for supported devices and platforms.

15. Describe requirements for application servers. Describe specific platform recommendations or requirements for certified configuration (*e.g. WebLogic, and Apache Tomcat*); include either specific application server version or required J2EE version.

See item 1 above, Cherwell supports a Microsoft environment.

16. Describe support for web servers (*i.e. Apache, Weblogic and IIS*).

Cherwell supports IIS, see item 3 above.

17. Describe the supported database platforms including versions and include any information on additional features required of the DBMS needed to support the functionality of your system as proposed.

See item 3 above, Cherwell supports MS SQL.

18. Describe your SLA to stay current with versions of software utilized by your product.

From Item 5.3 of the Cherwell License Agreement - Cherwell will provide support for the most current version of the Licensed Software and one prior version, including interim releases between the two versions; for example, upon release of version 5.x Cherwell will support version 5.x and 4.x. Cherwell may provide limited support for older versions. Cherwell will use its best efforts to answer Customer's specific questions and provide

support in accordance with Cherwell's service and support guidelines. We provided the Cherwell Sample Agreements as Appendix "C" beginning on page 124 of our response.

19. Provide an overall compatibility matrix of software required to operate your system. As appropriate, and at a minimum, this should include operating systems, drivers, browsers, JDKs, and compilers.

See item 3 above. We have provided the Cherwell Sizing Guide as Appendix "F" on page 143 as well.

20. Describe support for real-time access to data through some other method (e.g. on-the-fly access to database through ODBC, ADO, JDBC, LDAP, etc. allowing dynamic web content and applications).

Integration with Cherwell is fully supported. Please see our response in item 2 on page 36.

21. Describe support for integration with JMU's existing systems listed in the background statement including pricing, availability of APIs, toolkits for creating connectors, available services, etc. Provide a full list of application connectors. Describe any other methods of integration supported.

Throughout this section we have highlighted that Cherwell provides robust yet easy to configure integrations with third party systems and data sources. There are no costs associated for these integrations with the exception of any Professional Services if you elect that Avante Solutions perform the integration configuration. Cherwell includes the following out-of-the-box integrations: LDAP, Outlook, Twitter, KnowledgeBroker, Bomgar, and asset / inventory database using external database links (MS SCCM, Altiris, LAN Desk).

We also confirm Cherwell can easily be integrated with all the systems outlined in your "Section II Background" from you RFP, which we have included below:

The University has numerous systems that may be considered for integration including Bomgar Appliance for remote assistance 13.x, PeopleSoft Campus Solutions version 9.0 (PeopleTools 8.5x), PeopleSoft Application Portal version 9.1 (PeopleTools 8.5x), PeopleSoft Financials version 9.1 (PeopleTools 8.5x), PeopleSoft HCM 9.1 (PeopleTools 8.5x) and Oracle's Identity Management Suite (11g), Zenoss, Dell Open Manage/IT Assistant, Nessus Vulnerability Scanner, Oracle Enterprise Manager, VMWare (VSphere, VCenter, View), and Symantec Management Console. The University's email system for faculty / staff is Exchange 2010 and Office365 for students.

22. Describe support for inclusion of your application as part of the PeopleSoft application portal. Describe any pagelets available and how that integration would occur. Describe support for delegating authentication for the pagelet Oracle Access Manager Single Sign and/or PeopleSoft single-sign-on. Describe support for other single-sign-on technologies.

The Cherwell application can be added to any portal such as the PeopleSoft Application portal as a framed web application. This would allow for a section / page within the PeopleSoft Application Portal Framework to display an interactive session of the Cherwell browser based applications. Alternately, a link may just be added to allow the user to be taken directly to the Cherwell browser based application / portal seamlessly using single-sign-on.

23. Describe your product's support for Web Services/Service Oriented Architecture based standards such as JSR 168 Portlet development standard, and JSR 172 Web Services Interoperability Standard.

The Web Service is documented and published. It provides 100% of all core transaction based features, including but not limited to the following: Query, Create, Update, Delete, Execute Action, Get Dashboard and Mobile Access. Security is also enforced via login and credential passing. The web service WSDL is documented and available as part of the standard installation of the application and provides support for any Cherwell based application / module that may be configured upon the Cherwell platform.

24. Describe the ability for your product to create consumable web standards based content (such as RSS feeds, hcard, ical, and other microformat specifications) and the ability to pull XML based content from your system and any APIs supporting the delivery of such data/content.

The Cherwell system is fully documented / built using XML standards. All configuration information is maintained and managed within the database as xml formatted records. The Cherwell Web Service and as well the Cherwell API are available for integration and data reporting / use and xml formatted data is provided. The system has out of the box functionality for the displaying of RSS and Twitter feeds within the application. iCal objects can be created and sent out from the application as well.

25. Describe storage including file formats.

Cherwell supports several formats including xls, HTML, XML, PDF, CSV, Image, and other types. Only for receiving email attachments can we restrict types and size. But if you manually attach a file via the client apps it's then limited to MS SQL and MS IIS Configurations. For browser client users we set the size limits in MS IIS as to the max upload size.

26. Describe operational monitoring and reporting capabilities. Include the capabilities for application, content, access, and storage metrics, security and the method for obtaining them (e.g. *command line tools, SNMP, and GUI*).

Operational monitoring on system logs and authentication and access can be done for an On-premise solution where a monitoring application can be configured to access the relevant data. This feature is not available for a SaaS solution as the data center is a secured environment. System logs can be parsed by log viewing capabilities of an event monitor application and authentication data can be accessed via a database connection. Similar to monitoring system and authentication information, information regarding storage is only available with an On-premise solution and the information can be accessed via the database properties.

M. Security:

1. Describe how users and processes are authenticated before gaining access to data and services. Include authentication between components and between the product and external services. Describe your support for the following:

- a. LDAP/S
- b. Native AD authentication
- c. Shibboleth 1 and 2
- d. Kerberos
- e. SAML
- f. Other federated systems
- g. Open ID
- h. Any two-factor authentication system
- i. Certificate-based authentication
- j. Other

In response to this item please see the overview below:

With a SaaS implementation, users of the Browser clients (analyst and self-service portal) would be required to enter in their Windows Login ID and password for authentication using the LDAP and Windows login methods, the domain information would not be required as this is part of the configuration settings. Users utilizing the Cherwell Rich client would not be required to enter a Login ID or password if Windows authentication is enabled. For on premise implementations as the web servers would be in the same domain, user authentication could employ the Windows login requiring no entering of login id's or passwords. Alternatively, with a SaaS implementation, organizations have taken a hybrid approach where an on premise web server is used for the Browser client access providing the ability to use Windows login without prompting for any Login id or password. With this approach the web server will communicate with the SaaS application services in the data center. SAML implementations would not require any login and password entering where application SSO is used. Cherwell supports Federated Single Sign-On utilizing a variety of different sources. There are 4 types of sources available for Single Sign-On within the application and once configured can be tied directly to the different client application technologies available within the application (Rich, Browser, Portal, Mobile and Outlook). Any combination of Single Sign-On methods can be assigned to the different client technologies.

The following are the Single Sign-On capabilities supported:

- Security Assertion Markup Language (SAML)
- LDAP Authentication
- Windows Authentication
- Cherwell Internal Authentication

Security Assertion Markup Language (SAML) currently supports the following identity providers. Other providers will be added based upon market demands.

- Microsoft ADFS 2.0
- Shibboleth
- SSOCircle

Cherwell Rich Client Applications open a browser window when starting up to support the SAML authentication process. After SAML authentication has completed successfully, this window will automatically close. Each Rich Application maintains its own separate session information, so every time you log into a Rich Application you will be prompted to log in to the Identity Provider (with the exception of ADFS which uses the current Windows session Information).

LDAP Authentication is supported and prompts the user for their login and password credentials every time they launch the application. The login id and password credentials are validated and verified by the LDAP / AD source at the time of login.

Windows Authentication provides Windows pass thru authentication based upon the current Windows login credentials and passes thru the Windows login ID for the current user for validation within the application.

Cherwell's Internal Authentication provides login id and password management for users who are required to use the application but may not be able to be authenticated using any of the other authentication methods supported by the application. The internal authentication method provides password management where complexity rules, length and age are configured based upon password strength rules within your organization.

2. IF you support LDAP for authentication or authorization, describe use of LDAP(S). List the LDAP(S) servers integrated with product(s). Describe integration and support with LDAP(S) user database for authentication (*Active Directory/OID*) and authorization using attributes/group memberships.

Please see above.

3. Describe handling access to licensed/copyrighted content where access must be restricted.

Per the Addendum Three – this response not required.

4. Describe your use of authentication credentials and associated attributes, group membership, roles, etc. to make authorization decisions. Include method(s) and granularity of authorization of access to data and services (*e.g. individual accounts, IP address, UNIX groups, LDAP groups, Active Directory accounts*).

See item 1 above.

5. Describe how and where any sensitive data (*e.g. credit card, financial data, SSN, FERPA, HIPAA or other legally regulated data*) including authentication credentials, is stored on clients, servers, and participating external devices. Is it cryptographically protected? If so, provide details on cryptographic protocols, procedures, and key protection.

This information is governed by the Cherwell Hosting Addendum which we have provided as Appendix "C" on page 136. Note these also apply to the medium in which the information is stored, handled, transmitted and transferred. Below we have included the language regarding breaches and notifications:

Security/Confidentiality of Customer Data. *Customer Data means all information provided by Customer and stored in the hosted system. Customer represents that it has all necessary permissions and rights to the Customer Data and grants Cherwell, for the sole purpose of providing services under this Addendum, the right to copy, display, distribute, download and transmit Customer Data. Cherwell will treat Customer Data as Confidential Information of Customer and otherwise subject to the terms of the Agreement, including the Confidentiality section thereof. Cherwell will use industry standard security measures, such as firewalls and standard encryption protocols, to protect Customer Data. Cherwell will notify Customer of a security breach that impacts Customer Data within 24 hours and will provide regular status updates until the breach is resolved. Within 72 hours of final resolution of the breach, Cherwell will provide Customer with a final incident report. In the event Cherwell engages a third party service provider to assist Cherwell in fulfilling its duties under this Addendum, Cherwell agrees that it will enter into a confidentiality agreement with the third party that is at least as protective of Customer's Confidential Information as the Agreement.*

6. Describe auditing and logging capabilities and data. Include the information recorded with each event. For example,
 - a. Successful and failed authentication or bind
 - b. Successful and failed access authorization
 - c. Successful and failed policy change

Cherwell supports full auditing capabilities. All system fields including custom fields can be subject to an audit trail. All interactions are captured in the Journal tab for all records.

In addition Cherwell monitors the login and access for all users, in the sample screen below from the Administrators interface, note some of the audit log options for users accessing the system. The system audits all attempts for authentication. It records both failed and successful attempts. The system audits all attempts for access to specific Cherwell application interfaces (Administrator, Client, Web Form, Scheduler, Business Process, Email Monitor and Outlook Add in client). It records both failed and successful attempts, and currently the application does also audit policy changes.

7. Describe the effects of auditing and logging on a production implementation. Is the proposed system sized for full audit capability? Describe auditing methodologies and capabilities for managing integrity and change control. Describe elements captured with the audit process.
 - a. Describe enterprise audit capabilities
 - b. List the events and logs that can be sent to an external syslog server
 - c. List the events and logs that cannot be sent to a syslog server

The system has a series of different audits that are performed; these are authentication / access, field / data and system configuration changes. The authentication / access audits capture and report on all attempts to login and access the application via the different application interfaces. Field and data audits are field level audits capturing field value changes and recording when the change was made, who made the change and what the old and new values are for the field. The system also audits, at this level, relationships made between records. For example, an Incident related to a problem or a Service Request related to multiple tasks. Administrative or configuration audits are done identifying when a configuration change has been made to the system, the time / date and who made the change as well as what was done is captured.

There is no out of the box automated process to send audit events to an external syslog server. However, these are stored as data records and an external process could be configured to send selected audit events to an external syslog server. If the system is an on premise solution, all Windows server events captured can be sent to a syslog server where possible. These include service and system process events (business rules, notifications and email management).

As per question b, all audit events are maintained within the system.

N. Maintenance and Support:

Because consistency and stability of the operating environment and rapid correction of system failures are critical to James Madison University, major consideration will be given to the amount and extent of hardware and software maintenance coverage and to the quality of maintenance.

1. Describe the maintenance philosophy including frequency of updates, approach to completing updates, and model for obtaining them.

As the Manufacturer, Cherwell will provide the ongoing Maintenance & Support for the University. The program entitles organizations to all product upgrades as well as telephone technical support. Cherwell's technical support center is available Monday through Friday, 6:00 a.m. to 6:00 p.m. MST. After hours support is available in emergency situations for downed systems, as defined in the Cherwell Support Guide. Customers have 24/7 access to a Self Service portal which offers new communication submittal, review the status of existing communications, access to a knowledge base and other training facilities. Maintenance & Support is based on a per license fee for the perpetual model and is included in the cost of the subscription model. Cherwell offers a single support program that includes both product support (web, email, phone etc. questions and assistance) as well as product upgrades (all including major, patch and point). Support is based in Colorado Springs, is staffed with Certified Cherwell experts, and offers a schedule for escalation procedures based on priority levels. We can provide the Cherwell Support Guide that includes full details of the program upon request.

2. Describe capabilities for remote support and indicate what access to accounts and systems is required. Describe the locations from which this activity would take place. Describe any maintenance options/tiers and whether they vary in cost by time of day, response time, etc.

With advance permission, Cherwell Support analysts (located in Colorado) may remotely access systems associated with Cherwell Service Management to help analyze and resolve issues with the licensed software. Cherwell utilizes a number of tools to create the remote session. This is included in the annual support contract.

3. Describe services that may be required in the normal course of operating the system that are not covered under the maintenance contract.

Cherwell's support program is comprehensive and is outlined in the Cherwell Support Guide that can be provided to the University upon request. Services that would not be covered under the maintenance contract would be configuration services, assistance with upgrades and other Professional Services related activities. Support provides assistance with Cherwell's standard —out-of-the-box solution set. Support does not include the analysis and support of customizations. Incidents that relate to non-standard versions of the software are considered service requests and will be referred to Professional Services.

4. Describe the maintenance costs for the first year, and, on the basis of an annually renewable contract, the maintenance costs for each of the following five (5) years.

Maintenance and Support is based on a per license fee for the perpetual model. The cost to renew maintenance is based on the then current cost posted by Cherwell for your pricing tier. Cherwell would be willing to negotiate terms based on the length of agreement as well as pre-paid maintenance options.

Maintenance and Support is included in the subscription model. Cherwell would be willing to negotiate renewal terms, based on the length of agreement.

5. Describe the procedures for obtaining services for all types of maintenance (e.g. installation of corrective code, enhancements, applicable "escalation" procedures for providing additional assistance in diagnosing a failure that is not resolved in a timely manner to include notification procedures and timing as well as what higher levels of assistance will be made available.)

Support for the Cherwell Service Management software is available through a variety of contact methods which include: Cherwell Self-Service, Telephone Support, E-mail Support, Remote Access Support, Cherwell Scheduled After-Hours Support, and Cherwell On-call/After-hours Support. We encourage customers to log Incidents through Cherwell Self-Service, the most efficient method which allows analysts to quickly begin the analysis and research required to resolve the issue.

- Cherwell Self-Service: A wide range of options for Cherwell Self-Service are available at www.cherwellsupport.com:

- Product Documentation
- Live sessions with Cherwell experts providing Web-based training
- Access to Cherwell Knowledge
- Ability to view and update Incidents
- Access to product information
- Ability to download product updates
- Ability to submit feedback on Cherwell products and services
- Your User Id and password were included in your welcome letter

- Telephone Support: Call 719.386.7000
 - M–F from 6 A.M. – 6 P.M. Mountain Time
- E-mail Support: Send e-mail to support@cherwellsoftware.com
 - M–F from 6 A.M. – 6 P.M. Mountain Time
- Remote Access Support: With advance permission, Cherwell Support analysts may remotely access systems associated with Cherwell Service Management to help analyze and resolve issues with the licensed software.
- Scheduled After-hours Support: You can prearrange or schedule After-hours Support, subject to availability. Reduced fees are offered with advanced notice of two weeks or more. Contact Client Services at client.services@cherwellsoftware.com for more information.
- After-hours Priority 1 Emergency Support: Call 719.386.7000, 24 x 7 for Priority 1 Incidents only—i.e., for downed system support.

Cherwell Self-Service, telephone, and e-mail support are available during regular support hours for supported versions of the licensed software, and only to customers with a current Maintenance and Support agreement. Cherwell Support may require that a customer upgrade to the current version to resolve a known problem or technical issue which likewise requires that a customer be current on Maintenance and Support. For more information related to supported versions, please refer to Cherwell's Version Support Policy (see below). Best efforts will be made to provide a workaround for a known issue; however, Cherwell Support does not guarantee resolution to all software issues requiring changes to the software.

Cherwell Support inquiries are classified as Incidents. An Incident is a single, reproducible issue, symptom, or error inherent in the licensed software. Cherwell Support may determine that an Incident is in fact related to how the licensed software was implemented and/or is being used and indicates that the customer requires additional training or Professional Services. Cherwell Support will work with you to determine the best plan of action for Professional Services or Educational Services.

6. Describe the nature of any continuing research and development performed by the manufacturer to detect and correct problems in the system design, to improve efficiency, and/or to enhance the capabilities of the system proposed.

Cherwell Software is committed to improving their offering to all customers and the Service Management market. There are a number of drivers behind the research and development of the system some examples include: feedback from customers requesting enhancements, Pink Verification, updates to ITIL, and competitive market enhancements.

Cherwell follows a standard enhancement and release process which we have included in our response to item nine (9) below.

7. Describe your approach to security reviews during each phase of the software development lifecycle.

Cherwell's development policy includes full security testing after a particular feature has been developed and before it is released to QA.

8. Describe the procedures followed in distribution of information to James Madison University pertinent to system problems encountered at other locations, along with the solutions to those problems, when such information is relevant to the University's software.

Cherwell has a community forum <http://cherwellcommunity.com/> that provides discussion among users of both problems and solutions. Upgrades occur on a regular basis to address system issues and provide enhancements to systems. Along with those upgrades, release notes will be included indicating fixes and enhancements. Should a major system problem occur, customers will be contacted directly by Cherwell via email and notice on the Support portal.

9. Describe procedure for handling upgrades. Specify how often upgrades are made to the application software and how "patches" and "fixes" to the systems are handled. Describe if and how your product impacts our ability to apply security updates in a timely manner to underlying or supporting products (e.g. Windows, Linux, Java, Oracle, MS Office, Web server). "Timely" is defined as no later than 30 days from the time of vendor release.

Cherwell classifies four (4) types of releases, Major, Dot, Maintenance, and Patches, all are available to customers who have an active maintenance & support agreement. As with all releases these are posted on the Cherwell Customer Portal. Please see a description of each release below.

Major Releases – New Releases feature new functionality, improvements in quality and performance, as well as architectural enhancements. New Releases are signified by an increment in the major version number, represented by the digits to the immediate left of the first decimal in the version number (e.g. Cherwell Service Desk 3.0). Cherwell has a new Major Release approximately once a year.

Dot Releases – Dot Releases feature new functionality, improvements in quality and performance. They are typically significant changes that the Development team has opted to release before a Major Release, often at the request of our Customers. Dot Releases are signified by an increment in the minor version number, represented by the digits to the immediate right of the first decimal in the version number (e.g. Cherwell Service Desk 3.5). Generally one or two Dot Releases a year are released.

Maintenance Releases – Maintenance Releases are incremental changes to a New or Dot Release, periodically made available to supported customers. They primarily address Problems or bugs with the software that have been reported by customers or uncovered through Cherwell's own findings. In some cases they may contain new improvements, but to a lesser degree than a New or Dot Release. Maintenance Releases are represented by the letter to the immediate right of the number after the decimal (e.g. Cherwell Service Desk 3.40c).

Patch Releases – Patch Releases are fixes to a problem that a specific customer may be experiencing. Patch Releases are typically provided as soon as possible to the specific customer who is experiencing the issue and then included in the next Maintenance Release for the rest of the customer-base.

10. Describe the nature of system enhancements in development that are scheduled for release in the next twelve months.

[REDACTED]

[REDACTED]

11. Describe all responsibilities of both the contractor and James Madison University in the isolation and diagnosis of system failures.

Cherwell will make every effort to resolve all system issues especially system failures. The following is a detailed description of Cherwell's request that clients undertake before contacting Cherwell Support:

To expedite the resolution of an Incident, the following troubleshooting techniques may prove useful:

1. Check Cherwell Self-Service On-line Documentation/Knowledge to try and resolve the Incident.

2. Check for obvious causes such as file locations, directories, and paths specified; insufficient access permissions; lack of disk space; and so on.

3. Verify that the issue is inherent to the Cherwell Service Management application. Because the Cherwell Service Management software operates within various environments, make sure the issue isn't something else such as your hardware, database, operating system or network software that could affect the performance of Cherwell Service Management. If the issue is because of another reason but is impacting Cherwell Service Management, Cherwell Support will use reasonable efforts to resolve the issue for you. However, please keep in mind that you may need to contact another manufacturer.

4. Check to see if the problem is recurring by reviewing your company's past Incidents. Your Open and Closed Incidents can be found in Cherwell Self-Service.

5. Attempt to reproduce the problem to ensure it is not just a simple misstep. Determine whether the problem occurs randomly or consistently.

6. If the problem is reproducible, check to see whether any changes recently took place in your environment, including:

- Version changes of any product, database, operating system, network software, patches, etc.
- Web or application server configuration changes
- Security setting changes

7. Determine whether the Incident occurs on one, more than one, or all of your computers/client installations.

If, after taking these steps, the issue still exists, you will need to gather some information before logging an Incident to ensure your problem is resolved as quickly as possible.

12. Describe your "escalation" procedure.

Cherwell offers a schedule for escalation procedures based on priority levels. Cherwell's escalation procedure is fully defined and is based on Impact and Urgency levels. These are defined in the Cherwell Support Guide which we can provide upon request.

O. Hosted Applications:

The University occasionally explores opportunities for hosting applications external to the university. If hosting is an option for this project, then complete the following section. If hosting is not an option, there is no requirement to respond.

1. Describe where services and data storage are located geographically.

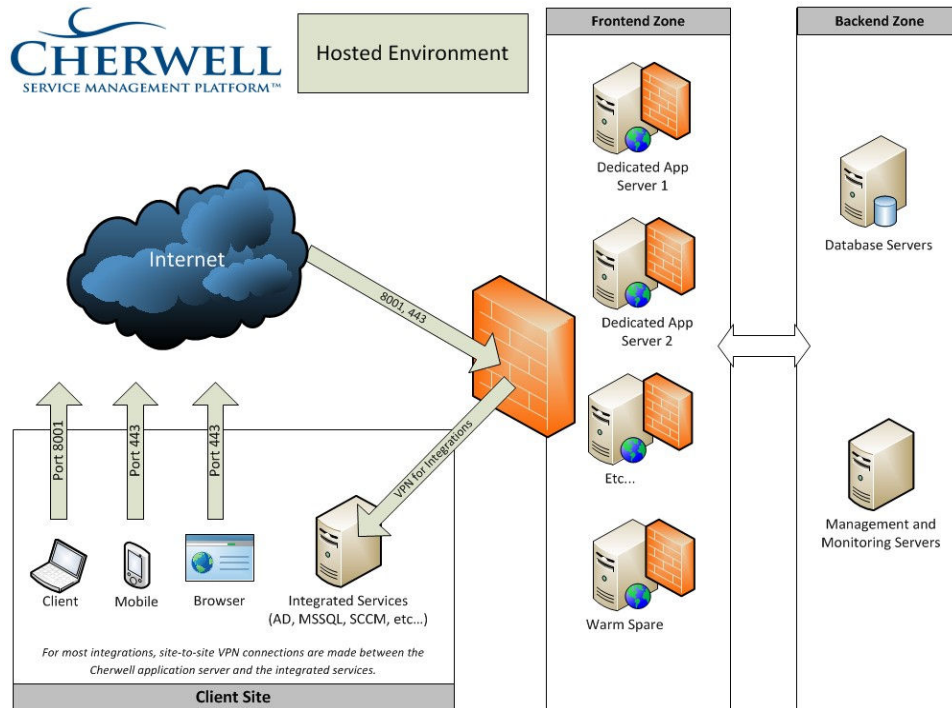
Cherwell is currently deploying high availability data solution between two major data centers Ashburn, VA and Denver, CO with a tertiary data center located in Colorado Springs, CO. This solution will allow near real time SAN replication between data centers depending on replication status. Customer traffic can be manually switched between data centers with minimum downtime in case of a data center failure. The targets are RTO < 2 hours and RPO < 1 hour for this solution.

2. Describe how applications are secured inside your firewall.

At the datacenter, application servers present the Cherwell Service Management application for each customer. Host-based firewalls isolate communications between application servers. Each server has host-based IDS, IPS, and anti-virus/anti-malware agents.

3. Describe your approach to applications and how they are hosted on servers. (Will the JMU application(s) reside on dedicated physical/virtual servers?) Describe the different levels of security for different application layers.

Each customer has their own dedicated application servers. Below we have provided a visual diagram showing the infrastructure:



4. Describe the network layer security you provide.

Cherwell uses two models of datacenter providers; managed services, and colocation. Our managed services providers manage all security controls for telecommunication infrastructure, network infrastructure, routing, switching, and firewalls. In our colocation datacenters, Cherwell manages these security controls. Cherwell has established a set of security configurations that have been applied to all environments for devices within Cherwell's control. These include such things as network segregation, firewall configurations, site-to-site VPN configurations, and access control lists.

5. Describe your methodology for handling patches and software updates.

The following is from the Cherwell Hosting Addendum we included in Appendix "C" on beginning on page 136.

Cherwell shall provide Maintenance of the Licensed Software as defined and set forth in the Agreement. Cherwell shall provide Customer thirty (30) days advance notice prior to applying any updates, upgrades, patches, bug fixes and new releases or versions of the Licensed Software provided as part of Maintenance (each a "Maintenance Release") to the Cherwell-hosted Licensed Software. Customer may opt out of a particular Maintenance Release, provided, however, that (a) Customer agrees that it will not be able to decline or defer critical security patches and updates and Cherwell is free in its

reasonable discretion to determine which Maintenance Releases are critical and (b) Customers under a subscription license model will not be able to decline or defer Maintenance Releases. Customer shall be responsible for applying Maintenance Releases to any locally installed portion of the Licensed Software.

6. Describe your approach to screening employees and the level of experience preferred.

Cherwell has a formal screening process for potential candidates that includes full background checks. Candidates who have extensive experience with enterprise level SaaS offerings are preferred.

7. Describe how you track attacks. Describe your approach to informing JMU about attacks.

Cherwell performs multiple security tests. Tests are conducted monthly or annually as appropriate. In the event of an attack customers that might be affected will be notified via email and notice on the support portal. Any attack or potential threat is tracked in Cherwell's security test logs.

8. Describe the audit and security infrastructure testing process you utilize and the frequency of those audits/tests.

Cherwell performs a series of security audits and assessments to ensure that an adequate level of security is maintained. These include the following:

Security Test	Performed By	Frequency
Physical Site Visit	Cherwell Software	Annually
SaaS Enterprise Information Security Assessment	3 rd Party	Annually
Internal Vulnerability Assessment	Cherwell Software	Monthly
Internal Process and Procedure Audit	Cherwell Software	Annually
SAS 70 Type II/SSAE16 Audits	Datacenter Providers	Annually

Details and audit reports for each datacenter can be made available upon request.

9. Describe your approach to security reviews during each phase of the software development lifecycle.

Cherwell performs multiple security tests. Tests are conducted monthly or annually as appropriate.

10. Describe the vulnerability detection and response process surrounding your product and hosting infrastructure. Describe your patch release strategy for problems found.

Cherwell provides host based intrusion detection services. Scans are preformed weekly.

11. If hosted, provide results of the latest penetration test and vulnerability scan performed on your system.

These reports can be provided upon request after executing a mutual NDA.

12. Describe your physical and cyber data center security. Describe what measures are in place to prevent employees from viewing data they are not authorized to see or outsiders from hacking into the system.

The following is from the Cherwell Hosting Center Overview regarding Security.

Physical – Physical security is managed by the datacenter providers and is regulated and controlled via their SAS 70 Type II/SSAE16 practices and standards. These practices and standards include but are not limited to:

- Established and regularly reviewed security policies
- Controlled entry, mantraps, biometrics, full camera coverage, bullet proof glass around the NOC
- 24x7 monitoring and security

Network – Cherwell uses two models of datacenter providers; managed services, and colocation. Our managed services providers manage all security controls for telecommunication infrastructure, network infrastructure, routing, switching, and firewalls. In our colocation datacenters, Cherwell manages these security controls. Cherwell has established a set of security configurations that have been applied to all environments for devices within Cherwell's control. These include such things as network segregation, firewall configurations, site-to-site VPN configurations, and access control lists.

Backend Servers – Server security is managed by our Cherwell Hosting Administrators. We are using a secure configuration that complies with the Center for Internet Security (CIS) benchmark standards. All computers are domain joined and security policies are enforced via group policy and scripts. Accounts, access, authorization, and authentication are tightly controlled and monitored. Customer application servers are isolated, via host-based firewalls, from each other. The backend services such as domain, management, and databases are segregated from all application servers. The concept of least privilege is in practice and enforced through administrative policy.

Application – Direct access to the server application in the hosted environment is only allowed by authorized Cherwell administrators. The only method a customer may use to access their application is through a 3-tier connection over the Internet, either via the Cherwell Service Management client, the Cherwell Administration tool, or the server's website. Client connectivity using any of these methods is encrypted and digitally signed to and from the application server using HTTPS over SSL.

Site to site VPN – Site-to-site VPN is only used for the purpose of integrating with other 3rd party applications and systems. It is not necessary for most email configurations and Active Directory imports, but would be required for all other integrations, including Active Directory integrated authentication. Customers are responsible for providing and maintaining a VPN device capable of establishing an industry standard IPSEC tunnel. Cherwell will provide the configuration information necessary for establishing the tunnel and will help troubleshoot connections but the configuration of customer devices is the sole responsibility of the customer.

13. Describe your approach and policy regarding ownership of customer data that resides in your data center. Describe customer rights and abilities regarding moving and copying. Describe vendor and partner practices related to moving and copying data.

Customers are always free to make their own backups of the application data using built-in functionality in the Cherwell Administration tool.

14. Describe any exit strategies you offer.

We assumed this question refers to the ability to migrate from SaaS to On-Premise or a Change from Subscription to Perpetual license model. Cherwell is extremely flexible with both the deployment and license models and makes every effort to accommodate your request to change. We have provided information on both below.

Cherwell allows customers to migrate from SaaS to on-premise and keep the same licensing model. If you elect the SaaS deployment with the Subscription model you can migrate at any time and continue to pay the subscription. You can also elect to purchase the licenses in a perpetual model and have a SaaS deployment, and can migrate to on-premise at any time. You can also move from a Subscription to a perpetual model and based on the length of time you have paid your subscription Cherwell will provide some credit toward to perpetual model. Avante has performed such conversions and it requires minimal effort to convert, and the conversion can be accomplished by your own administrators.

The following comes from the From the Cherwell End User Subscription Agreement - "Lease-to-Own" Option. During the term of this Agreement, Customer has the option to transition the subscription licenses provided under this Agreement to perpetual use licenses. Perpetual use licenses are subject to the terms of Cherwell's current End-User License Agreement. Customer may qualify for discounts on Cherwell's perpetual use licenses.

If you are inquiring if Cherwell has any plans to exit the SaaS market we can confirm that there are no plans to exit. To support that we can confirm that Cherwell has recently made a major investment in their hosting offering which includes additional data centers locations, additional staff, investment in technology and more. We would be happy to arrange a discussion to provide more details.

15. Describe your approach to backups and disaster recovery.

All backups are encrypted both at rest and in transit. Backups are made directly to disk and replicated to a separate location. Differential hourly backups are performed and stored for eight days. Then daily backups are stored for 31 days. Customers are always free to make their own backups of the application data using built-in functionality in the Cherwell Administration tool.

P. Privacy:

After reviewing this section we confirm that Cherwell does not collect personal or other data so this section is not applicable. We have included Cherwell's Privacy Statement in the URL below:

1. Provide your privacy statement.
2. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
3. Specify who collects the information.
4. Specify why the information is collected.
5. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
6. Describe how the information is used.
7. Specify how long the information is retained.
8. Describe how the information is stored and kept.
9. Describe how the information is secured.
10. Specify whether you share the information with another party. If information is shared with another party, then respond to Items a. through h. below relative to this information.
 - a. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
 - b. Specify who collects the information.
 - c. Specify why the information is collected.
 - d. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
 - e. Describe how the information is used.
 - f. Specify how long the information is retained.
 - g. Describe how the information is stored and kept.
 - h. Describe how the information is secured.
11. Specify whether you collect information on JMU or any party related to JMU from third parties. Respond to Items a. through i. below relative to this information.
 - a. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
 - b. Specify who collects the information.
 - c. Specify why the information is collected.

- d. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
 - e. Describe how the information is used.
 - f. Specify how long the information is retained.
 - g. Describe how the information is stored and kept.
 - h. Describe how the information is secured.
 - i. Specify whether you share the information with another party.
12. Specify the transaction information collected/maintained.

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
 - [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Pricing Schedule

The purpose of this section is to provide the detail to support your request for pricing for all products and services included in proposal indicating one-time and on-going costs as outlined in Section X Pricing Schedule.

We have two (2) sections, the first is the **Pricing Approach for Cherwell Licensing** and the second is the **Pricing Approach for Avante Professional Services**.

Pricing Approach for Cherwell Licensing

The purpose of this section is to provide all required pricing details for the licensing/subscription of Cherwell Service Management hosted by Cherwell.

This information is comprised of the following two (2) sections: the **Cherwell Product Pricing Overview** and the **License Pricing Matrix**.

Cherwell Product Pricing Overview

Cherwell offers a number of advantages to how they offer licensing as well as the functionality of the license model. Below we have highlighted the key advantages that would provide benefits to the University.

License Model Advantages

- Cherwell Service Management is available in a traditional purchase/perpetual license model as well as a Subscription model.
- Cherwell utilizes a Concurrent license model for both Subscription and Perpetual models.
- Either pricing model can be deployed as a SaaS deployment.
- A concurrent license (regardless of model) entitles the user to access all “out-of-the box” applications. (This includes: Incident, Service Request, Service Catalogue, Service Portfolio, Problem, Change, Release and Deployment, Configuration, Service Level, Knowledge, Event Management, and Project Management).
- There is **No Charge** for End-users accessing the Self-Service Application. End-user Self-Service is unlimited!
- Cherwell has **No Limit** on the number of **Non-Production** (i.e. development and test environments) systems you may have. (For SaaS deployments Cherwell provisions one (1) non-production environment. You can elect to install an unlimited number of non-production environments on your premises, as well as Cherwell will provide additional non-production environments in their hosting facility for a fee.)
- There is **No Charge** for configuring of new applications (Security, Human Resources, Facilities management, etc.) in addition to the out-of-box processes.
- A Concurrent license model includes access to all Agent/technician clients including; Agent Browser, Agent Rich Client, and Agent Mobile clients.

License Access Advantages - Below are examples where NO license is required for access to the Cherwell system.

- NO licenses are utilized when accessing the Administration module.
- NO licenses are utilized when users update records via email, including responses to requests for approvals or notification of new work actions / tasks.
- NO licenses are consumed when viewing and updating records via web forms. For example Self-Service portal or web forms such as a task, approval, or survey request.
- NO licenses are consumed when accessing the Dashboard Viewer. Accessing and viewing dashboards via the Cherwell Dashboard Viewer consumes no license.

Important Assumptions

When determining the number of licenses of Cherwell you would require we took into account the information you provided in your RFP, information we reviewed on your web site, as well as through the vendor submitted questions.

- In your Item II: Background on Page 1 of your RFP you provided guidance as to the number of end-users you support as 20,000 students and 3,000 faculty and staff.
- We learned from your website you have approximately 130 total IT staff, with approximately 10 full-time help desk staff.
- We are making the assumption you also may make use of some part-time students to assist the IT department. (With the concurrent license model Cherwell offers this typically will not affect your overall licenses requirements. In our experience Higher Education clients may utilize extra student workers for peak periods, and in cases like this it is possible to arrange for short-term temporary licenses.)
- At this time we do not know if any other departments (Facilities, HR or Maintenance for example) will require Agent/Technician licensing so we have not accounted for them in our license quote.

Based on the Cherwell concurrent license model we are anticipating you will need ten (10) licenses to support the Help Desk team, and thirty-five (35) licenses to support the remaining IT organization (we are using a 3:1 ratio of approximately 100 IT staff to concurrent user licensing).

We are providing pricing for **forty-five (45) concurrent licenses of Cherwell**. At current pricing that Subscription pricing would be **\$100.00 per user per month**, paid annually, based on the one (1) year term you provided in your RFP. There is also an annual VPN fee of \$3,000.00.

You can also elect to purchase the licenses in a perpetual model and have Cherwell host your environment, the cost of each license would be **\$3,000.00 plus \$500.00 annual Maintenance and Support**. There is also an annual VPN fee of \$3,000.00 plus an annual Hosting fee of \$2,500.00.

In the event you wish to acquire fewer than 25 licenses the pricing would increase to \$115 per license/per month for the subscription and \$3,500.00 per license + \$600.00 maintenance & support for the perpetual model. Should you determine you wish to subscribe to more than 45 licenses, Cherwell's next price break is over 100 licenses so based on the size of your organization we do not believe this would be applicable.

The key advantage of a Concurrent model is in a vast majority of environments not every IT user is going to be in the technology 100% of the time, thereby making the concurrent licensing module much more cost effective. As an example (B/E Aerospace has 320 IT employees and operates on a 100 concurrent Cherwell system).

There are licensing advantages that we highlighted above that we anticipate will reduce the number of licenses you will require from Cherwell versus other products.

In addition we provide all our customers with temporary licenses in addition to the licenses they purchase for the first 90 days after Go-live to ensure you optimize the number of licenses you require.

License Pricing Matrix

As we outlined in the licensing advantages section Cherwell provides options for how you can acquire the licenses in a SaaS deployment model. Below we have provided details for the two (2) options.

Option #1 – SaaS Subscription License Model (Hosted by Cherwell):

Required Items			
Item	Unit Cost	Units	Investment
Cherwell Service Management Subscription fee - Monthly Cost	\$100.00	45	\$4,500.00
Annual Maintenance & Support			Included
Subtotal (Total Annual Fee for 45 Licenses)			\$54,000.00
Annual Hosting Fee (waived)	N/A	1	N/A
Annual VPN Fee (optional but recommended)	\$3,000.00	1	\$3,000.00
TOTAL ANNUAL FEE			\$57,000.00
Optional – Additional Hosted Non-production Environment	\$10,000.00	TBD	TBD

- Subscription price is based on a one year contract. Annual pricing detailed above, based on a one year subscription term paid annually at the anniversary date of purchase with no cancellation provision. In the event that Customer attempts to cancel the subscription before the annual payment, 50% of the total remaining contract value will become due and payable within 30 days.
- Cherwell provides 1 production and 1 non-production environment. You can elect to have Cherwell provide additional non-production environments in their hosting facility at the cost of \$10,000.00 per environment/per year. (Note you can install unlimited non-production environments on your premises at no cost.)
- You can elect to Subscribe to the licenses and install on your premises. If you elect that option then the Annual VPN Fee of \$3,000.00 would NOT be applicable.
- The price is exclusive of any applicable taxes.
- Cherwell will honor the pricing the initial term of the agreement (1 year), for subsequent renewals we/Cherwell agree to negotiate terms if we are the selected vendor.

Option #2 – Perpetual License Model (Installed on your premises):

Required Items			
Item	Unit Cost	Units	Investment
Cherwell Service Management	\$3,000.00	45	\$135,000.00
Annual Maintenance & Support	\$500.00	45	\$22,500.00
TOTAL FEE			\$157,500,00

- Pricing detailed above is based on a one (1) year agreement.
- You can elect to Purchase the licenses and have Cherwell host your system. If you elect that option then the Annual Hosting Fee of \$1,000 and the Annual VPN Fee of \$3,000.00 would be applicable.
- The price is exclusive of any applicable taxes.
- Cherwell will honor the pricing the initial term of the agreement (1 year), for subsequent renewals we/Cherwell agree to negotiate terms if we are the selected vendor.

Some additional comments on optional capabilities

We would like to also inform the University the pricing for optional capabilities you may be interested in.

Discovery Tool - Cherwell offers an asset scanning and discovery module called Cherwell Discovery & Inventory (CDI) as an optional module. This provides asset scanning and importing to the Cherwell CMDB. As the integration is pre-configured this provides you the ability to easily manage all your assets and have a populated CMDB. The costs apply up to 20,000 assets. The cost provided for the subscription model is \$4,000.00 annually, or perpetual model \$10,000.00 one-time plus \$2,000.00 annual maintenance & support.

Reservation Manager – Avante provides an optional comprehensive loan equipment management system on the Cherwell application. The solution catalogs, tracks and manages the checking in and checking out of your designated equipment loan pool. There is a one-time fee of \$7,500.00 plus an annual Maintenance & Support fee of \$750.00. Professional Services would also be applicable, you could estimate 5 days for a standard deployment.

Pricing Approach for Avante Professional Services

The purpose of this section is to provide the University with a Professional Services cost proposal, as well as outline how the estimate is likely to be allocated across the high level deliverables outlined in your Section IV “Statement of Needs” of your RFP.

If we are the selected vendor we will begin the engagement with our Requirements Sessions to completely scope all the specific requirements you may have, and upon agreement from both parties, provide a formal Statement of Work (SOW).

We would also like to comment that Cherwell offers a Quick Start program for a low cost, out-of-the box only, deployment of their system. Based on our review of your requirements and experience with similar clients to the University, we do not see this as a valid option.

This cost proposal includes the following sections:

- Scope definition
- Key assumptions
- Professional services costs

Scope Definition

The purpose of this section is to outline the scope of deliverables associated with the University’s Cherwell Service Management initiative.

- The processes (ITIL and other) under scope we expect to include to support your requirements include: Incident, Service Request, Problem, Change, Knowledge and Project Management. In addition you will need basic Service Catalog (to support Service Request). End-User Self-Service.
- Integration with Email.
- Integration with Active Directory.
- Integration with Bomgar.
- Our proposal also includes on-site Administration Training and User Training.
- No other integrations are included in the scope of this estimate.

Our proposal accounts for providing a turn-key solution (i.e. completing all the deliverables). However, you can elect to assume some of the configurations once your administrator(s) are trained; thereby reducing the professional services costs.

Key Assumptions

The following points represent key assumptions used in the preparation of this estimate:

- The preferred deployment is to be determined (On-premise or SaaS), our estimate is applicable for both options.
- The scope of Phase 1 is outlined in the aforementioned ‘scope definition’ section.
- Based on the detail provided in your RFP we anticipate you will look to leverage/utilize as much of the out-of-box process Cherwell provides where applicable with some adjustments for a majority of processes listed (with the exception of Change and Project Management).

- No other integrations are applicable for this phase (in your Section II Background you stated that you have numerous systems (PeopleSoft, Oracle, Dell, Zenoss, Nessus and Symantec for example) that may be considered for integration however without scoping requirements for each we cannot provide an estimate. As we described, once you have received the training on the Administration of Cherwell you would be capable of completing these integrations with your internal staff.

Professional Services Cost Table

The purpose of this section is to outline how our professional services costs are allocated across the high level Phase 1 deliverables. Our professional services rate is \$187.50/hour (based on \$1,500/day) plus reasonable travel and expenses.

In summary, we recommend the University budget (\$87,000.00 - \$120,500.00) to accomplish the deliverables outlined in the scope definition. Refer to the following schedule for details.

Phase Deliverable	Comment	Time Effort
Pre Engagement Planning	This accounts for any follow up and/or documentation that are deemed necessary as an outcome of the technical and non-technical Engagement Planning Session.	1 day
Workshop (Optional but Recommended)	Recommended as a prerequisite to the Requirements Definition. Based on your scope, the focus will be on the following concepts: classification, lifecycle / process, priority / SLA, record ownership, etc. This will be limited to 2 days on-site.	No Charge
Requirements Definition	It will be necessary to identify what changes to the out-of-the-box configuration is applicable to support your deployment. The following areas are under scope: Incident, Service Request, Problem, Change, Project, Knowledge, and Self-Service, as well as basic Service Catalog to support Service Request. This time will be divided between on-site and documentation preparation. Documentation will depend on the level of detail the University requires.	7 – 8 days

Phase Deliverable	Comment	Time Effort
Provision/Install	<p>Provision Cherwell for use by the University under SaaS or install on your premises.</p> <p>Deliverables include: testing of all client access options, production and test environments.</p>	0 day
Configuration – Internal User	<p>A key deliverable will include a Customer Profile (i.e. end users being supported).</p> <p>In addition to configuring the profile, the data will need to be populated on a regular basis.</p> <p>Factors driving complexity are the number of sources used to populate the profile, creating different profiles for staff, faculty, students and other potential user groups.</p>	1 day
Configuration – Security Groups	<p>A key deliverable will include creating security groups for both the internal and external users.</p> <p>Factors driving complexity are the variations of the number of external IT Vendors and if there are a number of different vendors that will each require a separate security profile.</p>	1 day
Configuration – Incident	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include:</p> <ul style="list-style-type: none"> • Classification methodology • Priority SLA / OLA rules • Notification Rules • Process / Lifecycle • Surveys • Scripts • Stop the Clock • Etc. 	5 - 7 days

Phase Deliverable	Comment	Time Effort
Configuration – Service Request	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include approval rules (plus the points specified under Incident).</p>	3 - 5 days
Configuration – Problem	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus University requirements.</p>	1 day
Configuration – Knowledge	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include: importing from data sources, connecting to external knowledge repositories, and search sources.</p>	1 day
Configuration – Change	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include approval rules, number of change types, etc.</p> <p>As you indicated you have a current process we anticipate you will require changes to the out-of-box process.</p>	5 – 10 days
Configuration – Project	<p>Factors influencing the time are driven by the anticipated difference between out of the box functionality / capability versus the University's requirements.</p> <p>Examples of points for consideration include:</p> <ul style="list-style-type: none"> • Number of Project types • Approval rules • Notification Rules • Process / Lifecycle • Versioning • Etc. 	5- 10 days

Phase Deliverable	Comment	Time Effort
Service Level Management	Our recommendation would be that internal resources can deploy Service Level for the University. If you wish you can engage Avante. Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.	1 – 2 days
Configuration – Self-Service	<p>Factors influencing the time will be driven by the difference between out of the box functionality / capability versus the University's requirements.</p> <p>This estimate provides a basic starting point for Self-Service, basic Incident and Request capabilities for end users to submit and check status on submissions.</p>	2 - 3 days
Configuration – Reporting	<p>Although there are reports and dashboards out of the box, we thought it was important to allocate some time to meet some specific University requirements (if any).</p> <p>As we do not have your specific reporting requirements we have provided an estimate only with restrictions.</p> <p>We have allocated 3 - 5 days of time on the high estimate to write no more than 3 custom reports and modify 3 existing reports.</p>	3 - 5 days
Integrations Email and Directory	<p>Integration with Email and Active Directory.</p> <p>No time is allocated as this is plug and play out-of-the-box.</p>	0 days
Configuration – Mobile Support	In addition to the out-of-box capabilities Cherwell provides for mobile support we allocated some time for specific requirements you may have.	2 – 3 days
System Review	<p>One day will be spent reviewing our configurations against the design / specification report to confirm:</p> <ul style="list-style-type: none"> • System is delivered to specification • No issues exist 	1 day

Phase Deliverable	Comment	Time Effort
Administrators Training	We deliver on-site administration training, you can include up to 10 attendees, training manuals are provided.	5 days
End User Training	<p>To facilitate UAT Testing and User Training, we have budgeted 4 days for “user training”.</p> <p>Avante will provide a train-the-trainer approach where we will allocate time with your trainer(s) to provide instruction, as well as conduct 1 -2 training sessions and sit in on 1-2 training sessions delivered by your staff.</p> <p>This also reflects the effort for developing user manuals specific to the University’s configuration at the application / process level.</p>	4 days
Go-Live Support	Go-live support includes getting the system ready for production use (i.e. deleting test records, etc.), as well as being available the day of go-live.	1 day
Project Management	Please see comments below	5 - 6 days
Travel and Expenses	Please see comments below.	\$6,000.00 - \$8,000.00
Total		54 - 75 days (\$87,000.00 - \$120,500.00)

Project Management

We will assign an Avante Project Manager to work with your designated University Project Manager to coordinate resources and manage the agreed to implementation activities and milestones as to be defined in our formal Statement of Work. Avante will provide a formal Statement of Work upon completion of the Requirements Gathering sessions.

Travel & Expenses

A portion of the services work we perform can be completed off-site. We typically perform the following portions of our services on-site: ITIL Workshops, Requirements Sessions, Administrator and User Training, and Go-live support. We have based our travel and expenses cost on this model.

Avante Professional Services Overview

The purpose of this section is to provide a response to the items you included in your Statement of Needs Section J Services specifically in response to questions one (1) and two (2).

You will find the following on the next several pages:

Avante Deployment Methodology which provides additional supporting detail regarding our approach and methodology (beginning page 100).

High Level Schedule of Deliverables which outlines the high level activities, resources and timeline for implementing Cherwell Service Management (beginning page 103).

Sample Project Plan we have provided this as an example of a Project Plan, we would complete a formal project plan if we are the selected vendor once the contracts have been executed (page 107).

Training we have provided details for both Administration and User training (page 108).

Avante Professional Services Staffing Resources which provides an overview of the resources we typically utilize during a Cherwell deployment. Please note that based on the timing of your project our specific resources may vary, however we expect to utilize these specific resources for the University (page 110).

Avante Deployment and Implementation Methodology

The purpose of this section is to demonstrate how the Avante Solutions engagement methodology is a major differentiator from other service providers and better positions our clients for a successful initiative and higher return on investment.

Prior to identifying the concepts that we consider differentiators from other solution providers, we wish to comment on our professional service resources and provide visibility to activities that are likely to be applicable to this initiative. We wish to assure the University that your engagement will be staffed by professional, certified and experienced resources. Certified and experienced refers to both the Cherwell technology and ITIL framework.

Our deployment is based on a **Four Stage Service Delivery Methodology** which Avante applies to our implementations of Cherwell Service Management.

The four (4) stages are:

Stage 1: System Requirements and Definitions Identification

Stage 2: Agreement between Avante and the University

Stage 3: Implementation

Stage 4: Ongoing Support Commitment

Stage 1: System Requirements and Definitions Identification

Our experience demonstrates that prior to successful service delivery; further discussions and situation analysis are required to ensure that the University's functional, operational and business objectives are met. Consequently, a critical part of our strategy is to perform a review between an Avante Business Analyst and the Customer Service Desk representatives to perform a System Requirements and Definitions Identification. In our opinion, this approach will optimize the effectiveness of our proposed solution.

The deliverables of our standard System Requirements and Definitions Identification strategy include:

1. Defined project scope and boundaries
2. Definition and documentation requirements:
 - A business requirements definition
 - A process requirements definition (best practices recommendations where possible)
 - Data requirements and physical database model
 - Data import identification and definition
 - User Interface definition
 - System access definition and application licensing requirements
 - Detailed program-to-program integration, as well as, integration to e-mail, etc. (level of integration, data exchange definition and process)
 - Systems infrastructure requirements
 - Management reporting requirements definition
 - Success / performance measurements definition
 - Optimal systems platform recommendation
3. Defined roles and responsibilities for both the Avante and the University's teams

4. Implementation plan
 - Strategy
 - Phased approach (recommended) with all scope and boundary for each phase - aim for early key success factors
 - Timelines
5. System testing requirements
6. Training strategy and plan
7. Support infrastructure requirements and definition
8. Identification of potential challenges / pitfalls to avoid and recommendation of best practices where possible.
9. Related technology recommendation, where applicable

Stage 2: Agreement between Avante Solutions Inc. and the University

Upon completion of the System Requirements and Definition Report, Avante will discuss and review the Report with the appropriate University representatives. The purpose of this stage is for both parties to review and agree on the solution deliverables outlined in the Report, as well as consider any additional recommendations proposed by the University. The report will provide an accurate and complete costing of the proposed solution (technology, consulting & implementation, training, and maintenance & support). The report will also deliver timelines.

Prior to the commencement of the implementation, both parties will have signed the final document detailing the deliverables outlined in the System Requirements and Definitions Report.

Stage 3: Implementation

As important to the systems requirements and definitions report is to a successful deployment, an implementation methodology that will ensure that the agreed upon solution deliverables will be met is of equal importance.

In addition to delivering the agreed upon solution, Avante wishes to highlight some of the other concepts underlying our Implementation Methodology, including:

- *Painless* - minimal impact, reliance and disruption of the University personnel
- *On-time* – meet timelines specified in the implementation strategy
- *Quick* – follow a fast to production strategy
- *Within Budget* – commitment to deliver the solution within budget
- *By Professional Staff* – who are experienced, experts, professional and customer oriented
- *Knowledge Transfer* – knowledge transfer to the University personnel

Based on our experience, the following seven key steps will be followed to ensure a successful deployment. Our Implementation Methodology will be used and followed in order to deliver a fully operational system, on time and within budget.

1. System Requirement & Definition Identification (Report)
2. System Installation, Configuration, Data Import, Integration and Test
3. User Training (*Avante will focus on training the USER and ADMINISTRATION to ensure the technology is utilized effectively. Our experience has demonstrated that organizations utilize less than 20% of their systems.*)
4. System Roll-out (Go Live)

5. Early Results and Corrections
6. System Hand-Over
7. Ongoing, Post-Implementation Assessment

Stage 4: Ongoing Support Commitment

Our involvement does not end with the deployment of the technology into production. On the contrary, Avante recognizes the importance of ONGOING, post-implementation, support and guidance. During the post-deployment period, Avante and the University will consider the need for:

- Advanced user and/or administrator training
- Changes to functional and operational issues based on feedback from users (note: the users are more knowledgeable / familiar with the system after day-to-day use)
- Any system tweaking
- Any other items particular to the University's concerns

A critical component of our ongoing support commitment is providing the University with access to effective technical and non-technical support. A key step to accomplishing this objective is the formal hand over and knowledge transfer between the implementation team and support infrastructure.

High Level Schedule of Deliverables

We have provided a schedule outlining the high level activities that we anticipate being applicable for your deployment of Cherwell. The schedule has place holders for the time-frames, applicable resources and time commitment.

The aforementioned details are typically updated as part of Pre-Engagement Planning and become part of the Project Plan. The Date column will be populated with actual dates if we are selected to implement your solution and the final timeline has been determined and agreed to by both parties.

Important note: We have provided estimates for the time we expect to complete your engagement, however all estimates are subject to availability of appropriate resources from both Avante and The University.

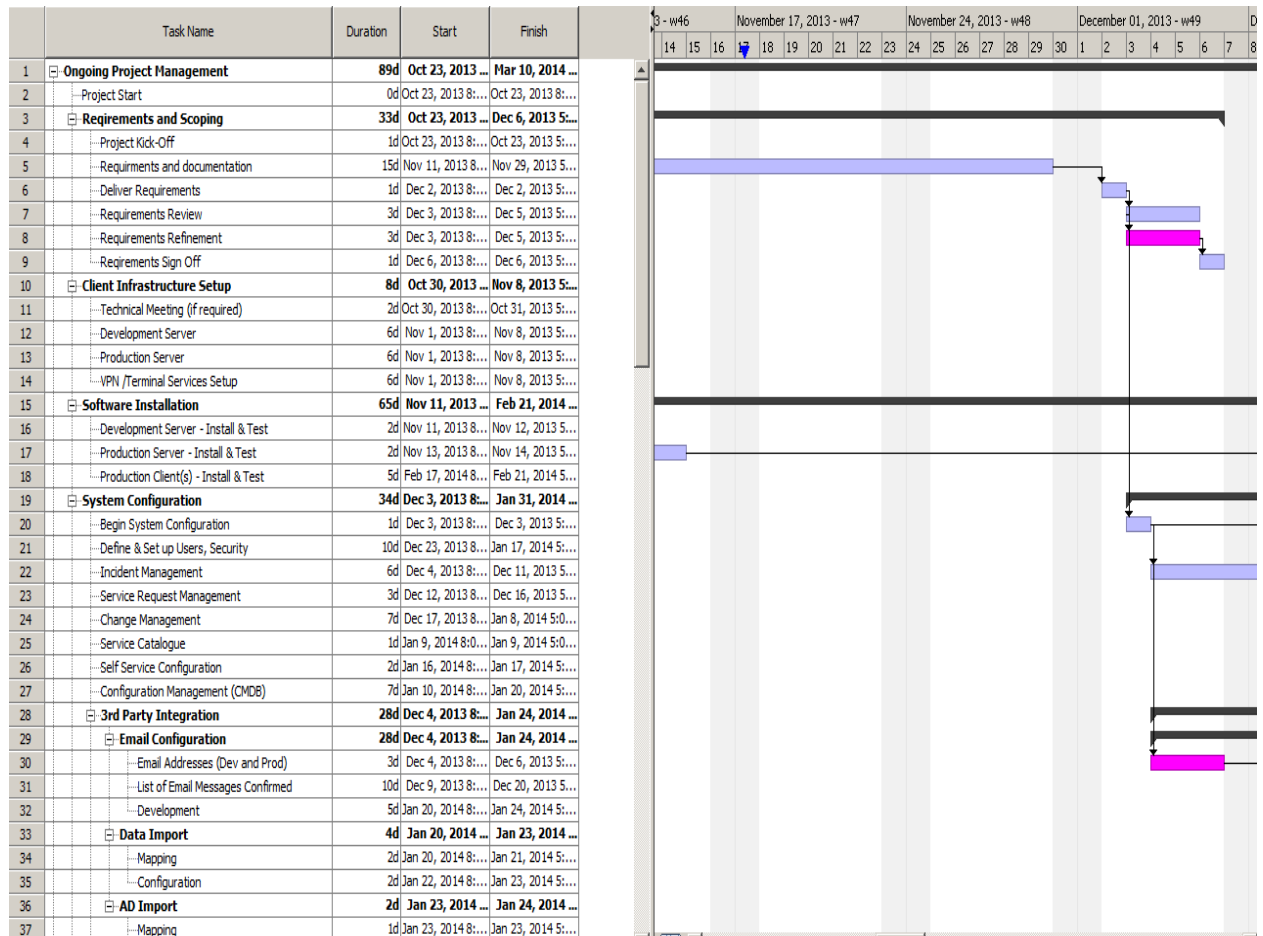
Schedule of Implementation Activities	AVANTE Resource(s)	the University Resource(s)	DATE
Project Kick Off The results of upfront planning and project roadmap should be communicated to all stakeholders in the form of a Kick-Off Presentation. The advantage of the above is that all resources involved in the project have visibility to both the high level and detailed aspects of the project.			
Project Kick-Off Presentation.	Project Manager	Project Team the University to specify	Will be scheduled within one (1) week of the execution of the contract and issuance of a Purchase Order from the University to Avante.
Pre-Engagement Planning To discuss with the University stakeholders key technical and non-technical items that are likely to be considerations under this initiative. In our experience, this advanced communication enables both parties to be better positioned for a successful engagement.			
Avante to provide the University the Cherwell pre-installation requirements documentation.	Project Manager	Project Manager the University to specify	Within 1 - 2 weeks of the Project Kick off
Conduct the technical call / meeting with the University stakeholders to discuss items such as Remote Access, Server and Client infrastructure etc.	Technical Lead & Project Manager	the University to specify	Within 1 - 2 weeks of the Project Kick off
Ongoing Project Management To outline the project plan including the assignment of resources and timelines to applicable activities. A key project management activity is to schedule weekly status meetings / calls, as well as a review of configurations accomplished to date (We assume the University will assign a resource to manage the project.)			
Prepare the preliminary project plan and refined project plan upon completion of requirements.	Project Manager	Project Manager the University to specify	Within 1 - 2 weeks of the Project Kick off
Schedule weekly project meetings with the University to discuss project progress.	Project Manager	Project Manager the University to specify	2 weeks prior to sign off of the requirements

System Requirements and Documentation To define the scope of the initial phase and to work with key stakeholders to confirm and agree to the specific system specifications that are deliverables under scope. The deliverable of this activity is a system design and specification report.			
Conduct the requirements analysis / design sessions.	Solution Architect	the University to specify	2 - 4 weeks from the project kickoff
Avante to provide the University the requirements documentation for review and approval.	Solution Architect		1 - 3 weeks following the requirements sessions
The University Sign's off on the requirements documentation.	Project Manager / Solution Architect	the University to specify	1 – 2 weeks following delivery *Important Note. All deliverable dates following the system design are dependent upon sign off of the system design by the University within 2 weeks.
Provision Technology To provision the technology in accordance to the agreed-to specification. The scope of the provisioning will incorporate both a production and non-production environment.			
The system dedicated to the University will be provisioned.	Technical Lead		TBS
The University Client infrastructure is installation ready.	Technical Lead	the University to specify	TBS
Technology connectivity has been tested.	Implementation Consultant		TBS
System Configuration To configure the technology as per the agreed to requirements specifications.			
Configure each applicable process within the system based on the agreed to requirements specifications.	Implementation Consultant		To be scheduled following System Requirements and Documentation, based on staff availability.
Configure the self-service portal based on the agreed to requirements specifications.	Implementation Consultant		To be scheduled following System Requirements and Documentation, based on staff availability.
Set up Users and Security.	Implementation Consultant		To be scheduled following System Requirements and Documentation, based on staff availability.
Setup email and other templates based on the agreed to requirements specifications.	Implementation Consultant		To be scheduled following System Requirements and Documentation, based

			on staff availability.
Integration / Data Migration Configure the system to support the (technology and data) integrations based on the agreed to requirements specifications.	Implementation Consultant		To be scheduled following System Requirements and Documentation, based on staff availability.
Final Walkthrough Avante will walk the University through the changes to the system to ensure they are in accordance with the requirements specification.			
Conduct the walkthrough meeting with the University.	Implementation Consultant	the University to specify	Approximately 1 - 2 weeks following completion of configurations
Changes are applied if needed and system is accepted prior to going into UAT.	Implementation Consultant		To start Immediately following the walkthrough meeting
The University to sign off that the system has been delivered in accordance to agreed specifications.	Not Applicable	the University to specify	To start Immediately following the Completed Changes *Important Note. Commencement of UAT is dependent upon walkthrough acceptance.
User Acceptance Testing The University to conduct UAT against the system delivered in accordance to the requirements specification.			
The University creates a UAT team consisting of members knowledgeable of the processes and design for each module, and prepares test plans based on the agreed to requirements specification.	Not Applicable	the University to specify	Immediately following sign off and acceptance of the system
The University to Conduct UAT against the system.	Not Applicable	the University to specify	2 weeks of UAT
Avante to address items identified during UAT that are within scope.	Implementation Consultant		2 weeks concurrently addressing issues
(If applicable) Avante to implement the agreed to feature requests following UAT.	Implementation Consultant		
The University to sign off that UAT is complete and that the system is error free.	Project Manager	the University to specify	Sign off of UAT would take place approximately "N" weeks from project kickoff.
User Training To ensure the users are trained to be effective with functionality under scope.			
User training manuals are ready.	Implementation Consultant		Two Weeks Following UAT sign off

The University's designated resource(s) have completed User Training.	Solutions Architect or Implementation Consultant	the University to specify	Two Weeks Following UAT sign off
Administration Training To provide the University designated super user(s) /administrator(s) with the knowledge to effectively manage the system. Administration training can be delivered on site as part of professional service delivery. We estimate 5 days to deliver the customized administration training. The University is not restricted to the number of participants. Alternatively, the University can send their administrator(s) to attend regularly scheduled Public Administration Training in Colorado Springs.			
Administrator training manuals are ready.	Implementation Consultant		One Week Following UAT sign off
The University's designated resource(s) have completed Administration Training.	Implementation Consultant	the University to specify	One Week Following UAT sign off
Go-Live To ensure a successful go-live, the University and Avante to review and complete all the tasks outlined on the Go Live Check List.			
Avante to prepare the Go-Live check list specific to the University.	Technical Lead		Upon determination of the University but approximately "N" weeks from project kickoff.
The University and Avante to review and ensure items are completed or in place to support Go-Live.	Implementation Consultant	the University to specify	Upon determination of the University but approximately "N" weeks from project kickoff.
Post Deployment Enhancements To account for requirements that were identified during the requirements analysis / system design that did not make the initial phase or requirements that surfaced as users became more knowledge about the technologies capabilities. These requirements may or may not be incorporated. The importance, urgency, complexity and number will drive whether they are included in an already established phase or their own phase.			
Document and prioritize the requirements.	Project Manager	the University to specify	Subsequent to Go-live
Project Review To understand both positive and negative feedback based on the University's experience. This will ensure that the experience of subsequent phases will be improved (if applicable) as well Avante is better positioned to provide feedback to its team as part of its continuous improvement process.			
Conduct the project review meeting.	Avante Principle	the University to specify	3 weeks post go live

Sample Project Plan



Training

To support the successful deployment and on-going support of the Cherwell Service Management technology for the University, Avante suggests two types of training: Administration Training and End-User Training.

For Administration Training Avante typically delivers this on-premise as part of our Implementation plan. Optionally you can send your System Administrators to Cherwell's public training in Colorado Springs, Colorado.

For User Training there are two types that Avante provides, Avante performs the User Training session, or you can leverage a Train-the-Trainer approach. For your deployment we are recommending the Train-the-Trainer approach.

Below we have provided some additional details regarding each approach to training.

Administrator Training

Based on our experience, Avante recommends the Administration Training be conducted toward the end of your engagement. The advantage to this approach is that your administrators will better retain the knowledge they have learned, and will be able to put that knowledge to practical application quickly in terms of system administration and configuration. This approach will better equip your admin team to provide effective support and service following "Go-Live".

Avante is able to deliver Administration Training on-site. There is no limit to the number of participants. The training is a five (5) day session. Based on the size and scope of your deployment as well as our experience with other clients similar to the University, you will find this to be a very effective method for ensuring successfully trained system administrators. We will deliver an Administrator Training Manual for each student that participates in the Administrators training session.

The advantages of on-site Administration training include: sessions do not need to be consecutive, travel and expenses for participants to Colorado Springs, Colorado are not applicable and sessions are specific to your deployment and the needs of your administrators. (Alternatively, the University can opt to send their administrator(s) to Cherwell's Public Administration Training Classes in Colorado Springs, Colorado. Cherwell offers a four and one-half (4 1/2) day training course for administrators and technicians who are responsible for managing, maintaining, and configuring Cherwell Service Management software.)

Avante is able to deliver the Administration Training on-site. The charge for administration training is based on our professional services rates, not based on the number of students who attend.

User Training

End-User Training is typically delivered twice. The first is to support User Acceptance Testing (UAT). The second is to support Go-Live.

We recommend the University utilize a Train-the-Trainer approach for your deployment. Avante will conduct a user training sessions as example, as well as support remote user training via webinar / conference facilities. We also suggest that at least one user training sessions be recorded and made available on an on-demand basis.

UAT is performed to a test group, typically one (1) session 1-3 hours in duration. The result from this session is feedback that may lead to some minor configuration adjustments.

End-user training is conducted in support of Go-live and is delivered in a class like environment, 15 to 20 participants for a duration of 2 ½ - 3 hours per session.

Avante will provide customized User Training Manuals for each student that participates in the User training session.

Note Avante does not provide training for end customers for the Self-Service portal; there are a number of resources including YouTube videos and other recorded materials.

Avante Professional Services Staffing Resources

The purpose of our response to this section is to provide an overview of the resources we typically utilize during a Cherwell deployment. Please note that based on the timing of your project our specific resources may vary, however we expect to utilize these specific resources for the University.

Avante Team Overview

Below is a summary of the typical Avante Project Team that Avante utilizes for our IT Service Management implementations which includes an overview of the team by role. We have also included **Staff Resumes** for the individuals we anticipate we would assign to your deployment.

The Avante assigned Professional Service Team consists of resources that have many years of experience consulting in ITIL and implementing Service Management Technologies. We wish to highlight that the team will follow a proven implementation methodology that is the result of years of finding what works and what does not, thereby honing our skills to better meet the objectives of our customers.

Although the team composition can change from project-to-project, the team we will assign if selected to deploy The University's Cherwell system will consist of the following: **Project Manager, Solutions Architect, Technical Lead** and one or more **Implementation Consultants**.

Avante's **Project Manager** will support The University's assigned Project Manager to plan, execute and finalize the project in accordance with agreed to deliverables, timelines and budget. Our Project Manager is directly responsible for coordinating and managing the Avante assigned team and responsibilities against the project plan, as well as to ensure the quality of all Avante based deliverables.

Avante's **Solutions Architect** is responsible for the overall system design. He or she will also provide applicable consulting and education services that are necessary to support an effective design. Furthermore, the Solutions Architect will deliver end-user training (or train-the-trainer training) in order to effectively support both technology functionality and process requirements.

Avante's **Technical Lead** is responsible for the design and architecture of all technology and data integrations under scope, as well as advising the client on the infrastructure required.

Avante's **Implementation Consultant** is responsible for configuring the system to the agreed upon specifications, as well as performing the installation, integration and administration training.

Furthermore, we wish to confirm that a Principle of Avante will be assigned to your initiative.

Staff Resumes

Below you will find resumes for the following key individuals we anticipate will be involved in your engagement (note that based on availability we may substitute our team members and will notify the University prior to the change).

Richard Corry – Project Manager, Faron Roth – Technical Lead, Steven Waxler – Solution Architect, John Hopkins – Technical Lead and Implementation Consultant.

RICHARD CORRY

PROFILE

Richard has over ten (10) years of experience in information technology. The last 6 years have focused on operational and Project Management within the ITSM sector.

Name: Richard Corry
Title: Operations Manager
Start Date: June, 2004

Mr. Corry has been involved in the implementation of over 100 projects during his time at Avante Solutions. Often, Richard is requested and engaged by clients to help with the design of systems to address complex business problems.

Richard takes the role of Project Manager on a majority of Avante's Cherwell deployments. Richard has experience managing large scale Cherwell implementations. Richard's goal is to help ensure project timelines, scope, budget and deliverables are met.

FARON ROTH

PROFILE

Faron has over twenty-five (25) years of experience in information technology consulting. The last twelve (12) have focused on service desk, service management and call center consulting and implementations. Prior to joining Avante, Faron spent fifteen (15) years delivering networking and communications consulting to F500 Corporate Customers.

Name: Faron Roth
Title: Director of Service Delivery & Support
Start Date: February, 2000

Faron has more implementation and consulting engagements under his belt than any other Avante employee (500+). Furthermore, he is often invited by manufacturers to participate in their roadmap discussions given his experience with a variety of service desk technologies, including: Cherwell Service Management, FrontRange HEAT and ITSM, Remedy, and Peregrine's Service Desk.

As Director of Service Delivery & Support, Faron has responsibility for all client engagements and the development and training of Avante's consultants. For high profile or more complex engagements, Faron will take an active role in the design and/or delivery. We have reserved Faron to provide his expertise for the University to ensure all integrations are completed in the most effective manner for the University's specific requirements. This is especially relevant as Cherwell offers great flexibility in how the University can accomplish integrations to third party systems.

STEVEN WAXLER

PROFILE

Steven has over fifteen (15) years of experience in the Service Desk and Service Management industry. In his primary role of Solutions Architect, he is responsible for assisting clients in System Design, Process Reengineering and (ITIL) Education.

Name: Steven Waxler
Title: Solutions Architect
Start Date: September, 1999

In his role as Solutions Architect, Steven provides both methodology and subject matter expertise and has been instrumental in assisting organizations in their adoption of service management best practices that are provided in ITSM, ITIL and other industry established models. Steven's consulting assignments range from education, assessments, defining an ITSM roadmap, process reengineering and technology design across the following ITIL practice areas: Service Desk, Incident, Service Request, Service Catalog, Service Level, Problem, Change, Release, Event and Configuration Management. Steven's experience and expertise will help guide the University's team to define the formal requirements that will drive the configuration of the production ready Cherwell environment.

JOHN HOPKINS

PROFILE

John has over six (6) years of experience in the Service Desk and Service Management industry. In his primary role of Implementation Consultant, he is responsible for installing and configuring the technology to the agreed to design / specifications, as well as delivering end user and administration training.

Name: John Hopkins
Title: Senior Implementation Consultant
Start Date: Since October, 2004

During his employment with Avante, John has been involved in numerous Service Desk, Service Management and Call Centre implementations and installations. His job responsibility involves all aspects of implementing a turnkey technology solution: Requirements Gathering & System Design, Installation, Configuration, Integration, Management Reporting, End User Training, Administration Training and Documentation. John is an expert in configuring the Cherwell system and will provide the University's team with the most efficiently configured system aligning to your defined requirements.

Avante Value Add

The following section highlights some of the key differentiators that Avante brings to our Professional Services Engagements and is comprised of: **Importance of Staff Education & Buy In "NO CHARGE Workshops"**, **Better System Designs Equate to Higher ROI**, **Management Reporting that Enables Decision Making**, and **Importance of an Effective Classification Methodology**.

Importance of Staff Education & Buy In "No Charge Workshops"

For every process being implemented Avante offers Educational Workshops at **No Charge**. The purpose of these workshops is to discuss the process framework and best practices in relation to the organization's business alignment objectives and outcomes driving the initiative. If you select Avante you can request we provide these workshops (typically 1/2 - 1 day per process).

According to Allan Furman of Madden Communications Inc., "The Avante differentiator was their understanding that the biggest risk in change was not technology-based, but rather effectively engaging our people in the process. Avante focused on educating the IT team on how processes and system design must be aligned specifically to the outcomes and objectives that are defined by key stakeholders – only then would a "win win" for the IT department and the employees / business operations being supported. In the absence of upfront planning and education, we would have run the risk of IT members reverting back to earlier behavior and biases towards how things were done in the past or their previous place of employment."

Better System Designs Equate to Higher ROI

In our opinion, the biggest factor an external vendor can have in driving an organization's Return on Investment on their technology deployment is the design. System designs are not all created equal! Regardless of whether the shortfall occurs at the requirements gathering or translating requirements into a system design, there is risk that the users and management will be unhappy with the final deliverable.

When it comes to the design of the newly selected technology, we find most organization's requirements (whether they realize it or not) are based on the various individual stakeholder's biases accumulated at their current or previous place of employment. In those cases where this observation is challenged, the stakeholder is quick to defend their position by saying the "change" will not be accepted.

In summary, our goal is to present a system design along with the business requirements and desired outcome. It needs to be emphasized that only if the system design is aligned to the specific outcomes and objectives can there be a mutual gain for the IT department and the users / business operations being supported.

Management Reporting that Enables Decision Making

Management reporting is essential to any service management initiative; however, many organizations struggle with report generation because there is often confusion around what should be measured and how to communicate performance in an easy to consume way. A common symptom of confusion around reporting is the focus upon quantity rather than quality; in the absence of knowing what to report on, organizations provide a report on almost everything making it difficult to focus attention on key areas that impact service desk performance.

As part of our implementation effort, we provide our customers with a unique measurement system that is designed to allow management to make informed decisions based on information gathered in the ITSM tool. The following two print screens are examples of reporting interfacing for Service Desk operations and Incident management.



Period: December 2011 [Edit Period](#) [Add New Period](#) [Delete Period](#) [Reconfigure Baseline](#)

Key Performance Indicator	Weight (%)	Baseline	Target	Actual Performance	KPI Calculation	Value Indicator
1. First Contact Resolution (%)	10%	20% / Medium	50%	60% / High / ↑	133.33%	10%
KPI Champion:	Dimension:	Quality	Tactical Reference:	1.1		
2. Customer Satisfaction	15%	1 / Low	4	3.5 / Low / ↑	83.33%	12.5%
KPI Champion:	Dimension:	Quality	Tactical Reference:	1.1, 1.2		
3. Compliance to Restoration Service Levels (%)	10%	30% / Low	80%	50% / Low / --	40%	4%
KPI Champion:	Dimension:	Quality	Tactical Reference:	1.3		
4. Cost per Service Desk Contact	10%	15 / Low	10	13.25 / Low / ↓	35%	3.5%
KPI Champion:	Dimension:	Cost	Tactical Reference:	2.1		
5. Incident Management Process Maturity	5%	2.5 / Low	4	3 / High / --	33.33%	1.67%
KPI Champion:	Dimension:	Cost, Quality	Tactical Reference:	2.2		
6. Restoration cost per incident	20%	50 / Low	30	35 / High / ↓	75%	15%
KPI Champion:	Dimension:	Cost	Tactical Reference:	2.4		
7. Agent Utilization (%)	20%	60% / Low	80%	70% / Low / ↓	50%	10%
KPI Champion:	Dimension:	Cost	Tactical Reference:	2.0		
8. Agent Satisfaction	10%	1.25 / Low	4	3 / Low / ↓	63.64%	6.36%
KPI Champion:	Dimension:	Cost, Quality	Tactical Reference:	1.1		
Overall Value Indicator: 63.03%						

[Previous Period](#) [Next Period](#)

Importance of an Effective Classification Methodology

Most organizations struggle with defining an effective Classification Methodology across all their ITIL processes. However, for most organizations, it is the Incident Process that proves the most challenging.

Our audits of organization's Incident Classifications (as well as the client's own admission) reveal that there is a high probability that identical Incidents are classified inconsistently. As a result the technology benefits in the following areas can be significantly impaired: Reporting, Searching, Knowledge Retrieval, Incident Matching, Service Levels, and Assignments / Escalations. We look forward to the opportunity to present our classification methodology to your team.

Appendix “A” Overview of Cherwell Software

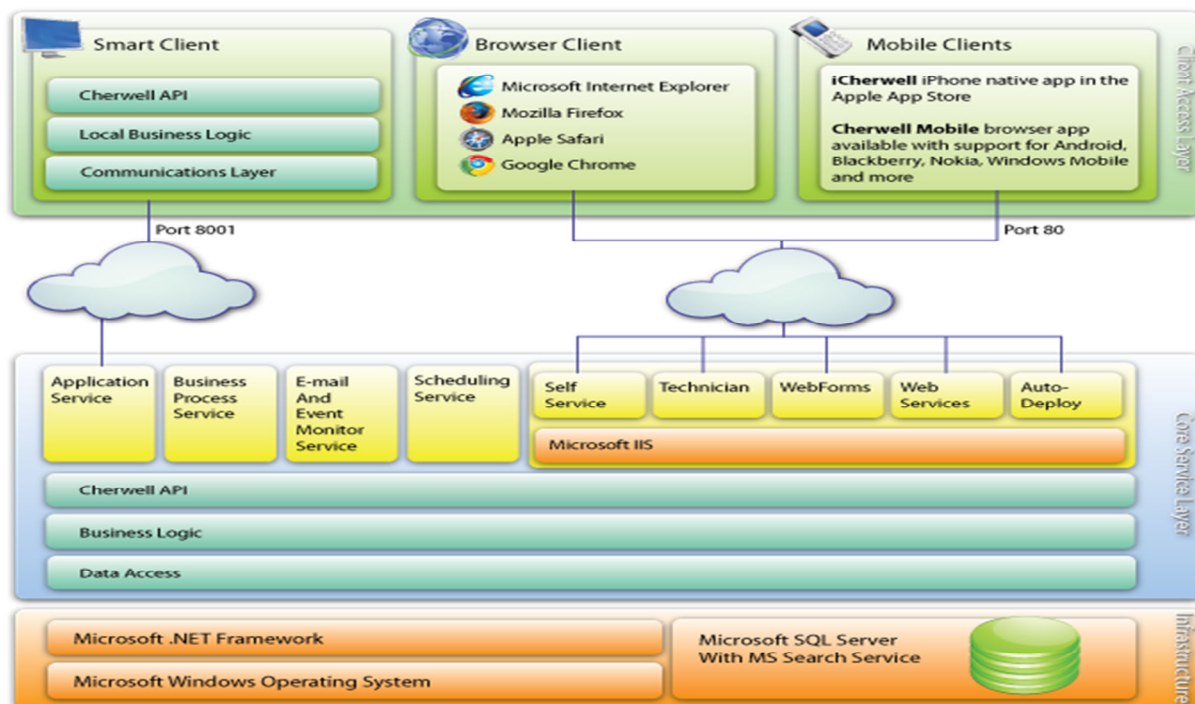
Below is high level summary of the Cherwell Service Management system. The information provided below summarizes those requirements and best provides an overview for four key areas: Architecture, Integration, Security and Expandability.

System Overview

Cherwell Service Management is an IT Service Management (ITSM) solution, based on IT Infrastructure Library (ITIL) v3 best practice, that seeks to help IT functions meet the enterprise-wide mandate to ‘deliver more with less’ and the need to demonstrate business value and to maximize the availability of business critical services. The solution offers capabilities in core ITIL v3 areas such as Incident and Request, Problem, Change, Release, Configuration, and Service Level Management. Cherwell Service Management has received certification, under the PinkVERIFY Program, for the following 11 ITIL management processes: Incident, Problem, Change, Release & Deployment, Service Asset & Configuration, Knowledge, Event, Service Catalogue, Service Level, Service Portfolio, and Request Fulfillment. Built from scratch by experienced ITSM industry professionals, the solution provides comprehensive functionality through an intuitive and uncluttered interface, thus enabling even first-time users to derive productivity benefits. In our opinion the notable aspects of Cherwell’s offering are its flexible delivery model, simple licensing structure, ease of use, customizability, and its intuitive design.

Architecture

Figure 1



As detailed in Figure 1, Cherwell Service Management has a three-tiered client server architecture. The lower tier contains the solution’s repository, implemented in a Microsoft SQL Server database, and the

Microsoft .NET Framework leveraged by the core services layer directly above it. The upper layer is the client layer which contains a rich desktop-based client as well as supporting browser and mobile device-based clients. Cherwell Software supports all the commonly used browsers (Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, and Google Chrome) as well as applications for mobile devices such as the Apple iPhone.

The middle tier, the core services layer, contains the internal data access layer, the business logic layer, Web-services API, and two sets of services that cater to the rich desktop-based clients and browser/mobile clients respectively. The rich desktop client services set provides access to complete solution functionality through four independent processes that handle application, business process, e-mail and event monitoring, and job scheduling service requests. Functionality for browser-based or mobile device clients is a subset of the rich client feature set, running as a group of mutually independent services on top of the Microsoft IIS server, with the service invoked upon a user request dependent on the user category. These services (based on user category) include Customer Self-Service, Technician, Web Forms, Web Services, and Auto Deploy.

Integration

Integration with the Cherwell Service Desk is fully supported and can be achieved using various methods depending on the integration requirements.

The system provides a documented and published API for application to application integration as well as the means for communication such as SOAP, Message Queues, XML, HTTP and TCP. Integration can also be achieved at the data layer level where the ability to connect to externally attached data sources and schedule imports is available. Alternatively externally connected data sources can be accessed in place without the need for imports. Bi-Directional data updates are also supported.

The system also provides integration with LDAP where data can be mapped and imported from your LDAP source such as Active Directory and stored with the central repository for use within the Cherwell Service Desk application. Data such as user information, device and computer association and security groups can be imported.

The Cherwell Email and Event Monitoring Service also provides a level of integration where incoming messages can initiate action within the application. Protocols such as POP3, IMAP, and SMTP are supported as well as a native Integration with MS Exchange 2007. Actions such as creating new or updating existing records can be done based upon a specific set of rules that are defined to manage your integration needs and are based upon the sources being monitored.

Security

Cherwell simplifies system security by allowing customers to manage all of their end-user security profiles in a centralized repository. User profiles can be imported from Active Directory or existing systems and security is enforced through industry standard authentication mechanisms.

Authentication of a user can be facilitated either using Cherwell's internal authentication or Windows authentication. In the case of Windows authentication, the user's network login credentials will be passed thru and validated within Cherwell's centralized repository. Connections can be secured where signed certificates and encryption can be enabled.

Using the provided tools, administrators can create user groups to control access to modules and features including business object and field level security. By default the system promotes "least access"

security, ensuring that only the minimum access necessary to perform an operation is granted, thus increasing data integrity by limiting access to the proper users only.

Expandability

Cherwell Service Management provides extensive capability to support a wide variety of IT Service Management requirements based on the out-of-box ITIL processes supported as well as the ease and power to make customizations and modifications to the system. In addition to providing the capability via the administrative interface to make those customizations Cherwell, also provides the ability to create entirely new business objects or applications to support additional requirements from different areas of the business. Examples of applications that Avante has worked with our Clients to create include; Reservation Manager Loan Scheduling, Purchase Order System, Customer Service, Facilities, and more.

Below is a sample screen print of our AV Loan application

Cherwell Service Management (licensed to Avante)

File Edit View Searching One-Step Customer Tools Help

Search Incident Go

Record 1 of 1

Task Pane

Quick Search

Search Loaner Item...

type search words here Go

Changed: Any tir

Sort by: Relevance

Search within existing result

Rich's Shortcut

- New Request - Walk In
- New Camera Request
- New Media Package
- Loan Console
- Loan Calendar
- Loan Item Console

Searches

- All Loan Items
- All Loaner Items
- All Requests
- Request Have Active Reservations
- All Active Reservations
- All Loan Reservations
- Scheduled Reservations

Dashboards

- Loan Item List
- Loan Item Usage
- Loan Console
- Billing Console

Loan Reservation (1449)

Created: 3/18/2013 6:22 PM by Avante Solutions

Last Modified: 3/18/2013 6:23 PM by Cherwell Admin

Reservation Origin

Requestor: Rich Clark

Alt Phone: (800) 555-1212

Alt Email: rich@gmail.com

Rich Clark

(r) Administrator

(p) (866) 282-6831

(e) rclark@avantesolutions.com

Reservation Details

Loan Center: Main Loan Center

Recurring: No

Loan Start: 3/18/2013 6:30 PM

Loan End: 3/20/2013 12:30 PM

Handling & Billing

Request Type: Loan Request

Primary Use: Academic

Delivery: No

Department: English

Account: 1320110000 / 2000011011

Special Instructions

Reservation Management

[Equipment Returned](#)

Reservation Actions

- [Modify Loan Return](#)
- [Add Loan Items to Reservation](#)
- [Print Agreement](#)
- [Send Email to Requestor](#)
- [Generate Invoice](#)

Actual Dates

Actual Start: 3/18/2013 6:23 PM

Actual Return:

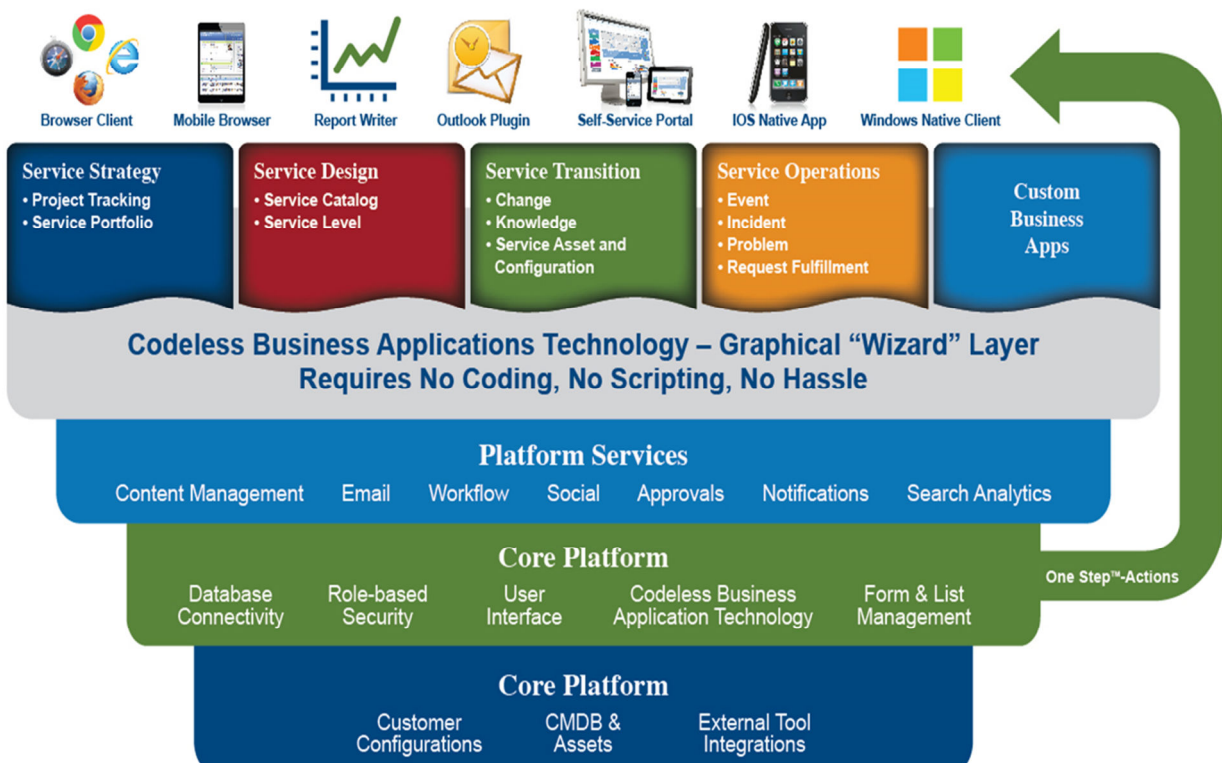
Booked Items

Item ID	Type	Make	Model	AssetID	Serial Number	Description
1374	Computer	Dell	Latitude 4500	1374		

Below is an example of a Customer Service Application - Non-IT Complaint tracking

The screenshot displays the Cherwell Service Management application (licensed to Avante). The interface includes a top menu bar with options like File, Edit, View, Searching, One-Step, Customer, Tools, and Help. A search bar is located in the top right corner. The main content area is titled 'Customer Service (329)' and features a left-hand navigation pane with sections for 'Record Action' (On Hold, Close - Resolved, Pending Details), 'I want to' (Add Journal Record, Email Customer, Email Resolution, Escalate to Supervisor), and 'Record Ownership' (Owner Team: Customer Service, Owned By: Rich Clark). The central pane shows 'Customer Details and Description' with fields for Full Name (Joe Student), Email (student@mcgill.ca), Preferred Phone ((866) 282-6831 x2795), and Alternative Phone ((800) 555-1212). The Description field contains the text 'I have an issue with something'. Below this, the 'Record Classification' section includes dropdowns for Category (Category One), Sub Category (Subcategory One), Source (Twitter), Priority (1 Day - High), and Target. The 'Record Resolution' section has links for Classification Search, Description Search, and Email, along with a Cause dropdown set to 'Cause 1' and a Resolution text area containing 'Help solve the issue'. A bottom pane shows 'Store Details' with fields for Store and Store AKA.

Below is another view of the Cherwell software system architecture.



Appendix "B" Overview of Cherwell's Workflow Builder

One of Cherwell's key strengths is the ease-of-administration which is extremely robust (you can create completely new business objects (applications/modules) yet simple to use (requires no scripting). Cherwell call's this Codeless Business Application Technology (CBAT).

As an example of the ease of configuration, especially compared with other system, we have provided information below regarding building workflow.

PROCESS BUILDING OVERVIEW

Workflow and process automation is facilitated with the Business Process feature within the application. The Business Process feature allows for workflow and process automation to be configured and managed using an easy to use graphical interface.

At the core is a robust processing engine that allows for the ability to create workflow based upon 3 different types of events. These events are as follows:

Simple Action/Event – This business process waits for an action to occur such as a business object being created or an item added to a queue. When the event occurs, a One-Step (the action) can be launched.

Threshold-based Process – This business process watches a value and performs an action when a threshold is crossed.

Visual Workflow Process – This business process allows you to define a sequence of time based and event-based steps that handle a business object as it passes through its various stages using an easy to use workflow designer.

To create a new workflow process, the administrator module is used and based upon the users security credentials, the user may be permitted to view, add, edit and delete a configured workflow process.

When the user accesses the business processes, they are presented with a listing of all processes configured and their applicable status.

Business Process	Business Object	Type	Status
Auto-close Incidents	Problem	Simple Action/E...	Enabled
Auto-close Problem	Change Request	Simple Action/E...	Enabled
Auto-Create Incident for Down CI	Config - Computer	Simple Action/E...	Enabled
Call Log Record Created	CallLog	Simple Action/E...	Enabled
Change - E-mail Approval	Approval	Simple Action/E...	Disabled
Incident - Confirmation e-mail on create	Incident	Simple Action/E...	Enabled
Incident - Confirmation Tweet	Incident	Simple Action/E...	Enabled
Incident - Notify OwnedBy on edit	Incident	Simple Action/E...	Enabled
Incident - Notify Owner	Incident	Simple Action/E...	Enabled
Incident - Resolve to Closed process	Incident	Visual workflow	Enabled
Incident - Send Survey	Incident	Simple Action/E...	Disabled
Incident Resolve By Breached - Incident Cha...	Incident	Visual workflow	Enabled
Incident Resolve By Breached - Incident Crea...	Incident	Visual workflow	Enabled
Incident Resolve By Breached - Incident Reo...	Incident	Visual workflow	Enabled
Incident Resolve By Waring - Incident Chan...	Incident	Visual workflow	Enabled
Incident Resolve By Waring - Incident Created	Incident	Visual workflow	Enabled

To add a new workflow the user just selects the new feature and chooses the type of workflow that is required. Based upon the type of workflow required a configuration form is displayed.

Simple Action/Event

With the Simple Action / Event the user defines the following:

- Event Information
- Action Taken
- Event Configuration

The screenshot shows the 'Simple Action/Event Business Process' dialog box. The 'Name' field is 'Incident - Priority 1'. The 'Description' field is empty. The 'Business object' is 'Incident' with a 'Show all' checkbox checked. The 'Execution priority' is 'Normal'. The 'Event' is 'Incident created or changed'. On the left, a sidebar shows icons for 'Limit Records', 'Limit Execution', and 'Action'. The 'Limit Records' section is active, showing 'Limit Based On' with a 'Query' button. Below it, 'Field' is 'Priority' and 'Value' is '1'. There is also an 'Expression' field and a checked 'Open Incidents only' checkbox. 'OK' and 'Cancel' buttons are at the bottom right.

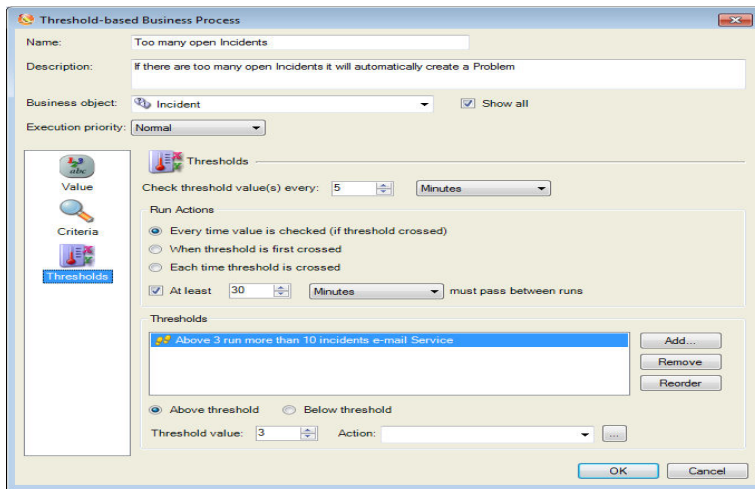
Action Taken

The screenshot shows the same dialog box, but the 'Action' section is active. The 'One-Step' radio button is selected, and the 'Execute Action' radio button is also selected. The 'Execute Action' field contains 'Send e-mail' and an 'Action' button. The 'Limit Records' and 'Limit Execution' sections are inactive. 'OK' and 'Cancel' buttons are at the bottom right.

Threshold Process

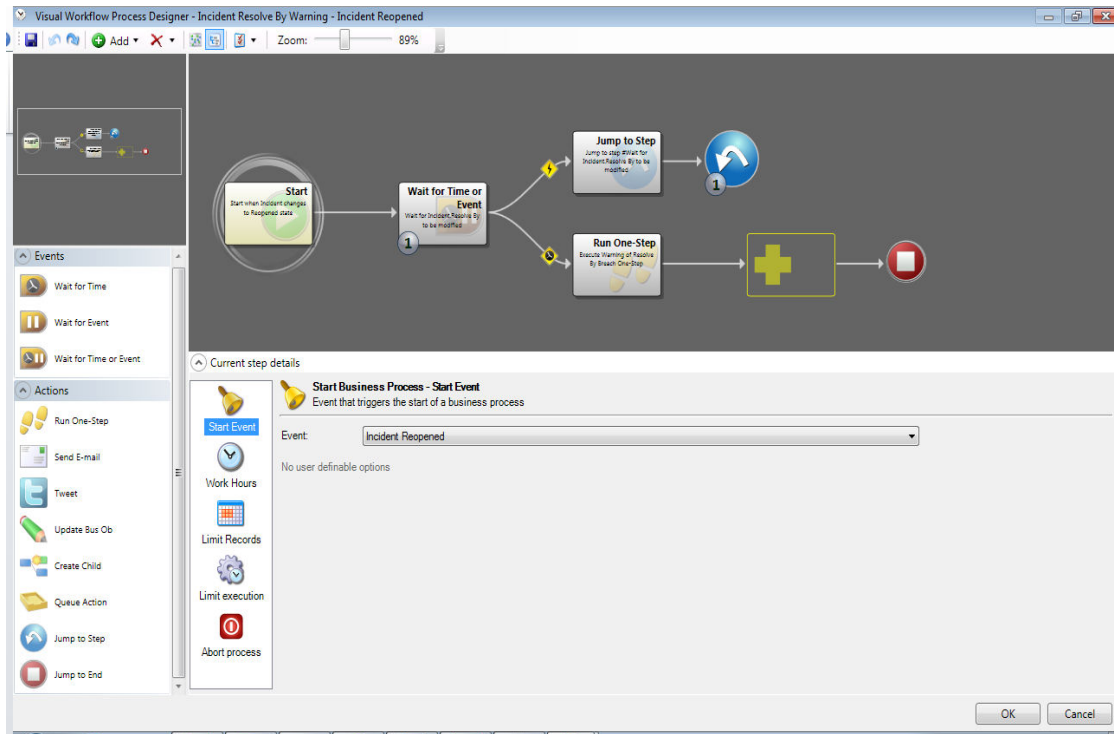
With the Threshold Process the user defines the following:

- Threshold Event and Action Taken



Visual Workflow Process

The visual workflow process designer is displayed and the user simply drags and drops the process objects onto the desktop



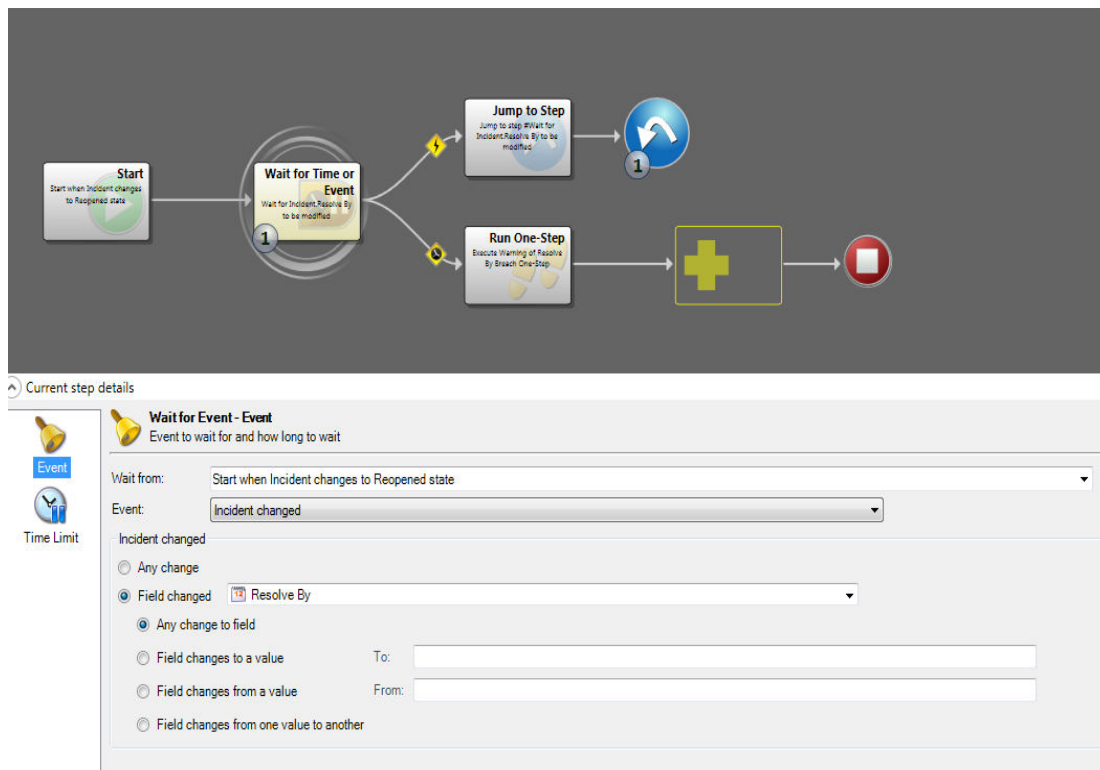
Event objects are used to monitor for certain events that will occur in the system. These are dragged from the event task pane and dropped into the visual diagram. The event object configuration form is then displayed so that the event can be defined.

Event Type choices are the following:

Wait for Time – Wait until a specific date / time has passed. For example a monitored SLA date / time has not been met.

Wait for Event – Wait until a specific event has occurred. For example, the status of a service request changes to Pending Approvals.

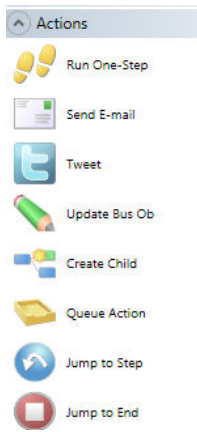
Wait for Time or Event – Wait for a specific event to occur. If the Event does not occur in a specific amount of time, take the defined action that is associated with the process. For example, a new task has been created and assigned to a specific team. If the team does not resolve the task by a specific time, an escalation email may be sent.



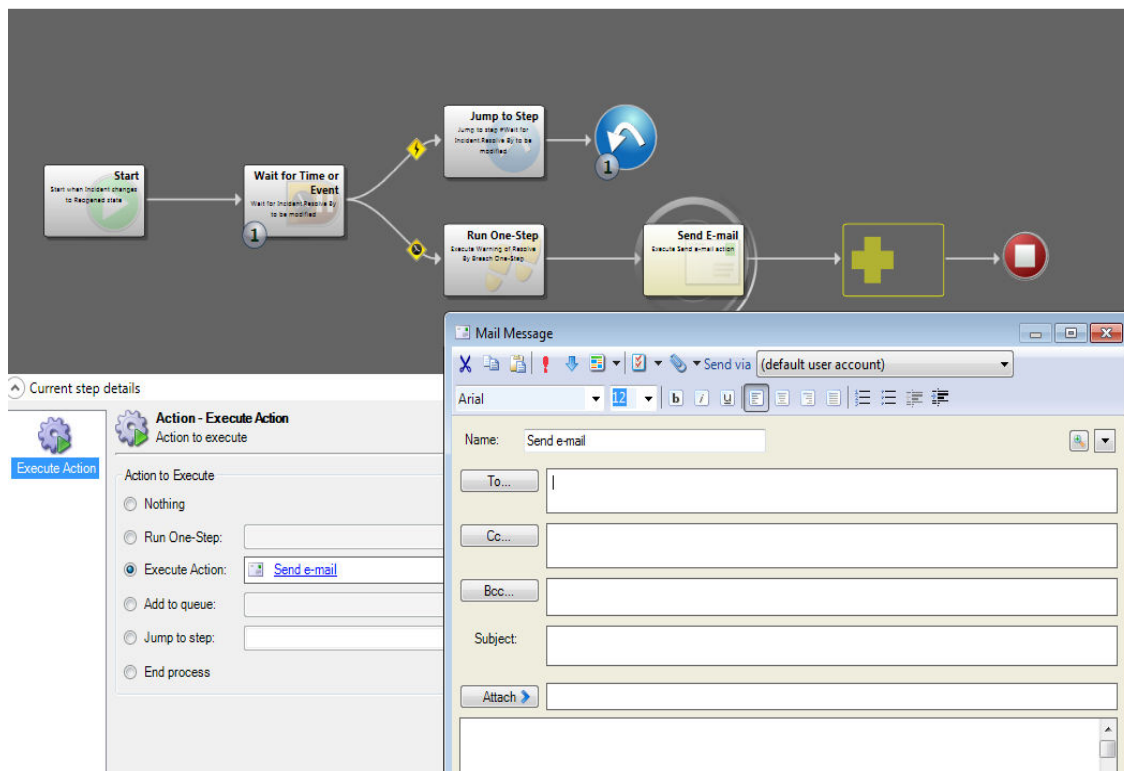
Once the event is defined, the user then drags an action item from the action task pane into the diagram and drops it onto the respective event that was just defined. Action Choices are the following:

- Run A One-Step (Cherwell's easy to use scripted action items)
- Send E-Mail
- Send Tweet
- Update Business Object – Update a record.

And More



Once the action is added to the workflow, the action then can be defined. For example, an email action is used; the email content would be defined.



Once the new workflow is saved and published, the new process or process changes will become active. Any workflow business process can be edited and customized based upon the user's security entitlement using the same interface that is used when creating a new workflow business process.

Appendix "C" Cherwell Sample Agreements

Below we have provided Cherwell Sample Agreements for the options for licensing of Cherwell Software including: Exhibit A End User License Agreement which applies to the Purchase model, and Exhibit B Cherwell End User Subscription Agreement and the Cherwell Hosting Addendum which applies to the SaaS Subscription model. Note that if you elect to move forward with our proposal, we will provide final versions of all agreements. Please also review our comments in the Exceptions section on page 4.

Avante has confirmed we have reviewed the terms and conditions included in your RFP and have also communicated these to Cherwell Software and while we agree in principle to a majority of the terms, we are prepared to negotiate in good faith minor changes to those terms should we be your selected vendor.

Avante is an authorized reseller partner of the developer whose software product is part of this response. The developer, Cherwell Software, LLC, is the licensor of the software and all use of and rights related to the Cherwell Service Management software are governed exclusively by Cherwell's End-User License Agreement or End-User Subscription Agreement (and Hosting Addendum, if applicable). Avante is not authorized to alter, amend or vary the terms and conditions of Cherwell's end-user license agreements.

CHERWELL END-USER LICENSE AGREEMENT

THIS END-USER LICENSE AGREEMENT ("EULA"), TOGETHER WITH ANY APPLICABLE CHERWELL ORDER CONFIRMATION FORM THAT REFERENCES THIS EULA (COLLECTIVELY, THE "AGREEMENT"), IS BETWEEN CHERWELL SOFTWARE, LLC, A DELAWARE LIMITED LIABILITY COMPANY ("CHERWELL"), AND THE CUSTOMER IDENTIFIED ON THE ORDER CONFIRMATION FORM ("CUSTOMER"). THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN CUSTOMER AND CHERWELL REGARDING THE CHERWELL SOFTWARE PRODUCTS ("LICENSED SOFTWARE") AND THE MAINTENANCE AND SUPPORT AND PROFESSIONAL SERVICES THAT ARE LISTED ON THE ORDER CONFIRMATION FORM. BY INSTALLING OR USING THE LICENSED SOFTWARE, CUSTOMER ACKNOWLEDGES THAT IT HAS READ AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN THIS AGREEMENT.

1. GRANT OF LICENSE

1.1 Perpetual License. The Licensed Software, which includes all configurable and executable application content or "Blueprints," is licensed to Customer for use subject to the terms of this Agreement. Cherwell hereby grants to Customer and Customer fully accepts, upon delivery, a nonexclusive, nontransferable and perpetual (unless terminated as provided below) right to use only the executable version (no source code) of the Licensed Software. Customer is allowed only the number of concurrent users of the Licensed Software as shown on the Cherwell Order Confirmation Form. If Customer wishes to expand the number of authorized concurrent users covered by the license, Customer can purchase additional user licenses. Customer's authorized concurrent users of the Licensed Software can include Customer, its subsidiaries and affiliates, and their employees and authorized representatives, agents and contractors. Customer may install copies of the Licensed Software in non-production environments, for purposes of testing, development or disaster recovery, provided, however, that such copies cannot be used for production purposes and there cannot be more than one installation of the Licensed Software in a production environment. In no event shall the number of concurrent users in a production environment exceed the authorized concurrent users covered by the license.

1.2 Intellectual Property Rights. The Licensed Software is protected by copyright and other intellectual property laws. Cherwell retains all rights, title and interest in and to the Licensed Software. Customer

agrees that this is a license only and that no title passes to Customer. If Customer makes or installs copies of the Licensed Software as provided in this Agreement, the original and all copies of the Licensed Software may not leave Customer's control and are owned by Cherwell. Customer retains all rights to its data.

1.3 Restrictions. To the maximum extent permitted by applicable law, Customer may not resell or otherwise transfer for value the Licensed Software without the written consent of Cherwell. Customer may not export, ship, transmit, or re-export the Licensed Software in violation of any applicable law or regulation, including, without limitation, the Export Administration Regulations issued by the United States Department of Commerce and the United States trade embargoes and economic sanctions administered by the U.S. Treasury Department, Office of Foreign Assets Control, or any such similar law or regulation issued by such other governmental entity which may have jurisdiction over such export. Customer agrees not to: (i) modify, decompile, disassemble or reverse engineer the object code portions of the Licensed Software; (ii) distribute, rent, lease or lend the Licensed Software; or (iii) use the Licensed Software except as expressly permitted under this Agreement.

2. INDEMNIFICATION

2.1 Cherwell shall defend, indemnify and hold Customer harmless against all third party claims, suits, proceedings, costs, damages, losses and expenses (including reasonable attorneys' fees), and judgments incurred, claimed or sustained by Customer arising out of or related to any allegation that any portion of the Licensed Software (including any updates, error corrections, or upgrades thereto), when used solely in the manner and for the purpose for which it was licensed hereunder, violates any patent, copyright, trade secret, trademark, or other third party intellectual property right. If a claim is filed in a court or other administrative proceeding seeking to enjoin the use of the Licensed Software, Cherwell shall either: (i) at Cherwell's cost, procure for Customer the right to continue to use the relevant portion of the Licensed Software; (ii) replace, at Cherwell's cost, the relevant portion of the Licensed Software with a substitute product that functions substantially in accordance with the applicable specifications for that portion of the Licensed Software; or (iii) at Cherwell's cost, modify the Licensed Software so that it does not infringe or misappropriate, provided that the Licensed Software, as modified, continues to perform substantially in accordance with the applicable specifications.

2.2 Cherwell's indemnification obligation pursuant to the above shall not apply to the extent any infringement claim is found to be caused by (i) Customer's use of the Licensed Software in a manner that is not provided for under this Agreement or Cherwell's user documentation; or (ii) Customer's use, operation or combination of all or any component or portion of the Licensed Software with all or any portion of other software, equipment or systems not provided or required by Cherwell. As a condition precedent to any liability of Cherwell, if Customer receives notice of any infringement claims for which indemnification may be available under the above, Customer must promptly notify Cherwell in writing of the infringement claim.

2.3 Cherwell will have the right to control the defense, select counsel, and direct the course of resolution, including settlement of any infringement claim (but only if the settlement does not include an admission of liability by Customer, does not involve more than the payment of money and grants Customer a full and unconditional release from all liability with respect to the claim). In addition to the defense provided by Cherwell, Customer may elect to retain its own counsel, but Cherwell will not be responsible for any fees or expenses of such counsel.

3. WARRANTIES AND DISCLAIMERS

3.1 Limited Warranties. Each party represents and warrants to the other that it has the legal power to enter into this Agreement. Cherwell further represents and warrants that: (a) it has the right to grant to Customer the license to use the Licensed Software as set forth in this Agreement without violating any rights of any third party and that, to the best of Cherwell's knowledge, the Licensed Software does not infringe or otherwise violate any intellectual property rights of any third party; (b) the Licensed Software shall operate in material compliance with Cherwell's user documentation; (c) all services provided by Cherwell pursuant to this Agreement relating to the Licensed Software will be performed in a timely and professional manner, by qualified and skilled individuals, and in conformity with standards generally accepted in Cherwell's industry; and (d) the Licensed Software shall be delivered free of any virus or otherwise malicious code, or any code or command intended to bring down the Licensed Software or Customer's computers/networks automatically or upon command or otherwise impair their use.

3.2 Limited Remedy. In the event of any breach of warranty, Customer's sole and exclusive remedy shall be for Cherwell to either correct or replace, at no additional charge to Customer, any portion of the Licensed Software or services found to be defective or, if Cherwell is unable to correct or replace the defect, refund the license fees and any prepaid but unused Maintenance and Support or hosting fees paid to Cherwell by Customer; and in the event Cherwell introduces any virus or such disabling code or commands into the Licensed Software or any of Customer's equipment, make commercially reasonable efforts to restore any and all data or programming lost by Customer as a result of such virus or disabling code.

3.3 Disclaimer. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTIES SET FORTH IN SECTION 3 ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED. CHERWELL DOES NOT WARRANT THAT THE OPERATION OF THE LICENSED SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. EXCEPT AS SET FORTH IN THIS SECTION 3, CHERWELL MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE LICENSED SOFTWARE, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

4. LIMITATION OF LIABILITY; EXCLUSION OF DAMAGES

4.1 Limitation of Liability. To the maximum extent permitted by applicable law and except for Customer's payment obligations under this Agreement and Cherwell's obligation to indemnify Customer under Section 2, each party's entire liability under this Agreement shall be limited to the amount paid by Customer for the Licensed Software, which does not include any amounts paid for related services.

4.2 Exclusion of Consequential and Related Damages. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR LOST PROFITS, LOSS OF USE OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, EXCEPT TO THE EXTENT THAT ANY THIRD PARTY CLAIM SUBJECT TO INDEMNIFICATION UNDER SECTION 2 INCLUDES SUCH DAMAGES. IN PARTICULAR, AND WITHOUT LIMITATION, CHERWELL SHALL HAVE NO LIABILITY FOR ANY DATA STORED OR PROCESSED WITH THE LICENSED SOFTWARE.

5. MAINTENANCE AND SUPPORT AND SERVICES

5.1 General. Maintenance and Support is offered on no less than an annual basis and will commence and be invoiced in accordance with the Order Confirmation Form. Cherwell will invoice Customer for Maintenance and Support renewal fees at least sixty (60) days prior to the end of each term. Maintenance and Support fees increase as Customer adds additional concurrent user licenses. Failure to pay any amount due under this Agreement may result in suspension of Maintenance and Support. If

Maintenance and Support is interrupted as a result of expiration or termination, Customer may be charged a reinstatement fee equal to the cost of Maintenance and Support for the period from the date of expiration or termination to the date of renewal.

5.2 Maintenance. “Maintenance” entitles Customer to receive updates, upgrades, patches, bug fixes and new releases or versions of the Licensed Software, including updated documentation, as Cherwell may provide from time to time without requirement of a separate license agreement, and without additional charge other than payment of the annual Maintenance and Support fee.

5.3 Support. Where provided by and purchased from Cherwell, “Support” entitles Customer to technical assistance with Customer’s ongoing use of the Licensed Software, Monday through Friday, 6:00 a.m. to 6:00 p.m. (Mountain Standard Time). Cherwell will provide support for the most current version of the Licensed Software and one prior version, including interim releases between the two versions; for example, upon release of version 5.x Cherwell will support version 5.x and 4.x. Cherwell may provide limited support for older versions. Cherwell will use its best efforts to answer Customer’s specific questions and provide support in accordance with Cherwell’s service and support guidelines. Support does not include any third party products that are not part of the Licensed Software.

5.4 Professional Services. Where provided by and purchased from Cherwell, “Professional Services” may include training, implementation, installation, on-site assistance, customization, and configuration of the Licensed Software. The total “Professional Services” fee quoted on the Cherwell Order Confirmation Form, if any, is an estimate of the number of days required based on Cherwell’s current understanding of Customer’s stated implementation requirements. A statement of work shall be mutually agreed upon prior to commencement of any Professional Services.

6. TERM/TERMINATION

6.1 Effective Date and Term. This Agreement is effective as of the earlier of the date set forth on the Cherwell Order Confirmation Form or the date Customer first installs or uses the Licensed Software (the “Effective Date”). Customer’s right to use the Licensed Software shall continue in perpetuity unless and until Cherwell terminates this Agreement for material breach by Customer. The parties acknowledge and agree that the license granted pursuant to Section 1 shall survive termination or expiration of Maintenance and Support Services.

6.3 Termination. Either party may terminate this Agreement upon written notice to the other party if the other party fails to cure a material breach of this Agreement within thirty (30) days of written notice of the breach from the terminating party. If Customer elects to terminate only Maintenance and Support for Cherwell’s failure to cure a material breach of its Maintenance and Support obligations, Cherwell shall return to Customer any prepaid but unused Maintenance and Support fees, on a monthly pro-rata basis as of the date Cherwell was notified of Customer’s intent to terminate. Upon any termination by Cherwell for an uncured breach by Customer, unless such termination is with regard to Maintenance and Support services only, Customer agrees to remove all Licensed Software from its computers, destroy all copies of the Licensed Software, and, upon request from Cherwell, certify in writing its compliance.

7. CONFIDENTIALITY

7.1 Definition. As used in this Agreement, “Confidential Information” means any information, whether oral or written, designated by a party as confidential or that reasonably should be understood to be confidential or proprietary in nature. Customer’s Confidential Information shall include Customer data stored or processed with the Licensed Software. Cherwell’s Confidential Information shall include the

Licensed Software. Confidential Information of each party shall include the terms of this Agreement (but not the fact of its existence), as well as each party's business and marketing plans, financial data, employee data, product plans and designs, and technical information. However, Confidential Information shall not include any information that (i) is or becomes generally known to the public other than by breach of this Agreement; (ii) was known to the receiving party prior to its disclosure; (iii) becomes known to the receiving party after proper disclosure from a third party not under an obligation of confidentiality; or (iv) was disclosed to the minimum extent necessary to comply with a lawful court order or government law or regulation, provided that in the case of (iv) the disclosing party shall provide the other party with advance written notice thereof and reasonably cooperate with the other party to limit disclosure and obtain protective orders or other relief as appropriate.

7.2 Protection. Each party agrees to hold the other party's Confidential Information in strict confidence and to treat such other party's Confidential Information with at least the same degree of care employed with respect to its own Confidential Information (but in no event less than reasonable care). Neither party shall (i) use the other party's Confidential Information for its own account or in any manner not contemplated by this Agreement; nor (ii) disclose the other party's Confidential Information to a third party without the prior written consent of the other party. Both parties shall limit access of each others' Confidential Information to those of its employees, contractors and agents who have a need for such access and who are bound to confidentiality obligations substantially similar to those set forth in this Section. This Section shall survive termination or expiration of the Agreement (for any reason) for a period of three (3) years.

8. MISCELLANEOUS

8.1 Severability. If any of the terms, or portions thereof, of this Agreement are invalid or unenforceable under any applicable statute or rule of law, the court shall reform the Agreement to include an enforceable term as close to the intent of the original term as possible; all other terms shall remain unchanged.

8.2 Entire Agreement. This Agreement constitutes the entire agreement between Customer and Cherwell relating to the subject matter hereof and supersedes all prior and contemporaneous agreements, representations, proposals and negotiations, whether written or oral. Any additions to, or modifications of, this Agreement shall be binding upon the parties only if in writing and executed by a duly authorized representative of Customer and Cherwell. TERMS AND CONDITIONS OF ANY CORRESPONDING PURCHASE ORDER OR OTHER DOCUMENT RELATING TO THE LICENSED SOFTWARE THAT ADD TO OR CONFLICT WITH THE TERMS CONTAINED IN THIS AGREEMENT SHALL BE DEEMED MATERIAL AND ARE REJECTED.

8.3 Waiver. The waiver or failure of either party to exercise in any respect any right provided for in this Agreement shall not be deemed a waiver of any further or future right under this Agreement.

8.4 Past Due Accounts. Any invoices not paid within the time period agreed on the Order Confirmation form and not disputed in good faith may be subject to a monthly finance charge of 1.5% of amounts due or the maximum amount allowed by law, whichever is lower. CHERWELL MAY WITHHOLD ANY APPLICABLE LICENSE KEY OR PASSWORD UNTIL ALL AMOUNTS DUE FOR THE LICENSED SOFTWARE ARE FULLY PAID.

8.5 Assignment. This Agreement is binding upon, and inures to the benefit of, the parties hereto and their respective successors and permitted assigns. A party may not assign any of its rights, obligations, or responsibilities under this Agreement without the prior written consent of the other party, which shall not be unreasonably withheld, except that neither a change in control in the assigning party nor

assignment to any entity (other than a competitor of the other party) that controls, is controlled by or is under common control with the assigning party, shall be deemed an assignment in violation of the foregoing; provided, however that the assigning party gives the other party thirty (30) days advance written notice of any such change in control or assignment.

8.6 Choice of Law. This Agreement is governed under the laws of the state of Delaware, without regard to its conflicts of laws principles. This Agreement will not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

8.7 Third Parties. No person who is not a party to this Agreement has or shall have any right to enforce any term of this Agreement and no consent of any third party shall be required for any cancellation or variation of the Agreement. Cherwell may authorize certain third parties, such as value-added resellers or solutions partners (“Partners”), to distribute the Licensed Software and Maintenance and Support Services. Partners are not authorized to modify this Agreement or the rights granted to Customer with regard to the Licensed Software. If Customer purchases Support Services or Professional Services to be performed by the Partner, the terms of any agreement between Customer and Partner for such services shall govern, and Cherwell shall not be liable or responsible for Partner’s performance under such agreement.

8.9 Taxes. Unless otherwise stated on an Order form, Cherwell’s fees do not include any taxes, levies, duties or similar governmental assessments of any nature, including without limitation value-added, sales, use or withholding taxes, assessable by any local, state, provincial, federal or foreign jurisdiction (collectively, “Taxes”). Customer is responsible for paying all Taxes associated with its purchases under this Agreement. If Cherwell has the legal obligation to remit or collect Taxes for which Customer is responsible under this paragraph, the appropriate amount shall be invoiced to, and paid by Customer, unless Customer provides Cherwell with a valid tax exemption certificate authorized by the appropriate taxing authority. For the avoidance of doubt, Cherwell is solely responsible for taxes assessable against Cherwell based on its income, property or employees.

Signature lines for the EULA are located on the Cherwell Order Confirmation form to which the EULA is incorporated by reference.

CHERWELL END-USER SUBSCRIPTION AGREEMENT

THIS END-USER SUBSCRIPTION AGREEMENT ("EUSA"), TOGETHER WITH ANY APPLICABLE CHERWELL ORDER CONFIRMATION FORM THAT REFERENCES THIS EUSA (COLLECTIVELY, THE "AGREEMENT"), IS BETWEEN CHERWELL SOFTWARE, LLC, A DELAWARE LIMITED LIABILITY COMPANY ("CHERWELL"), AND THE CUSTOMER IDENTIFIED ON THE ORDER CONFIRMATION FORM ("CUSTOMER"). THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN CUSTOMER AND CHERWELL REGARDING THE CHERWELL SOFTWARE PRODUCTS ("LICENSED SOFTWARE") AND THE MAINTENANCE AND SUPPORT AND PROFESSIONAL SERVICES THAT ARE LISTED ON THE ORDER CONFIRMATION FORM. BY INSTALLING OR USING THE LICENSED SOFTWARE, CUSTOMER ACKNOWLEDGES THAT IT HAS READ AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN THIS AGREEMENT.

1. GRANT OF LICENSE AND SUBSCRIPTION

1.1 Subscription License. The Licensed Software, which includes all configurable and executable application content or "Blueprints," is licensed to Customer for use subject to the terms of this Agreement. Cherwell hereby grants to Customer and Customer fully accepts, upon delivery, a nonexclusive, nontransferable right to access and use only the executable version (no source code) of the Licensed Software, during the term of the Subscription Service, as described below (the "Subscription Service"). This is not a perpetual use license; rather, Customer is using the Licensed Software pursuant to the Subscription Service and for a limited duration. Customer is allowed only the number of concurrent users of the Licensed Software as shown on the Cherwell Order Confirmation Form. If Customer wishes to expand the number of authorized concurrent users covered by the license, Customer can purchase additional user licenses. Customer's authorized concurrent users of the Licensed Software can include Customer, its subsidiaries and affiliates, and their employees and authorized representatives, agents and contractors. Customer may install copies of the Licensed Software in non-production environments, for purposes of testing, development or disaster recovery, provided, however, that such copies cannot be used for production purposes and there cannot be more than one installation of the Licensed Software in a production environment. In no event shall the number of concurrent users in a production environment exceed the authorized concurrent users covered by the license.

1.2 Subscription Service Term. This Agreement is effective as of the earlier of the date Customer first uses or installs the Licensed Software or the date set forth on the Cherwell Order Confirmation Form (the "Effective Date"). Customer's right to use the Licensed Software continues until this Agreement is terminated or the Subscription Service expires. The Subscription Service is offered on no less than an annual basis and will commence and be invoiced in advance of each term in accordance with the Order Confirmation Form. Cherwell will invoice Customer for Subscription Service renewal fees at least sixty (60) days prior to the end of each term. Customer's payment of the invoice will constitute notice of Customer's election to renew this Agreement and the Subscription Service. Subscription fees increase as Customer adds additional concurrent user licenses. Either party may terminate this Agreement upon written notice to the other party if the other party fails to cure a material breach of this Agreement within thirty (30) days of written notice of the breach from the terminating party. Upon any termination, Customer agrees to remove all Licensed Software from its computers, destroy all copies of the Licensed Software, and, upon request from Cherwell, certify in writing its compliance. Upon termination by Customer for an uncured breach by Cherwell, Cherwell will pay Customer a pro rata refund of any prepaid but unused Subscription Fees.

1.3 Intellectual Property Rights. The Licensed Software is protected by copyright and other intellectual property laws. Cherwell retains all rights, title and interest in and to the Licensed Software. Customer agrees that this is a license only and that no title passes to Customer. If Customer makes or installs

copies of the Licensed Software as provided in this Agreement, the original and all copies of the Licensed Software may not leave Customer's control and are owned by Cherwell. Customer retains all rights to its data.

1.4 Restrictions. To the maximum extent permitted by applicable law, Customer may not resell or otherwise transfer for value the Licensed Software without the written consent of Cherwell. Customer may not export, ship, transmit, or re-export the Licensed Software in violation of any applicable law or regulation, including, without limitation, the Export Administration Regulations issued by the United States Department of Commerce and the United States trade embargoes and economic sanctions administered by the U.S. Treasury Department, Office of Foreign Assets Control, or any such similar law or regulation issued by such other governmental entity which may have jurisdiction over such export. Customer agrees not to: (i) modify, decompile, disassemble or reverse engineer the object code portions of the Licensed Software; (ii) distribute, rent, lease or lend the Licensed Software; or (iii) use the Licensed Software except as expressly permitted under this Agreement.

2. INDEMNIFICATION

2.1 Cherwell shall defend, indemnify and hold Customer harmless against all third party claims, suits, proceedings, costs, damages, losses and expenses (including reasonable attorneys' fees), and judgments incurred, claimed or sustained by Customer arising out of or related to any allegation that any portion of the Licensed Software (including any updates, error corrections, or upgrades thereto), when used solely in the manner and for the purpose for which it was licensed hereunder, violates any patent, copyright, trade secret, trademark, or other third party intellectual property right. If a claim is filed in a court or other administrative proceeding seeking to enjoin the use of the Licensed Software, Cherwell shall either: (i) at Cherwell's cost, procure for Customer the right to continue to use the relevant portion of the Licensed Software; (ii) replace, at Cherwell's cost, the relevant portion of the Licensed Software with a substitute product that functions substantially in accordance with the applicable specifications for that portion of the Licensed Software; or (iii) at Cherwell's cost, modify the Licensed Software so that it does not infringe or misappropriate, provided that the Licensed Software, as modified, continues to perform substantially in accordance with the applicable specifications.

2.2 Cherwell's indemnification obligation pursuant to the above shall not apply to the extent any infringement claim is found to be caused by (i) Customer's use of the Licensed Software in a manner that is not provided for under this Agreement or Cherwell's user documentation; or (ii) Customer's use, operation or combination of all or any component or portion of the Licensed Software with all or any portion of other software, equipment or systems not provided or required by Cherwell. As a condition precedent to any liability of Cherwell, if Customer receives notice of any infringement claims for which indemnification may be available under the above, Customer must promptly notify Cherwell in writing of the infringement claim.

2.3 Cherwell will have the right to control the defense, select counsel, and direct the course of resolution, including settlement of any infringement claim (but only if the settlement does not include an admission of liability by Customer, does not involve more than the payment of money and grants Customer a full and unconditional release from all liability with respect to the claim). In addition to the defense provided by Cherwell, Customer may elect to retain its own counsel, but Cherwell will not be responsible for any fees or expenses of such counsel.

3. WARRANTIES AND DISCLAIMERS

3.1 Limited Warranties. Each party represents and warrants to the other that it has the legal power to enter into this Agreement. Cherwell further represents and warrants that: (a) it has the right to grant to

Customer the license to use the Licensed Software as set forth in this Agreement without violating any rights of any third party and that, to the best of Cherwell's knowledge, the Licensed Software does not infringe or otherwise violate any intellectual property rights of any third party; (b) the Licensed Software shall operate in material compliance with Cherwell's user documentation; (c) all services provided by Cherwell pursuant to this Agreement relating to the Licensed Software will be performed in a timely and professional manner, by qualified and skilled individuals, and in conformity with standards generally accepted in Cherwell's industry; and (d) the Licensed Software shall be delivered free of any virus or otherwise malicious code, or any code or command intended to bring down the Licensed Software or Customer's computers/networks automatically or upon command or otherwise impair their use.

3.2 Limited Remedy. In the event of any breach of warranty, Customer's sole and exclusive remedy shall be for Cherwell to either correct or replace, at no additional charge to Customer, any portion of the Licensed Software or services found to be defective or, if Cherwell is unable to correct or replace the defect, refund any prepaid but unused Subscription Service fees paid by Customer; and in the event Cherwell introduces any virus or such disabling code or commands into the Licensed Software or any of Customer's equipment, make commercially reasonable efforts to restore any and all data or programming lost by Customer as a result of such virus or disabling code.

3.3 Disclaimer. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTIES SET FORTH IN SECTION 3 ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED. CHERWELL DOES NOT WARRANT THAT THE OPERATION OF THE LICENSED SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. EXCEPT AS SET FORTH IN THIS SECTION 3, CHERWELL MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE LICENSED SOFTWARE, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

4. LIMITATION OF LIABILITY; EXCLUSION OF DAMAGES

4.1 Limitation of Liability. To the maximum extent permitted by applicable law and except for Customer's payment obligations under this Agreement and Cherwell's obligation to indemnify Customer under Section 2, each party's entire liability under this Agreement shall be limited to the amount paid by Customer for the Subscription Service during the most recent 24 month period, which shall not include any amount paid for related or Professional Services.

4.2 Exclusion of Consequential and Related Damages. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR LOST PROFITS, LOSS OF USE OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, EXCEPT TO THE EXTENT THAT ANY THIRD PARTY CLAIM SUBJECT TO INDEMNIFICATION UNDER SECTION 2 INCLUDES SUCH DAMAGES. IN PARTICULAR, AND WITHOUT LIMITATION, CHERWELL SHALL HAVE NO LIABILITY FOR ANY DATA STORED OR PROCESSED WITH THE LICENSED SOFTWARE.

5. MAINTENANCE AND SUPPORT AND SERVICES

5.1 General. The Subscription Service includes Maintenance and Support of the Licensed Software. Failure to pay any amount due under this Agreement may result in suspension of Maintenance and Support. If Maintenance and Support is interrupted as a result of expiration or termination, Customer may be charged a reinstatement fee equal to the cost of Maintenance and Support for the period from the date of expiration or termination to the date of renewal.

5.2 Maintenance. “Maintenance” entitles Customer to receive updates, upgrades, patches, bug fixes and new releases or versions of the Licensed Software, including updated documentation, as Cherwell may provide from time to time without requirement of a separate license agreement, and without additional charge other than payment of the Subscription fee. Maintenance shall be applied to the Licensed Software for all customers using a Subscription Service; and Customer will not be able to decline or defer Maintenance.

5.3 Support. “Support” entitles Customer to technical assistance with Customer’s ongoing use of the Licensed Software, Monday through Friday, 6:00 a.m. to 6:00 p.m. (Mountain Standard Time). Cherwell will provide support for the most current version of the Licensed Software and one prior version, including interim releases between the two versions; for example, upon release of version 5.x Cherwell will support version 5.x and 4.x. Cherwell may provide limited support for older versions. Cherwell will use its best efforts to answer Customer’s specific questions and provide support in accordance with Cherwell’s service and support guidelines. Support does not include any third party products that are not part of the Licensed Software.

5.4 Professional Services. Where provided by and purchased from Cherwell, “Professional Services” may include training, implementation, installation, on-site assistance, customization, and configuration of the Licensed Software. The total “Professional Services” fee quoted on the Cherwell Order Confirmation Form, if any, is an estimate of the number of days required based on Cherwell’s current understanding of Customer’s stated implementation requirements. A statement of work shall be mutually agreed upon prior to commencement of any Professional Services.

6. “Lease-to-Own” Option. During the term of this Agreement, Customer has the option to transition the subscription licenses provided under this Agreement to perpetual use licenses. Perpetual use licenses are subject to the terms of Cherwell’s current End-User License Agreement. Customer may qualify for discounts on Cherwell’s perpetual use licenses.

7. CONFIDENTIALITY

7.1 Definition. As used in this Agreement, “Confidential Information” means any information, whether oral or written, designated by a party as confidential or that reasonably should be understood to be confidential or proprietary in nature. Customer’s Confidential Information shall include Customer data stored or processed with the Licensed Software. Cherwell’s Confidential Information shall include the Licensed Software. Confidential Information of each party shall include the terms of this Agreement (but not the fact of its existence), as well as each party’s business and marketing plans, financial data, employee data, product plans and designs, and technical information. However, Confidential Information shall not include any information that (i) is or becomes generally known to the public other than by breach of this Agreement; (ii) was known to the receiving party prior to its disclosure; (iii) becomes known to the receiving party after proper disclosure from a third party not under an obligation of confidentiality; or (iv) was disclosed to the minimum extent necessary to comply with a lawful court order or government law or regulation, provided that in the case of (iv) the disclosing party shall provide the other party with advance written notice thereof and reasonably cooperate with the other party to limit disclosure and obtain protective orders or other relief as appropriate.

7.2 Protection. Each party agrees to hold the other party’s Confidential Information in strict confidence and to treat such other party’s Confidential Information with at least the same degree of care employed with respect to its own Confidential Information (but in no event less than reasonable care). Neither party shall (i) use the other party’s Confidential Information for its own account or in any manner not contemplated by this Agreement; nor (ii) disclose the other party’s Confidential Information to a third party without the prior written consent of the other party. Both parties shall limit access of each others’

Confidential Information to those of its employees, contractors and agents who have a need for such access and who are bound to confidentiality obligations substantially similar to those set forth in this Section. This Section shall survive termination or expiration of the Agreement (for any reason) for a period of three (3) years.

8. MISCELLANEOUS

8.1 Severability. If any of the terms, or portions thereof, of this Agreement are invalid or unenforceable under any applicable statute or rule of law, the court shall reform the Agreement to include an enforceable term as close to the intent of the original term as possible; all other terms shall remain unchanged.

8.2 Entire Agreement. This Agreement constitutes the entire agreement between Customer and Cherwell relating to the subject matter hereof and supersedes all prior and contemporaneous agreements, representations, proposals and negotiations, whether written or oral. Any additions to, or modifications of, this Agreement shall be binding upon the parties only if in writing and executed by a duly authorized representative of Customer and Cherwell. TERMS AND CONDITIONS OF ANY CORRESPONDING PURCHASE ORDER OR OTHER DOCUMENT RELATING TO THE LICENSED SOFTWARE THAT ADD TO OR CONFLICT WITH THE TERMS CONTAINED IN THIS AGREEMENT SHALL BE DEEMED MATERIAL AND ARE REJECTED.

8.3 Waiver. The waiver or failure of either party to exercise in any respect any right provided for in this Agreement shall not be deemed a waiver of any further or future right under this Agreement.

8.4 Past Due Accounts. Any invoices not paid within the time period agreed on the Order Confirmation form and not disputed in good faith may be subject to a monthly finance charge of 1.5% of amounts due or the maximum amount allowed by law, whichever is lower. CHERWELL MAY WITHHOLD ANY APPLICABLE LICENSE KEY OR PASSWORD UNTIL ALL AMOUNTS DUE FOR THE LICENSED SOFTWARE ARE FULLY PAID.

8.5 Assignment. This Agreement is binding upon, and inures to the benefit of, the parties hereto and their respective successors and permitted assigns. A party may not assign any of its rights, obligations, or responsibilities under this Agreement without the prior written consent of the other party, which shall not be unreasonably withheld, except that neither a change in control in the assigning party nor assignment to any entity (other than a competitor of the other party) that controls, is controlled by or is under common control with the assigning party, shall be deemed an assignment in violation of the foregoing; provided, however that the assigning party gives the other party thirty (30) days advance written notice of any such change in control or assignment.

8.6 Choice of Law. This Agreement is governed under the laws of the state of Delaware, without regard to its conflicts of laws principles. This Agreement will not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

8.7 Third Parties. No person who is not a party to this Agreement has or shall have any right to enforce any term of this Agreement and no consent of any third party shall be required for any cancellation or variation of the Agreement. Cherwell may authorize certain third parties, such as value-added resellers or solutions partners ("Partners"), to distribute the Licensed Software. Partners are not authorized to modify this Agreement or the rights granted to Customer with regard to the Licensed Software. If Customer purchases Support Services or Professional Services to be performed by the Partner, the terms of any agreement between Customer and Partner for such services shall govern, and Cherwell shall not be liable or responsible for Partner's performance under such agreement.

8.9 Taxes. Unless otherwise stated on an Order form, Cherwell's fees do not include any taxes, levies, duties or similar governmental assessments of any nature, including without limitation value-added, sales, use or withholding taxes, assessable by any local, state, provincial, federal or foreign jurisdiction (collectively, "Taxes"). Customer is responsible for paying all Taxes associated with its purchases under this Agreement. If Cherwell has the legal obligation to remit or collect Taxes for which Customer is responsible under this paragraph, the appropriate amount shall be invoiced to, and paid by Customer, unless Customer provides Cherwell with a valid tax exemption certificate authorized by the appropriate taxing authority. For the avoidance of doubt, Cherwell is solely responsible for taxes assessable against Cherwell based on its income, property or employees.

Signature lines for the EUSA are located on the Cherwell Order Confirmation form to which the EUSA is incorporated by reference.

CHERWELL SOFTWARE HOSTING SERVICES ADDENDUM

This Hosting Services Addendum (this “Addendum”) is between Cherwell Software, LLC, a Delaware limited liability company (“Cherwell”) and Customer (“Customer”), and is entered into pursuant to the End-User License Agreement (“EULA”) or End-User Subscription Agreement (“EUSA”) (in either case the “Agreement”) between Customer and Cherwell regarding certain Licensed Software, as defined in the Agreement.

Cherwell offers a flexible licensing model that allows Customer to deploy the Licensed Software on-premise, in a Cherwell-hosted environment or in a third-party data center. This flexibility applies to both perpetual licenses under a EULA and subscription licenses under a EUSA. This Addendum contains the terms and conditions that apply when Customer has chosen to deploy the Licensed Software in a Cherwell-hosted environment and is attached to and incorporated into the Agreement. The Addendum may be terminated as provided below and Customer may continue to use the Licensed Software subject to the applicable Agreement.

1. HOSTING SERVICES

1.1 Facility. Cherwell shall maintain and support the hardware, servers, operating systems, database servers, networking and infrastructure (such as power, connectivity and environmental controls) necessary for Customer to access and use the Licensed Software, including maintaining maintenance and support agreements with necessary third party providers and applying the latest upgrades, updates and patches from those providers. Cherwell’s hosting facility will comply with applicable laws, rules and regulations regarding safe working environments and fire protection measures and will maintain safety and security measures in accordance with customary industry standards. Upon request, Cherwell will provide Customer with documentation describing such standards and measures.

1.2 Connectivity. Cherwell shall provide a Domain Name System (DNS) Name which shall provide Customer connectivity and access to the Licensed Software.

1.3 Security. Customer Data means all text, images and information provided by Customer and stored in the hosted system. Cherwell will use industry standard security measures, such as firewalls and standard encryption protocols, to protect Customer Data. Cherwell will promptly notify Customer of any compromise to the security of the hosting facility that impacts Customer. Cherwell shall logically segregate Customer Data from data belonging to other Cherwell customers. Cherwell will immediately notify Customer of a confirmed security breach that impacts Customer Data and will provide Customer with regular status updates until the breach is resolved. Within 72 hours of final resolution of the breach, Cherwell will provide Customer with a final incident report. In the event Cherwell engages a third party service provider to assist Cherwell in fulfilling its duties under this Addendum, Cherwell agrees that it will enter into a confidentiality agreement with the third party that is at least as protective of Customer’s Confidential Information as the Agreement.

1.4 Customer Data Back-Up. Cherwell shall back up Customer Data to two geographically distinct data storage sites. Cherwell will use commercially reasonable efforts to meet a disaster recovery time objective of 18 hours in a disaster recovery scenario. Customer acknowledges that Cherwell may charge customer for recovering data which was lost or no longer available as a result of Customer’s own actions or inactions. Customer further acknowledges that Cherwell’s services are not intended to be used as the sole repository for Customer Data and that Customer has access to and control over its Customer Data, including the ability to make its own backups using the Cherwell Administration tool. CUSTOMER IS STRONGLY ADVISED TO MAINTAIN A COPY OF ALL CUSTOMER DATA ON SERVERS OTHER THAN THOSE PROVIDED OR MAINTAINED BY CHERWELL PURSUANT TO THIS ADDENDUM.

1.5 Maintenance and Support. Pursuant to the Agreement, Cherwell or a Cherwell Partner will provide Maintenance and Support for the Licensed Software, including any portion installed locally on Customer's own computers. All requests for Support must be directed to the designated technical support team and not the Cherwell hosting team. However, Customer acknowledges that Cherwell or the Cherwell Partner, as the case may be, is not responsible for, nor will Cherwell or the Cherwell Partner provide support related to, Customer's environment or infrastructure in which such local installations of any portion of the Licensed Software are found.

1.6 Upgrade Notification. Cherwell shall provide Maintenance of the Licensed Software as defined and set forth in the Agreement. Cherwell shall provide Customer thirty (30) days advance notice prior to applying any updates, upgrades, patches, bug fixes and new releases or versions of the Licensed Software provided as part of Maintenance (each a "Maintenance Release") to the Cherwell-hosted Licensed Software. Customer may opt out of a particular Maintenance Release, provided, however, that (a) Customer agrees that it will not be able to decline or defer critical security patches and updates and Cherwell is free in its reasonable discretion to determine which Maintenance Releases are critical and (b) Customers under a subscription license model will not be able to decline or defer Maintenance Releases. Customer shall be responsible for applying Maintenance Releases to any locally installed portion of the Licensed Software.

2. SYSTEM AVAILABILITY; EXCUSED OUTAGES

2.1 Availability. The Licensed Software shall be available 99.98% of the time per month, except for Excused Outages. Excused Outages are defined as unavailability of the Licensed Software caused by (a) Scheduled Maintenance, as defined below; (b) Customer's systems or Customer's actions or inactions; and (c) circumstances beyond Cherwell's control or the control of Cherwell's authorized agent or service provider, including without limitation, acts of God, acts of government, flood, fire, earthquakes, civil unrest, acts of terror, strikes or other labor problems, and equipment and telecommunications failures, delays, attacks or intrusions, provided Cherwell or its authorized agent or service provider takes reasonable and commercial care to prevent such failures, delays, attacks or intrusions.

2.2 Scheduled Maintenance. Scheduled Maintenance is defined as routine maintenance that occurs on a designated day and time each month and out of band or emergency maintenance that occurs only during designated non-peak hours. Cherwell will provide Customer with at least 48 hours advance notice of any Scheduled Maintenance and any change to the designated days and times of Scheduled Maintenance. Cherwell reserves the right to perform emergency maintenance as necessary and will promptly notify Customer of any downtime caused by the emergency.

2.3 Notification and Cooperation. In addition to the Scheduled Maintenance notice above, Cherwell will promptly notify Customer of any service outages via email or telephone. All notices will include a recovery time estimate. Cherwell will attempt to resolve outages within the time estimated but any timeframes are estimates only and are not guaranteed. Cherwell will also notify Customer when the outage is resolved and services have been restored. Customer acknowledges that in certain circumstances system unavailability may be caused by issues with Customer's computers or systems and agrees to cooperate with Cherwell to determine the source of the outages.

2.4 Service Credits. In the event the Licensed Software is not available as set forth above, Customer shall be entitled to a Service Credit equal to the value of the down time (on a pro-rata basis, using Customer's annual hosting fee), applied as a credit on Customer's next invoice. Customer must request a Service Credit in writing to Cherwell within 15 days of the end of the month for which a Service Credit is requested, and provide sufficient detail necessary to support the Service Credit. In the event Customer is

entitled to Service Credits over any three consecutive months, or for any five months during a 12-month period, then notwithstanding any other provision of the Agreement, Customer shall have the right to terminate this Addendum and receive a pro rata refund of any prepaid but unused hosting fee.

3. CUSTOMER ACCESS. In order to administer its installation of the Licensed Software, Customer must install the Cherwell Administration module on a local computer. However, in order to maintain the security of the hosting system while Cherwell is providing hosting services, Customer will not have direct access to the hosted environment except via the Cherwell Service Management applications and shall not install the Server portion of the Licensed Software on its own systems or premises for use in a production environment. At Customer's option, Customer may (a) access the Licensed Software in a "smart client" environment and install the Client portion of the Licensed Software on Customer's end-user computers or (b) Customer may access the Licensed Software in a "browser client" environment without installing the Client portion of the Licensed Software on Customer's end-user computers. In either environment, however, the number of concurrent users accessing the Licensed Software must not exceed the number of concurrent users provided for under the Agreement. Upon termination of this Addendum, Customer may install the Server portion of the Licensed Software on its own systems and premises in a production environment, subject to the Agreement. Customer may install copies of any portion of the Licensed Software in non-production environments, solely for purposes of testing, development or disaster recovery, provided, however, that in no event shall such copies be used for production purposes

3. CUSTOMER OBLIGATIONS

3.1 Restrictions. Customer shall not, and shall ensure that its employees, affiliates and clients do not: (a) knowingly or intentionally interfere with or disrupt the Licensed Software or the Cherwell systems used to host the Licensed Software, including, without limitation, transmitting viruses, worms, Trojan horses or other malicious code; (b) attempt to gain unauthorized access to the hosted system or network or allow others to do so; (c) make any use of the service that violates any applicable law, rule or regulation; or (d) make any use of the service that violates any acceptable use policy provided by Cherwell from time to time. Cherwell may suspend services due to detection of an attack coming from Customer's systems or a determination that continued use of the service will violate applicable law or the legal rights of another person or entity. Except for the limited right to access and use the Cherwell hosted environment as provided in this Addendum and the software use license granted in the Agreement, Cherwell reserves all rights to the Licensed Software and the Cherwell hosted environment.

3.2. Indemnification by Customer. Customer represents that it has all necessary permissions and rights to the Customer Data and grants Cherwell a limited and non-exclusive license, for the sole purpose of providing services under this Addendum, to copy, display, distribute, download and transmit Customer Data. To the extent Customer Data is Confidential Information of Customer, it is subject to the terms of the Agreement, including the Confidentiality section, and to any other confidentiality agreement mutually agreed between Cherwell and Customer. To the extent permitted by applicable law, Customer agrees to indemnify, defend and hold harmless Cherwell and its officers, directors, employees, and representatives from and against all third party claims, demands, damages, expenses, fees, penalties, liabilities, judgments, or causes of action of any nature (including, reasonable attorney's fees) arising out of or related to the Customer Data or any communication transmitted by Customer.

4. TERM AND TERMINATION

4.1 Effective Date. This Addendum is effective as of the Effective Date of the Agreement and the initial term of this Addendum shall be one year, unless otherwise agreed to in writing by the parties. Following the initial term, Customer may renew this Addendum for one or more additional one-year terms by

providing notice to Cherwell. Payment by Customer of Cherwell's renewal invoice for the hosting service fees, which will be sent to Customer at least 30 days prior to the end of any term, shall constitute notice of Customer's election to renew.

4.2 Termination. Customer may terminate this Addendum at any time, without cause, by providing written notice to Cherwell, but this does not entitle Customer to any type of refund. Either party may terminate this Addendum upon written notice to the other party if the other party fails to cure a material breach of this Addendum within thirty (30) days of written notice of the breach from the terminating party. Upon termination by Customer for an uncured breach by Cherwell, Cherwell will pay Customer a pro-rata refund of any prepaid but unused hosting fee, plus any unpaid service credits payable to Customer.

4.3 Effect of Termination. Termination of this Addendum shall not terminate the Agreement nor Customer's right to use the Licensed Software as set forth in the Agreement. Termination of this Addendum will likewise not obligate Cherwell to reinstall the Licensed Software on Customer's own systems or premises or provide professional or "migration" services related thereto, except as mutually agreed upon by the parties. Upon termination of this Addendum, Customer will have 30 days to request a copy its data, and if requested, Cherwell shall provide such data in an industry-standard format such as a XML or .csv file. After the 30-day period, Cherwell has no obligation to maintain or provide Customer Data and will destroy all Customer Data in its possession or under its control in accordance with industry standard DOD data destruction methods, unless such destruction is legally prohibited.

Signature lines for the Agreement are located on the Cherwell Order Confirmation form to which the Agreement is attached and incorporated by reference.

CHERWELL ORDER CONFIRMATION

Cherwell Software, LLC
12295 Oracle Blvd., Suite 200
Colorado Springs, CO 80921
(719) 386-7000 Fax: (719) 386-7001
www.cherwell.com

Customer Name			Prepared By:	
Installation Address:				
Primary Contact		Title		
Telephone		Fax		
Email		PO #		
Billing Contact		Billing Phone		
Billing Contact Email		Date Issued:		
License Type:		Hosting Type:		

Item	Description	QTY	Product Price	Discount	Unit Price	Amount
Total Contact Value						
(Sales Total Due for First Year of this Contract. Please see additional terms.)						
Additional Terms:						

Payment Terms: Payment due within 30 days of invoicing. Licensed Software, Training, Maintenance & Support be invoiced immediately. Professional Services to be invoiced as rendered. The above pricing does not include any applicable sales tax or similar tax

NOTE: All software to be delivered electronically

This Order Confirmation, together with the applicable license, subscription and/or services agreement identified below and incorporated herein, constitutes an agreement (collectively, the "Agreement") between Cherwell Software, LLC, ("Cherwell") and Customer, and must be signed by an authorized representative of Customer. Use of the Licensed Software described above is subject to the Agreement. By using the Licensed Software or by signing below, Customer acknowledges and agrees to the terms and conditions contained in the Agreement which can be reviewed at the URL noted below or obtained from the Cherwell account manager. If Customer is ordering additional software licenses or services and has already executed an agreement with Cherwell, by signing below Customer agrees that the products . This Order Confirmation expires 30 days from Date Issued.

End-User License Agreement (EULA)
<http://www.cherwell.com/company/legal/eula.pdf>

Hosting Services Agreement (HSA)
<http://www.cherwell.com/company/legal/hsa.pdf>

or
End-User Subscription Agreement (EUSA)
<http://www.cherwell.com/company/legal/eusa.pdf>

Existing Cherwell Customer: _____

Each party signing below represents that it has authority to bind the company or legal entity named below.

CUSTOMER		CHERWELL SOFTWARE, LLC	
By: (print name and title)		By: (print name and title)	
Signature		Signature	
Date:		Date:	

Appendix "D" Avante Professional Services Terms & Conditions

The purpose of this section is to outline the terms and conditions that are in place to ensure the University's interests, as well as outline Avante responses to specific project conditions should they arise.

- A. Both Avante and the University, at all times during the project, will act reasonably and in good faith.
- B. Avante will allocate resources with the expertise to deliver the scope and deliverables described herein.
- C. Unless instructed otherwise, Avante will not commence any aspect of the project until deliverables and final cost are agreed to.
- D. Any changes to scope, deliverables and timeframes must be agreed to by authorized representatives of both parties. It is reasonable to expect that any changes will necessitate an update to project timelines and costs.
- E. Avante can request the project plan be updated in the event that the University does not fulfill its agreed to deliverables and tasks (in accordance with the project plan and / or system specifications and design) on time. Additional charges will be applicable if it is agreed that Avante resources should perform the deliverables in order to avoid project delays.
- F. Avante will deliver the agreed upon deliverables outlined in this Statement of Work. The deliverables will be provided on time and on budget; unless circumstances beyond Avante's control come to bear. Avante's inability to deliver on time or on budget must be immediately communicated to the University.
- G. Avante will immediately communicate to the University any item that prevents Avante from meeting the agreed to deliverables. Avante confirms it will provide commercially reasonable efforts to achieving the deliverables. However, Avante is not responsible for an Impediment of the implementation beyond its control.
- H. Avante warrants all deliverables for the lesser of ninety days from system acceptance or when the University's resources make changes to the deliverable.
- I. Project pricing is based on the assumption that the University's equipment, network and operating system are compliant (with stated requirements) and are in good working order. Any challenges with the University's technology infrastructure and security access will be immediately communicated by Avante to the project managers of both companies. Avante will provide troubleshoot guidance if requested but will not perform any fixes to the University's technology infrastructure without prior approval from an authorized the University officer. Avante will bill for (at project rates) for any unforeseen time spent or delays associated with technology infrastructure and security access.
- J. The University must dispute any work within seven days from receipt of applicable invoice; otherwise all invoices are due within thirty days from the invoice date. Any unreasonable delay in payment will result in a work stoppage.
- K. Should either party, during the project, be unsatisfied, the complaint / concern should be documented and immediately communicated to the project manager of the other party. If the complaint / concern is with the project manager, an appropriate management level project resource will become the alternative contact until the matter is resolved.



Educational Process Workshop

The purpose of the workshops is to educate the company's IT representatives on the applicable processes under consideration and best practices in relation to the organization's business alignment objectives and outcomes driving the initiative.

In our experience, engaging and educating the IT representatives involved in the process is essential if the organization wishes to realize the benefits of implementing the new process, both ITIL and non-ITIL. In the absence of education, regardless of the role the IT representative plays in the newly adopted process, there is a high risk that IT representatives will revert back to earlier behaviour and biases towards how things were done in the past or their previous place of employment.

Although the workshop is open to any member of the IT department, it is essential that any IT representative involved in designing the Cherwell technology (to support the process) must attend. (i.e. the workshop is a prerequisite to the Cherwell design session.)

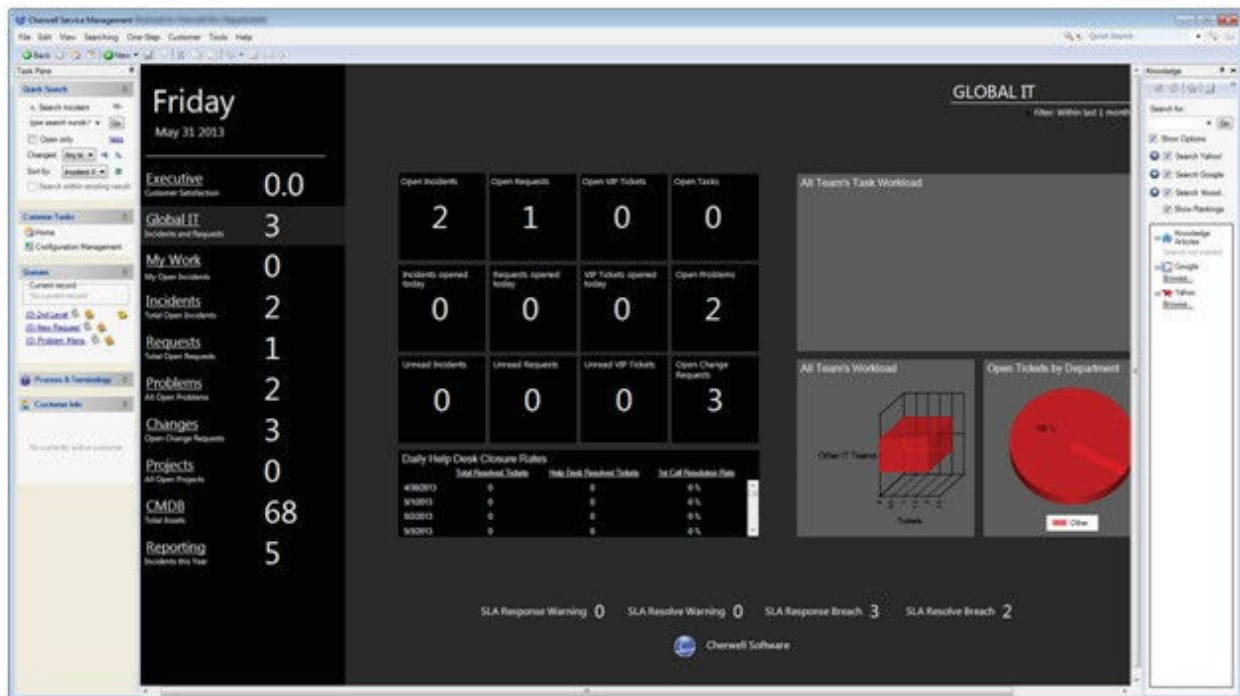
Workshop Topics

- The importance of a clear process and scope definition
- Provide an overview of the process, as well as its relationship to other processes
- Understanding the key process concepts and applicable best practices
- Identify business reasons driving the implementation of this process
- Identify the benefits the organization wishes to realize (and mechanisms for measurement)
- Identify process risks and common pitfalls to avoid
- Outline the process life cycle and workflow
- Identify and prioritize data capture
- The importance of well-defined process roles and responsibilities

Appendix “F” Cherwell Sizing Guide

Welcome to Cherwell Service Management (CSM)

Cherwell Service Management® (CSM), developed by Cherwell Software™, is a seamlessly integrated, Web-enabled IT Service Management (ITSM) software solution. CSM offers a customizable, scalable, Out-Of-The-Box (OOTB) solution based on ITSM best practices and the ITIL framework. Use CSM to manage daily Incidents and Service Requests, or utilize CSM’s robust processes (Incident Management, Problem Management, Change Management, Configuration Management, Release Management, and more) to fully integrate your organization’s ITSM processes.



CSM delivers OOTB functionality for common ITIL functions; however because ITIL is a framework (and not a step-by-step methodology), and because every company is unique, CSM provides the flexibility to add, remove, or change our OOTB functionality to address your company’s business requirements.

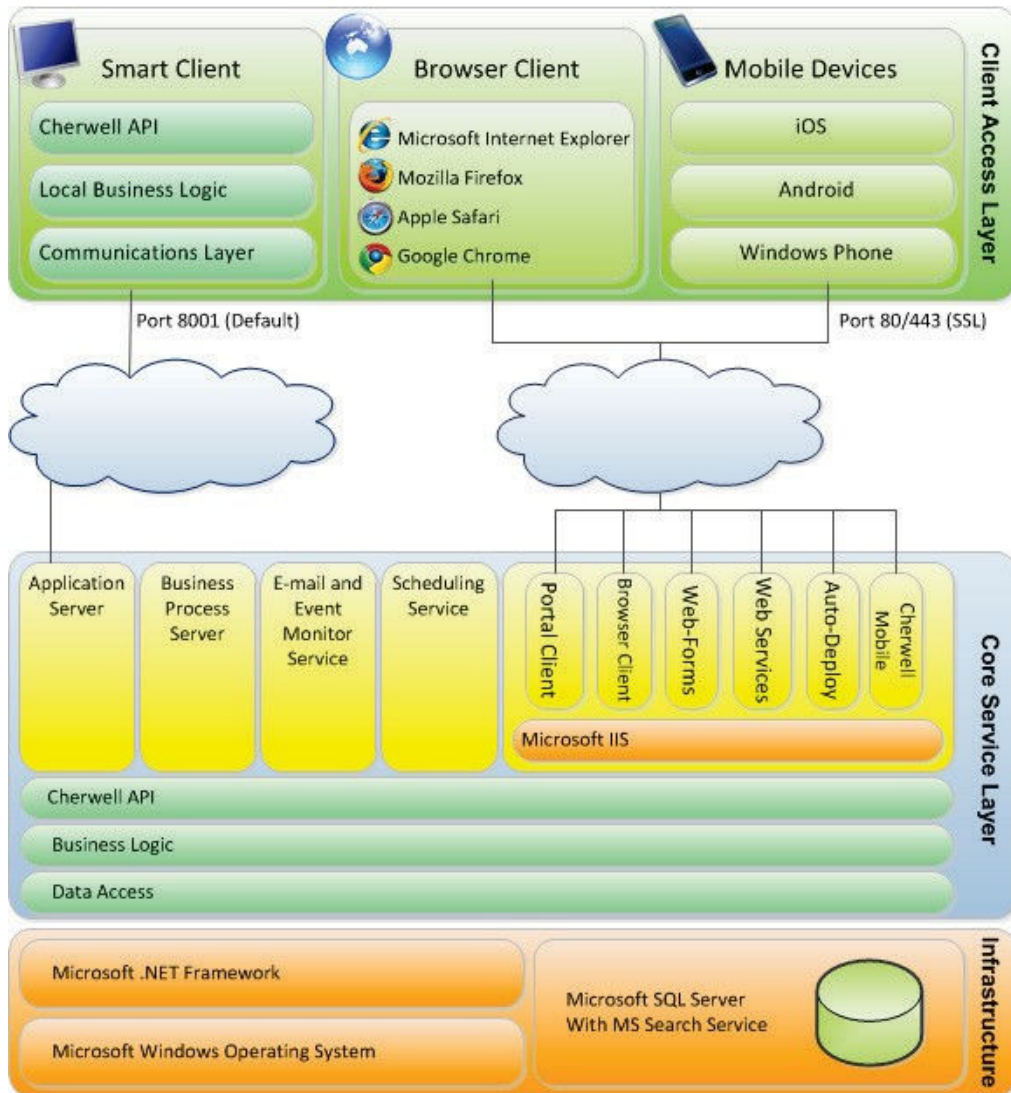
Although priced for small to mid-sized companies, CSM provides the power of an enterprise solution your company will never outgrow. Designed by industry experts, CSM is a revolutionary new product built from the ground up using Microsoft’s .NET technology and the framework of ITIL best practices. It offers enterprise-level features without enterprise-level cost or complexity.

About this Document

Many variables influence how Cherwell Service Management (CSM) should be architected within a customer environment. This document explains some of the variables and provides Cherwell Software’s recommendations.

Technical Architecture

Please use the following diagram as a reference for this document.



CSM is an XML-based, 3-tier application built on Microsoft .NET that can be used as a Web-enabled smart client or as a browser-based application. The three tiers are:

- Database Server.
- Application Server.
- Client.

CSM makes use of Microsoft SQL Server (2005-2012) as its back-end database. In many cases, SQL Server can be installed on the same server as CSM. However, if a company has a centralized database server, it is probably more efficient to host CSM's database on that server because it simplifies management and ensures that CSM's data will participate in any existing backup/recovery plan.

Components

By default, when CSM is installed, it is installed on a single server. However, the system components can be separated onto additional servers. There are generally two reasons for separating components:

- **Support of existing infrastructure:** It is very common for customers to have specific servers set up for specific functionality. Most commonly, this includes the database or the Web server.
- **Scalability:** While a single server is sufficient for most customers, when the number of concurrent users substantially increases, moving secondary services to additional boxes might be more efficient. Also, if an exceptional load is expected on one of the secondary services, moving that service off might make sense.

Database

In many cases, SQL Server can be installed on the same server as CSM. However, if a company has a centralized database server, it is probably more efficient to host CSM's database on that server because it simplifies management and ensures that CSM's data will participate in any existing backup/recovery plan.

When moving the CSM database to a separate server, consider the following:

- Network activity will obviously exist between the CSM server and the database server (usually via named pipes). The connection between the two machines should be fairly fast, and firewalls might have to be appropriately configured to allow this communication.
- The CSM servers must have appropriate security access to the database. This can either be accomplished by providing SQL credentials for the database to the CSM server or by ensuring that the account used by the CSM servers has appropriate rights on the database server (and also has appropriate local rights on the CSM server machine).

Servers

The Cherwell Application Server is an NT Service that runs on a server and is accessed by the various clients. It talks directly to the SQL Server database via an appropriate mechanism (Ex: named pipes), and the clients communicate with the application server via TCP or HTTP on a particular exposed port (the default is TCP on port 8001).

In addition to the Cherwell Application Server, there are four other servers that also run as NT Services and connect directly to the database. Each of these can be run on the same machine as the Cherwell Application Server, or they can be run on separate machines.

- **Business Process Server:** This server is responsible for handling background processing of business rules (such as notifications). While it is extremely efficient, if there are a large number of rules, a large number of records created/changed per minute or, particularly, a large number of threshold-based rules, it might be more efficient to move this server to a different machine.
- **E-Mail and Event Monitor:** This server monitors incoming e-mail messages to create or update records. In addition to connecting to the database server, it also has to be able to talk to the mail server (Ex: Exchange). If an exceptionally large amount of e-mail traffic is expected, it might be more efficient for this to be on its own server, or if the Business Process Server is on its own box,

it might be more efficient for the e-mail monitor to be on the same box.

- **Scheduling Server:** This server is responsible for executing activities such as imports and reports on a timed/recurring basis. Normally, these activities are scheduled for off-hours, but for 24x7 operations, or for situations where large numbers of items might be scheduled, it might be more efficient to offload this server.
- **Configuration Scheduling Server:** This server is an add-on that allows for discovery/inventory of all assets. It is an agent-less tool that communicates (on a scheduled basis) with the entire network to determine the current state of the network and systems. Normally, this is run during off-hours so it has a minimal effect on performance, but for large sites, or sites that run 24x7, it might be more efficient to run this server on its own machine. This decision should be based on the number of assets and network topology.

In our default configuration, all four servers and the Cherwell Application Server run on the same machine. A secondary configuration is to have the Cherwell Application Server on one machine and all of the other servers on a second machine. While it is possible for each server to have its own box, it would rarely be warranted.

Web Servers

CSM includes several browser applications that are hosted in Microsoft IIS. The browser applications also communicate directly with the database. By default, these applications are also installed on the main CSM server, but might be broken out either because there is a common publicly available Web server or for scalability reasons. Each of these servers can be installed separately or on the same server:

- **Cherwell Portal:** This application allows Customers (end-users) to research and enter their own incidents and requests in CSM. This means that there might be as many users of this application as there are employees at a company, although it is unlikely that they will be simultaneously using the application.
- **Cherwell Browser (Thin Client):** This application allows technicians not at their desk or users whose systems do not support the Cherwell client (such as Macs or Linux users) to access CSM. It is a little heavier (per user) than Cherwell Portal, but will have fewer users.
- **Cherwell Web-Forms:** This application allows access to arbitrary objects in CSM (for things like surveys, training requests, etc.). Because it is arbitrary, it is hard to judge the amount of use it might or might not receive.
- **Cherwell Auto-Deploy:** This is a simple application that allows new users to deploy the Cherwell Rich Clients to their system without requiring access to a CD or network share.
- **Cherwell Web Service:** This is a development interface for accessing CSM via a Web Services API. It is also used by Cherwell's mobile applications – iCherwell for iPhones/iPads and Cherwell Mobile for other mobile devices.

Sizing a Deployment

The following factors can affect performance:

- Customer's network performance
- Complexity of the network configuration sql database
- Customer's database performance
- Whether CSM is on a shared or dedicated server
- If CSM is being run in a high availability environment or not

System Requirements

Minimum System Requirements (Client)

System Processor:	Intel® Core™ Duo or equivalent
System Memory:	1 GB (2 GB or more recommended)
Operating System:	Microsoft® Windows® XP, Windows Vista®, Windows® 7 x86 or x64 editions, Windows 8 x86 or x64 Pro or Enterprise editions
Free Disk Space:	250 MB
Networking:	Internet Access required for Online Documentation feature
Browser:	Internet Explorer 7-10, Mozilla Firefox 8.0+, Safari 5.0+, Google™ Chrome™ 18+ (required for Browser Applications)
Other:	Microsoft .NET 4.0 (Full version), 1024x768 or better screen resolution

Minimum System Requirements (Server)

System Processor:	Intel® Core™ or equivalent
System Memory:	4 GB (6 GB or more recommended). Note that if you have SQL Server® installed on the same server, more RAM is recommended.
Operating System:	Microsoft® 2008 Server x64, 2008 R2, 2012
Free Disk Space:	300 MB
Networking:	Internet access required for online documentation feature
Other:	Microsoft .NET 4.0 (Full version)
Browser Applications:	IIS 7.0+ (required for Browser Applications)

Database:

Microsoft® SQL Server® 2005 SP4, Microsoft® SQL Server® 2008 SP2, Microsoft® SQL Server® 2012 (can be on a separate server)

Note: Full-text indexing must be enabled.

Note: Requires SQL Standard Edition, either a Processor License or a Server License with sufficient number of Client Access licenses. Please see Cherwell's SQL Policy.

Other Requirements

E-mail:

Server running SMTP and POP or IMAP, Microsoft® Exchange 2007, Microsoft® Exchange 2010, Microsoft® Exchange 2013.

LDAP:

Microsoft® Active Directory® 2003+, Novell® eDirectory™. Other LDAP servers might allow some/all functionality.

Mobile Devices: iPhone®/iPad®/iPod Touch® (iOS 5+), Blackberry® 4.7+, Android®

Scaling Variables

With the minimum requirements met, customers can scale their instance of CSM based on their projections. Key variables to the configuration include:

- Total number of users.
- Concurrent licenses being used simultaneously.
- Number of records created (for example Incident records or Change records).
- Number and complexity of relationships.
- Number and types of Reports being run.
- Number and types of attachments.

Attachments and Scaling

CSM does not limit the size and type of attachments. Typical attachments, such as e-mails, screenshots, voicemail (.wav files), etc. do not need to be factored in when scaling the deployment. However, do consider the following types of attachments when factoring scalability:

- Applications
- Large picture files
- Drawings
- Video clips
- Any type of file that is larger than 50 MB

Consideration should also be given to quantity of these types of attachments. For example, there is a difference between four Change Requests per month that have a 50 MB file attached vs. hundreds of Knowledge Articles with a video clip attached.

Scaling Recommendations

Listed below are our recommendations for peak performance. It has been overbuilt, meaning that customers can get by with a much more scaled back version.

Note: These are only recommendations and are very broad. Additional tuning might be required to get optimal performance.

Application Server

# of Licenses	1-10	10-50	50-200	200+
# of Processors	Use Baseline	1 (2-GHz or higher)	2 (2-GHz or higher)	4 (2-GHz or higher)
Amount of Memory	Use Baseline	4 GB	8 GB	16 GB
Amount of Storage	Use Baseline	50 GB	50 GB	50 GB

Database Server (Shared Server)

Note: For more than ten (10) users, we recommend a dedicated SQL Server database.

# of Licenses	1-10	10-50	50-200	200+
# of Processors	Use Baseline	2 (2-GHz or higher)	4 (2-GHz or higher)	8 (2-GHz or higher)
Amount of Memory	Use Baseline	4 GB	16 GB	32 GB
Amount of Storage (OS)	Use Baseline	50 GB	50 GB	50 GB
Amount of Storage (Logs)	Use Baseline	10 GB	50 GB	50 GB
Amount of Storage (Data)	Use Baseline	50 GB	100 GB	200 GB

Considerations

Scaling variables individually and collectively affect CSM's performance. Consider the following when calculating specs:

- If the use of CSM includes numerous or large attachments, double the amount of storage.
- If the transaction count is especially high, increase memory and processors on both servers.
- If high volume reporting is being done, increase memory and processors on both servers.
- If historical/trend reporting for large periods of time is being done, increase memory and processors on both servers.
- On average, Cherwell recommends customers factoring 200 MB of storage per license, per year.

Conclusion

Like much software in use today, there are many factors that come into play in determining the specifications for hosting CSM on a server. Cherwell always has been and is committed to continuing to fine tune CSM to enable it to run in a customer's environment at peak performance utilizing the least amount of resources.

Appendix "G" Cherwell Sample Report List

Association	Report Name	Description	Location	Search Group
Change Request	Planned Changes	Change Requests grouped by Date of Proposed Change for use in a Change meeting to review changes that may overlap and discuss possible conflicts.	Global\CSM Management Reports	Date Range for report
	Post Implementation Review	RFCs and their impact on availability & reliability of each service	Global\CSM Management Reports	Changes with Linked Incidents and Problems
	Change Trends	# of Changes over time, and by service, CI	Global\CSM Management Reports	Changes with Linked CIs
	Past Year Change Trends	# of Changes over time, and by service, CI	Global\CSM Management Reports\Yearly Reports	Created within past year
	Change Breakdown	Group Changes by Reason. Detail includes linked Incidents with severity, sorted by reason.	Global\CSM Management Reports	Date Range for report
	Past Year Change Breakdown	Group Changes by Reason. Detail includes linked Incidents with severity, sorted by reason.	Global\CSM Management Reports\Yearly Reports	Created within past year
	CI Change Request Metrics	Top 5 Config Items wrt highest number of change requests	Global\CSM Management Reports	Changes with Linked CIs
	Proactive Service - Changes	Lists Changes - detail report	Global\CSM Management Reports	Date Range for report
Configuration Item	Incidents by CI		Global\CSM Management Reports	
	Incidents by Configuration Item		Global\CSM Management Reports	
	CI Change Request Metrics		Global\CSM Management Reports	
	BIOS Versions	List of machines, grouped by BIOS Version	Global\CSM Management Reports	Hardware
	OS Report		Global\CSM Management Reports	Hardware
	Computer Memory Audit		Global\CSM Management Reports	Hardware
	CI Summary Report		Global\CSM Management Reports	Hardware
	Software Summary		Global\CSM Management Reports	Software
	CPU Speed Report		Global\CSM Management Reports	Hardware
Customer	Internal Customer List	List of employees	Global	Internal Customers
	Company Contact List	List of Companies and Contacts		Company

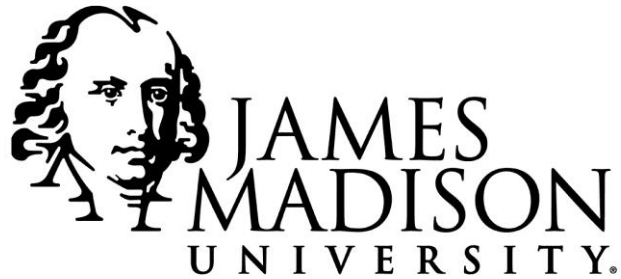
	Customers and Their Incidents	List of Customers with Incidents listed below	Global	Customers who have logged Incidents
Customer Survey	Unsatisfied Customer Incidents	Detail report listing info for management review	Global\CSM Management Reports	*Unsatisfied Survey Results
	Team Customer Survey Results	Chart of response averages, and detail with color coded values	Global\CSM Management Reports	All Surveys
	Technician Customer Survey Results	Chart of response averages, and detail with color coded values	Global\CSM Management Reports	All Surveys
	Customer Survey Trends	Survey results by Month	Global\CSM Management Reports	All Surveys
Incident	Incidents that Occur Most Often	Chart: Top 5 Categories, # of Incidents	Global\CSM Management Reports	Date Range for report
	Past Month Incidents that Occur Most Often		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents that Occur Most Often		Global\CSM Management Reports \Weekly Reports	Created within past week
	Incidents with Longest Duration	Chart: Top 5 Categories, Average Duration	Global\CSM Management Reports	Closed in Date Range
	Past Month Incidents with Longest Duration		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents with Longest Duration		Global\CSM Management Reports \Weekly Reports	Created within past week
	Monthly Management Incident Review	Inserted Charts	Global\CSM Management Reports \Monthly Reports	Created within past month
	Weekly Management Incident Review		Global\CSM Management Reports \Weekly Reports	Created within past week
	Service Trends	Chart: Incidents logged against major services over time to see upward or downward trends.	Global\CSM Management Reports	Date Range for report
	Past Year Service Trends		Global\CSM Management Reports \Yearly Reports	Created within past year
	SLA Metrics of Response Time	Charts to show the duration of each Incident that has been responded to the customer, and a threshold showing what the SLA should be.	Global\CSM Management Reports	Open Incidents
	Past Week SLA Metrics of Response Time		Global\CSM Management Reports \Weekly Reports	Created within past week
	SLA Metrics of Resolution Time	Charts to show Incidents that have missed a defined service level resolution time.	Global\CSM Management Reports	Closed in Date Range
	Past Week SLA Metrics of Resolution Time		Global\CSM Management Reports \Weekly Reports	Closed within past week
	SLA Trends	Charts to show AVG response and resolve times over time, including thresholds	Global\CSM Management Reports	Date Range for report
	Category Trends	Bar chart of # of incidents by Category	Global\CSM Management Reports	Date Range for report

Incident	Past Year Category Trends		Global\CSM Management Reports \Yearly Reports	Created within past year
	Day of Week Metrics	Cross Tab of number of incidents logged on Sunday, Monday, Tuesday, etc.	Global\CSM Management Reports	Date Range for report
	Past Year Day of Week Metrics		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Day of Week Metrics		Global\CSM Management Reports \Monthly Reports	Created within past month
	Overdue Incidents	Bar Chart & Detail of Incidents that have been open more than x days.	Global\CSM Management Reports	Open Overdue
	Service Desk Overdue Incidents	Pie Chart & Detail of Incidents with the number of days open.	Global\CSM Management Reports	Open Overdue
	Incidents by Priority	pie chart and detail	Global\CSM Management Reports	Date Range for report
	Past Month Incidents by Priority		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents by Priority		Global\CSM Management Reports \Weekly Reports	Created within past week
	Incidents by Category	bar chart and detail	Global\CSM Management Reports	Date Range for report
	Past Month Incidents by Category		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents by Category		Global\CSM Management Reports \Weekly Reports	Created within past week
	Incidents by SubCategory	bar chart and detail	Global\CSM Management Reports	Date Range for report
	Past Month Incidents by SubCategory		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents by SubCategory		Global\CSM Management Reports \Weekly Reports	Created within past week
	Incidents by Owner (Analyst)	bar chart and detail	Global\CSM Management Reports	Date Range for report
	Past Year Incidents by Owner (Analyst)		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Incidents by Owner (Analyst)		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Incidents by Owner (Analyst)		Global\CSM Management Reports \Weekly Reports	Created within past week
	Incidents by Team	bar chart and detail	Global\CSM Management Reports	Date Range for report
	Past Year Incidents by Team		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Incidents by Team		Global\CSM Management Reports \Monthly Reports	Created within past month

	Past Week Incidents byTeam		Global\CSM Management Reports \Weekly Reports	Created within past week
	Top 10 High Volume Customers	bar chart and detail with Min and Max Dates on Title	Global\CSM Management Reports	Date Range for report
	Past Year Top 10 High Volume Customers		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Top 10 High Volume Customers		Global\CSM Management Reports \Monthly Reports	Created within past month
	Incident Detail Report	Used for default print feature	Global\CSM Management Reports	Prompt for Id
	Staff Workloads	list the number of tasks for each team and person	Global\CSM Management Reports	Date Range for report
	Past Year Staff Workloads		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Staff Workloads		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Week Staff Workloads		Global\CSM Management Reports \Weekly Reports	Created within past week
	My Task List	List of Incidents with linked task details for current user	Global\CSM User Reports	My Incident Tasks
	My Open Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Open Incident Reports	My Open Incidents
	By Category - My Open Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Open Incident Reports	My Open Incidents
	By Priority - My Open Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Open Incident Reports	My Open Incidents
	By Status - My Open Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Open Incident Reports	My Open Incidents
	By SubCategory - My Open Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Open Incident Reports	My Open Incidents
	Incidents Resolved at First Level		Global\CSM	Date Range for report
	Past Year Incidents Resolved at First Level	Chart of resolved at first level versus escalated	Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Incidents Resolved at First Level		Global\CSM Management Reports \Monthly Reports	Created within past month
	Average Duration by Category	Chart of avg duration by Category with Min and Max Closed Dates on Title	Global\CSM Management Reports	Closed in Date Range
	Past Year Average Duration by Category		Global\CSM Management Reports \Yearly Reports	Closed within past year
	Past Month Average Duration by Category		Global\CSM Management Reports \Monthly Reports	Closed within past month
	Past Week Average Duration by Category		Global\CSM Management Reports \Weekly Reports	Closed within past week
	Average Duration by Priority	Chart of avg duration by Priority	Global\CSM Management Reports	Closed in Date Range

Incident	Past Year Average Duration by Priority		Global\CSM Management Reports \Yearly Reports	Closed within past year
	Past Month Average Duration by Priority		Global\CSM Management Reports \Monthly Reports	Closed within past month
	Past Week Average Duration by Priority		Global\CSM Management Reports \Weekly Reports	Closed within past week
	Top 10 Customer Activity	Charts of Incident and Service Request totals - charts have max value set - may need adjustment	Global\CSM Management Reports	Date Range for report
	Past Year Top 10 Customer Activity		Global\CSM Management Reports \Yearly Reports	Created within past year
	Past Month Top 10 Customer Activity		Global\CSM Management Reports \Monthly Reports	Created within past month
	My Closed Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Closed Incident Reports	My Closed in Date Range
	By Category - My Closed Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Closed Incident Reports	My Closed in Date Range
	By Priority - My Closed Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Closed Incident Reports	My Closed in Date Range
	By SubCategory - My Closed Incidents	List of Incidents with response deadlines needed	Global\CSM User Reports\Closed Incident Reports	My Closed in Date Range
	My Teams Incidents	Chart of Open and Closed Incidents by Priority, plus detail	Global\CSM User Reports	My Teams Incidents
	Incident Aging	Chart of Incidents and Service Requests in each age category	Global\CSM Management Reports	Open Incidents
	Incident Duration Metrics	Charts and detail of duration in days	Global\CSM Management Reports	Closed in Date Range
	Past Year Incident Duration Metrics		Global\CSM Management Reports \Yearly Reports	Closed within past year
	Past Month Incident Duration Metrics		Global\CSM Management Reports \Monthly Reports	Closed within past month
	Incident Volume by Source	3D Chart and Min and Max Date/Times on Title	Global\CSM Management Reports	All Incidents
	Avg Resolution Trends	Chart of average resolution time over a specified period	Global\CSM Management Reports	Closed in Date Range
	Past Year Avg Resolution Trends		Global\CSM Management Reports \Yearly Reports	Closed within past year
	Past Month Avg Resolution Trends		Global\CSM Management Reports \Monthly Reports	Closed within past month
	Past Week Avg Resolution Trends		Global\CSM Management Reports \Weekly Reports	Closed within past week
	Trends by day	Chart of Incidents and Service Requests logged for each day	Global\CSM Management Reports	Date Range for report
	Past Month Trends by day		Global\CSM Management Reports \Monthly Reports	Created within past month

	Past Week Trends by day		Global\CSM Management Reports \Weekly Reports	Created within past week
	Trends by Week	Chart of Incidents and Service Requests logged for each week	Global\CSM Management Reports	Date Range for report
	Past Year Trends by Week		Global\CSM Management Reports \Monthly Reports	Created within past month
	Past Month Trends by Week		Global\CSM Management Reports \Weekly Reports	Created within past week
Problem	Proactive Service - Problems	Major Problems along with any Work-arounds - detail report	Global\CSM Management Reports	*Known Error
	Problem Metrics	Series of Charts to show problem metrics for Availability Management	Global\CSM Management Reports	All Problems
	Problem Trends	Charts to show the frequency of Problems over time to be alerted to upward trends	Global\CSM Management Reports	All Problems
	Problem Summary	Chart of outstanding and resolved problems by quarter	Global\CSM Management Reports	All Problems
	Problems Linked with Incidents	Detail list of problems with associated incidents	Global\CSM Management Reports	All Problems
	Problem Impact Metrics	List Problems with list of associated incidents	Global\CSM Management Reports	All Problems
	Problems by Service	Chart and list of Problems with detail	Global\CSM Management Reports	All Problems
	Problems by Category	Chart and list of Problems with detail	Global\CSM Management Reports	All Problems
	Problems by Impact	Chart and list of Problems with detail	Global\CSM Management Reports	All Problems
	Problems by Status	Chart and list of Problems with detail	Global\CSM Management Reports	All Problems
	Top 10 Problems	Problems that have the most Incidents linked to them.	Global\CSM Management Reports	All Problems
	Top 10 Problems by Team	Problems that have the most Incidents linked to them for each Owned By Team	Global\CSM Management Reports	All Problems
	Top 10 Problems by Category	Problems that have the most Incidents linked to them for each Category	Global\CSM Management Reports	All Problems
Task	Task Metrics	Table of totals for different Task Types	Global\CSM Management Reports	All Tasks
	My Task List		Global\CSM Management Reports\User Reports	



Request for Proposal

RFP # LBS-764

**Information Technology Service Management
System**

February 21, 2014



College of William and Mary
George Mason University
James Madison University
Old Dominion University
Radford University
The University of Virginia
Virginia Commonwealth University
Virginia Military Institute
Virginia Tech

REQUEST FOR PROPOSAL
RFP # LBS-764

Issue Date: February 21, 2014
Title: Information Technology Service Management System
Issuing Agency: Commonwealth of Virginia
James Madison University
Procurement Services MSC 5720
752 Ott Street, Wine Price Bldg.
First Floor, Suite 1023
Harrisonburg, VA 22807

Period of Contract: From Date of Award Through One Year (Renewable)

Sealed Proposals Will Be Received Until 2:30 p.m. on April 8, 2014 For Furnishing The Services Described Herein.

SEALED PROPOSALS MAY BE MAILED, EXPRESS MAILED, OR HAND DELIVERED DIRECTLY TO THE ISSUING AGENCY SHOWN ABOVE.

All Inquiries For Information and Clarification Should Be Directed To: LeeAnne Beatty Smith, VCO, Buyer Senior Procurement Services, smith2lb@jmu.edu, 540/568-7523, (Fax) 540/568-7936 not later than five business days before the proposal closing date.

NOTE: THE SIGNED PROPOSAL AND ALL ATTACHMENTS SHALL BE RETURNED

In compliance with this Request for Proposal and to all the conditions imposed herein, the undersigned offers and agrees to furnish the goods/services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation.

Name and Address of Firm:

By: _____
(Signature in Ink)

Name: _____
(Please Print)

Title: _____

Date: _____

Phone: _____

Web Address: _____

Fax #: _____

Email: _____

ACKNOWLEDGE RECEIPT OF ADDENDUM: #1 _____ #2 _____ #3 _____ #4 _____ #5 _____ (Please Initial)

SMALL, WOMAN OR MINORITY OWNED BUSINESS:

☐ YES; ☐ NO; IF YES ⇒ ⇒ ☐ SMALL; ☐ WOMAN; ☐ MINORITY **IF MINORITY**: ☐ AA; ☐ HA; ☐ AsA; ☐ NW

Note: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

REQUEST FOR PROPOSAL

RFP # LBS-764

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[A.](#) Offeror Data Sheet

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I. PURPOSE

The purpose of this Request for Proposal (RFP) is to solicit sealed proposals from qualified sources to enter into a contract to provide an Information Technology Service Management System for James Madison University (JMU), an agency of the Commonwealth of Virginia. Initial contract shall be for one (1) year with an option to renew for nine (9) additional one-year periods.

II. BACKGROUND

James Madison University (JMU) is a comprehensive public institution in Harrisonburg, Virginia, with an enrollment of approximately 20,000 students and 3,000 faculty and staff. JMU has an internal Information Technology (IT) organization that supports the majority of the technology needs of the University. The Libraries and Educational Technology group supports instructional technology.

JMU IT supports the needs of all the University's constituents. These include students, faculty, staff, affiliates, alumni, and applicants. Information Technology's Computing HelpDesk serves as the primary contact for most technology-related service requests and issues for these constituents. The University is currently utilizing a customized version of BMC Remedy Action Request System to manage its support of customers.

The University has numerous systems that may be considered for integration including Bomgar Appliance for remote assistance 13.x, PeopleSoft Campus Solutions version 9.0 (*PeopleTools 8.5x*), PeopleSoft Application Portal version 9.1 (*PeopleTools 8.5x*), PeopleSoft Financials version 9.1 (*PeopleTools 8.5x*), PeopleSoft HCM 9.1 (*PeopleTools 8.5x*) and Oracle's Identity Management Suite (11g), Zenoss, Dell Open Manage/IT Assistant, Nessus Vulnerability Scanner, Oracle Enterprise Manager, VMWare (*VSphere, VCenter, View*), and Symantec Management Console. The University's email system for faculty / staff is Exchange 2010 and Office365 for students.

III. SMALL, WOMAN-OWNED AND MINORITY (SWAM) PARTICIPATION

It is the policy of the Commonwealth of Virginia to contribute to the establishment, preservation, and strengthening of small businesses and businesses owned by women and minorities and to encourage their participation in State procurement activities. The Commonwealth encourages contractors to provide for the participation of small businesses, and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other contractual opportunities. Attachment B contains information on reporting spend data with subcontractors.

IV. STATEMENT OF NEEDS

James Madison University is seeking an Information Technology Service Management System that will assist IT in its support of customers through service offerings and support as well as project planning and management. The Contractor shall have available and be able to demonstrate the use and functions of the following components and/or features of an Information Technology Service Management System. Describe in detail the manner in which each item is addressed by the system.

A. Incident Management:

An incident is an unplanned interruption of an IT service or a reduction in the quality of an IT service. Incidents are categorized to be able to identify who should work on them and to more easily identify trends that may be developing. The Incident Management process focuses on restoring normal service as quickly as possible in order to minimize impact upon business operations.

1. Describe the ability to populate the incident form based on certain rules (*e.g. client and customer information*).
2. Describe the ability to generate different workflows, including approvals (*with different subtasks*), for different types of incidents.
3. Describe the ability to provide automated status updates when an incident reaches specific points in the workflow.
4. Describe the ability to categorize and prioritize incidents, such as to prioritize "critical" incidents based on specific customers.
5. Describe the view capabilities for managers, technical staff and end-users.
6. Describe the levels of ownership that can be assigned to an incident.
7. Describe the ability to restrict incident data by role based access controls and/or encryption.
8. Describe the ability to integrate with Bomgar Remote Support to manage and capture interactions with customers.
9. Describe the ability to support requests received through a variety of channels, such as email, chat, Twitter, etc., allowing the automatic creation of incidents without the need to monitor multiple channels.
10. Describe the ability for users in different roles to see all changes and history related to an incident without leaving the incident screen.

B. Problem Management:

A problem is a cause of one or more incidents. As the cause is not generally known at the time that a problem is created, the Problem Management process is responsible for further investigation. The primary goals of Problem Management are (1) to prevent problems from occurring, which reduces the number of new incidents that occur, (2) to resolve the causes of the existing incidents so that they do not recur, and (3) minimize the impact of incidents that cannot be prevented.

1. Describe the ability to provide configurable problem process and categorization templates based on industry best practices.
2. Describe the ability to prevent closure of a problem before all assignments have been resolved.
3. Describe the ability to automate the updating of the status of all related incidents upon updating of status of the problem.
4. Describe the ability to automate opening of a problem record from an incident record based on business rules and SLAs.
5. Describe the ability to integrate with event and alert monitoring tools, and allow for automatic creation, update and closure of tickets from these tools.

6. Describe the ability to differentiate between problems and known errors.
7. Describe the ability to create sub-activities or task records for a specific problem record for separate assignment to an individual, group or vendor.
8. Describe the ability to make problem and known error details available to Incident Management for use in matching, troubleshooting and resolution.
9. Describe the ability to route and assign problem records to pre-defined support staff or groups.
10. Describe the ability for the problem management team to communicate status and progress reports, as well as temporary solutions and workarounds to the Service Desk staff.

C. Change Management:

Change management is the application of the set of tools, processes, skills and principles for managing the people side of change to achieve the required outcomes of a project or initiative.

1. Describe the ability to provide configurable change process and categorization templates.
2. Describe the ability to reference a Change Model that clearly depicts the requirements and activities associated with the change process.
3. Describe the ability to relate post-implementation incidents and problems resulting from an implemented change.
4. Describe the ability to create sub-activities or task records for a specific change record for separate assignment to an individual, group or vendor.
5. Describe the ability to provide proactive notification to stakeholders and management for changes with critical business impact, collisions and compliancy issues.
6. Describe the ability to provide role-based approval, retracting or rescheduling of requests for change (RFCs).
7. Describe the capabilities around forward schedule of changes (FSC).
8. Describe the ability to support maintenance, release and moratoriums (*locked status*) for freeze windows.
9. Describe the ability to select and create "preapproved changes" from a list of predefined templates with prepopulated content, such as categorization, text, etc.
10. Describe the ability to monitor and track the lifecycle of a change request.

D. Service Request Fulfillment and Service Catalog:

A service request is a request from a user for information, for advice, for a standard change, or for access to an IT service. The purpose of Service Request Fulfillment is to enable the user to make such a request and receive these services; to provide information to users for how to request and obtain the services; to ensure delivery of the services; and to assist with general information, complaints, and comments. It includes tracking and logging progress on requests as well as the approval process required before fulfilling the request.

1. Describe the ability to log and edit Service Requests, get the status of requests, and search the knowledge base via a portal.
2. Describe the ability to generate different workflows (*including multi-function with different subtasks*) for different types of requests.
3. Describe the ability for service requests to initiate automated actions both within the system and in external systems.
4. Describe the ability to support automatic sending, receiving and logging of approvals for requests.
5. Describe the ability to provide automated status updates when a request reaches specific points in the workflow.
6. Describe the ability to route and assign service request records to pre-defined support staff or groups (*e.g. IT, HR, Procurement or other business functions*).
7. Describe the ability to market available services via a portal.
8. Describe the ability to provide different views of the Service Catalog, such as Technical Service Catalog and Business Service Catalog.
9. Describe the ability to support distributed, role-based Service Catalog management and use.
10. Describe the ability to customize service definition templates and pre-packaged Service Catalog content.

E. Knowledge Management:

Knowledge management comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences.

1. Describe the ability to create, maintain and monitor a knowledgebase.
2. Describe the ability to integrate with third-party knowledge bases and document storage solutions (*e.g. SharePoint, file shares*).
3. Describe the ability to report on the number of proposed solutions, most used solutions, and least used solutions in the knowledgebase.
4. Describe the ability to publish FAQs and supporting reference documents in the knowledgebase to be accessible by end-users.

5. Describe the ability to provide configurable knowledgebase input templates.
6. Describe the ability to populate a knowledge article into an incident, problem or change record.
7. Describe the ability to support role-based knowledge items (*e.g. a technical role can access either technician-facing or customer-facing articles*).
8. Describe the ability to create knowledge management entries from existing incidents, problems and changes.
9. Describe the ability to support a variety of search methodologies (*e.g. metadata, fuzzy searching, hierarchical/drill-downs, cross-references, attribute queries, category, web and file system external library searches, natural language, stemming, Boolean search*).
10. Describe the ability to allow user feedback to rate/score content for usefulness related to the inquiry.

F. Project Management:

Project management is the discipline of planning, organizing, motivating, and controlling resources to achieve specific goals. A project is a temporary endeavor with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value.

1. Describe the ability to support requesting and managing project inventory.
2. Describe the ability to add user-defined fields to capture and report various information about a project including: cost benefit analysis information, multiple associated systems and applications, dates and classifications.
3. Describe the ability to designate low priority projects that do not need to follow timeline.
4. Describe the ability to associate requirements to key project deliverables.
5. Describe the ability to manage milestones.
6. Describe the ability to link projects to a service, product or asset.
7. Describe the ability to see impacts and dependencies of projects across the portfolio of product/services/assets.
8. Describe the ability to connect releases/incidents/changes to a project.
9. Describe the ability to associate and report on projects relationship to corporate strategic goals and objectives.

G. Asset Management:

Asset management is a systematic process of operating, maintaining, upgrading, and disposing of assets cost-effectively.

1. Describe the concept of an asset's lifecycle and the system's ability to support and manage that lifecycle.
2. Describe the variety of assets the system can manage.
3. Describe the system's ability to manage leases, depreciation schedules, warranties, and service provider contracts.
4. Describe the system's ability to support both flexible data import/export, and simple points of integration for associated tools.
5. Describe the system's ability to interface with and make use of barcode scanners.

H. Application Technology:

1. Describe how the modules function as an integrated whole and detail any limitations in their ability to function independently from other modules.
2. Describe the application security features for data, for each module, and for the system. Describe all row-level security options as well as any field-level encryption available.
3. Describe any transactions or functions that are not done on a real time basis and list batch jobs required for this function.
4. Describe how menus are used within the system and if menus are customizable and/or configurable. Define what customizable and configurable mean for your application.
5. Describe the extent to which the user can configure or customize all forms, reports, input/output screens, formats, etc. to brand the application for JMU. Define what modifiable, customizable and configurable mean for your application.
6. Describe the tools and expertise which university technical staff would use to support, troubleshoot, configure or customize the application.
7. Describe other customizations available and associated cost, i.e., hourly and fixed fee.
8. Describe how configuration and customization will affect future releases of software.
9. Describe workflow functionality included with the application and provide a list of any function for which workflow is already built and delivered.
10. Describe how JMU's email systems would be incorporated with your system's operation. (Faculty/Staff – on-premise Exchange and students – Office 365).
11. Describe third party emailing, if this functionality is part of your solution. What messaging service is utilized by your system?

12. Describe details of how messages look and can be customized (to, from, body, etc.)
13. Describe the modules' ability to enter free form text, screen captures, and file attachments.
14. Describe the ability for support staff to make private notes.
15. Describe the ability to track the total amount of time of effort expended.

I. Reporting:

1. Describe application approach/strategy for reporting including the approach to ad-hoc reporting for power users as well as the occasional user.
2. Describe all reporting tools supported and how they integrate with the product. Does application licensing include any of the products?
3. Provide a list of all reports delivered as part of the base product including a short description of each. Also include a sample of several reports for review.
4. Describe reporting output formats available.
5. Describe the types of reporting that would typically require Information Technology staff support.
6. Describe the ability to provide automated repeatable metrics.
7. Describe the ability to provide real-time dashboards.
8. Describe the ability to access raw data for further analysis.
9. Describe the availability of a bulletin board frame function for current major problems, such as outages and scheduled downtimes.
10. Describe abilities to automatically detect, notify, and report on incident and problem anomalies and thresholds.

J. Services:

1. Describe the training options and include a catalog of training offerings and their associated costs. Response should include differentiation between technical staff and end-user training.
2. Describe services available from your company and/or partners including pricing information that may be included in the final contract. Examples of services that could be included are:
 - a. Implementation
 - b. Development
 - c. Project Management
 - d. Architecture and Design

- e. Capacity Planning
 - f. Installation and Configuration
 - g. Performance and Scalability
 - h. Conversion
 - i. Monitoring, administration and upgrades
 - j. Operations metrics
3. Describe the support options available through your company including on-going support of the application. Describe what portions of support are to be performed by IT, the customer versus the vendor.
 4. If support is provided to end-users directly as part of your services, provide the SLA under which you would operate.

K. General:

1. Describe typical implementation timeline and project plan and include examples of previously used project plans.
2. Describe your approach to test and production environments including licensing requirements and any additional costs.
3. Describe how product(s) addresses accessibility to ensure the application is accessible to people with disabilities. Describe testing for adherence to accessibility guidelines and standards. Provide documentation of the testing performed and results of that testing including the Web Accessibility and Template Guide (WATG located at <http://www.vadsa.org/watg>).
4. Describe the Help system(s) and how it can be modified.
5. Describe the system's search capabilities.
6. Describe your relationship with the vendor(s) of any third party tools (*i.e. reporting tools, application server and DBMS vendors, etc.*) included in this proposal including licensing, costs, support for the product(s), and versions (*e.g. full or modified*).
7. JMU is interested in developing a strategic relationship with the successful vendor. Provide information regarding ideas on how such a relationship can prove mutually beneficial.
8. Describe active user groups and how they function.
9. Describe licensing. If licensing is based on number of users, describe the models used to obtain numbers both for current and future usage.

L. Technical:

1. Provide a detailed diagram of the typical architecture/technical environment required for the system. List all protocols and ports used for communications and indicate which components are

clients and which are servers and whether the communications are fully, partially, or not encrypted. Specify any communications paths where unencrypted authentication or other sensitive data are passed. List all third party dependent integration points and data paths including any web content included from or sent to outside parties.

2. Describe the toolset from which your application is derived.
3. Describe hardware and software requirements for the proposed system(s) along with any sizing assumptions made to arrive at those requirements.
4. Describe supported server hardware and/or virtualized platforms. Describe support for the following operating systems: Linux and Windows. If virtualization is supported, what virtualization technologies are supported including what components can be virtualized?
5. Describe support for load balancing and system failover including any and all vendor specific preferences. Also include any vendor specific configuration guides.
6. Describe how scalability is accomplished as the criticality of the system(s) and number of users increase.
7. Describe the system capabilities and options for the backup and restoration of the system components (*example: database*).
8. Describe the average client response time for all the various functions of the proposed system.
9. Describe services not available during scheduled maintenance.
10. Describe any standard and proprietary APIs, integration/connection resources, and development languages and tools that extend your toolset.
11. Describe the client operating system and browser requirements for your toolset. List any additional client-side software required for development/management of your toolset.
12. Describe any aspects of your application that do not support the Macintosh. Describe any changes to default browser or client security settings.
13. Describe any functionality loss, installation problems, upgrade problems, or other difficulties if client applications are run using a regular user account.
14. Describe your support for mobile technologies including technology used, distribution method, functionality, integration and development toolset and security.
15. Describe requirements for application servers. Describe specific platform recommendations or requirements for certified configuration (*e.g. WebLogic, and Apache Tomcat*); include either specific application server version or required J2EE version.
16. Describe support for web servers (*i.e. Apache, Weblogic and IIS*).
17. Describe the supported database platforms including versions and include any information on additional features required of the DBMS needed to support the functionality of your system as proposed.

18. Describe your SLA to stay current with versions of software utilized by your product.
19. Provide an overall compatibility matrix of software required to operate your system. As appropriate, and at a minimum, this should include operating systems, drivers, browsers, JDKs, and compilers.
20. Describe support for real-time access to data through some other method (e.g. on-the-fly access to database through ODBC, ADO, JDBC, LDAP, etc. allowing dynamic web content and applications).
21. Describe support for integration with JMU's existing systems listed in the background statement including pricing, availability of APIs, toolkits for creating connectors, available services, etc. Provide a full list of application connectors. Describe any other methods of integration supported.
22. Describe support for inclusion of your application as part of the PeopleSoft application portal. Describe any pagelets available and how that integration would occur. Describe support for delegating authentication for the pagelet Oracle Access Manager Single Sign and/or PeopleSoft single-sign-on. Describe support for other single-sign-on technologies.
23. Describe your product's support for Web Services/Service Oriented Architecture based standards such as JSR 168 Portlet development standard, and JSR 172 Web Services Interoperability Standard.
24. Describe the ability for your product to create consumable web standards based content (such as RSS feeds, hcard, ical, and other microformat specifications) and the ability to pull XML based content from your system and any APIs supporting the delivery of such data/content.
25. Describe storage including file formats.
26. Describe operational monitoring and reporting capabilities. Include the capabilities for application, content, access, and storage metrics, security and the method for obtaining them (*e.g. command line tools, SNMP, and GUI*).

M. Security:

1. Describe how users and processes are authenticated before gaining access to data and services. Include authentication between components and between the product and external services. Describe your support for the following:
 - a. LDAP/S
 - b. Native AD authentication
 - c. Shibboleth 1 and 2
 - d. Kerberos
 - e. SAML
 - f. Other federated systems

- g. OpenID
 - h. Any two-factor authentication system
 - i. Certificate-based authentication
 - j. Other
2. IF you support LDAP for authentication or authorization, describe use of LDAP(S). List the LDAP(S) servers integrated with product(s). Describe integration and support with LDAP(S) user database for authentication (*Active Directory/OID*) and authorization using attributes/group memberships.
 3. Describe handling access to licensed/copyrighted content where access must be restricted.
 4. Describe your use of authentication credentials and associated attributes, group membership, roles, etc. to make authorization decisions. Include method(s) and granularity of authorization of access to data and services (*e.g. individual accounts, IP address, UNIX groups, LDAP groups, Active Directory accounts*).
 5. Describe how and where any sensitive data (*e.g. credit card, financial data, SSN, FERPA, HIPAA or other legally regulated data*) including authentication credentials, is stored on clients, servers, and participating external devices. Is it cryptographically protected? If so, provide details on cryptographic protocols, procedures, and key protection.
 6. Describe auditing and logging capabilities and data. Include the information recorded with each event. For example,
 - a. Successful and failed authentication or bind
 - b. Successful and failed access authorization
 - c. Successful and failed policy change
 7. Describe the effects of auditing and logging on a production implementation. Is the proposed system sized for full audit capability? Describe auditing methodologies and capabilities for managing integrity and change control. Describe elements captured with the audit process.
 - a. Describe enterprise audit capabilities
 - b. List the events and logs that can be sent to an external syslog server
 - c. List the events and logs that cannot be sent to a syslog server

N. Maintenance and Support:

Because consistency and stability of the operating environment and rapid correction of system failures are critical to James Madison University, major consideration will be given to the amount and extent of hardware and software maintenance coverage and to the quality of maintenance.

1. Describe the maintenance philosophy including frequency of updates, approach to completing updates, and model for obtaining them.

2. Describe capabilities for remote support and indicate what access to accounts and systems is required. Describe the locations from which this activity would take place. Describe any maintenance options/tiers and whether they vary in cost by time of day, response time, etc.
 3. Describe services that may be required in the normal course of operating the system that are not covered under the maintenance contract.
 4. Describe the maintenance costs for the first year, and, on the basis of an annually renewable contract, the maintenance costs for each of the following five (5) years.
 5. Describe the procedures for obtaining services for all types of maintenance (e.g. installation of corrective code, enhancements, applicable "escalation" procedures for providing additional assistance in diagnosing a failure that is not resolved in a timely manner to include notification procedures and timing as well as what higher levels of assistance will be made available.)
 6. Describe the nature of any continuing research and development performed by the manufacturer to detect and correct problems in the system design, to improve efficiency, and/or to enhance the capabilities of the system proposed.
 7. Describe your approach to security reviews during each phase of the software development lifecycle.
 8. Describe the procedures followed in distribution of information to James Madison University pertinent to system problems encountered at other locations, along with the solutions to those problems, when such information is relevant to the University's software.
 9. Describe procedure for handling upgrades. Specify how often upgrades are made to the application software and how "patches" and "fixes" to the systems are handled. Describe if and how your product impacts our ability to apply security updates in a timely manner to underlying or supporting products (e.g. Windows, Linux, Java, Oracle, MS Office, Web server). "Timely" is defined as no later than 30 days from the time of vendor release.
 10. Describe the nature of system enhancements in development that are scheduled for release in the next twelve months.
 11. Describe all responsibilities of both the contractor and James Madison University in the isolation and diagnosis of system failures.
 12. Describe your "escalation" procedure.
- O. Hosted Applications:

The University occasionally explores opportunities for hosting applications external to the university. If hosting is an option for this project, then complete the following section. If hosting is not an option, there is no requirement to respond.

1. Describe where services and data storage are located geographically.
2. Describe how applications are secured inside your firewall.

3. Describe your approach to applications and how they are hosted on servers. (Will the JMU application(s) reside on dedicated physical/virtual servers?) Describe the different levels of security for different application layers.
4. Describe the network layer security you provide.
5. Describe your methodology for handling patches and software updates.
6. Describe your approach to screening employees and the level of experience preferred.
7. Describe how you track attacks. Describe your approach to informing JMU about attacks.
8. Describe the audit and security infrastructure testing process you utilize and the frequency of those audits/tests.
9. Describe your approach to security reviews during each phase of the software development lifecycle.
10. Describe the vulnerability detection and response process surrounding your product and hosting infrastructure. Describe your patch release strategy for problems found.
11. If hosted, provide results of the latest penetration test and vulnerability scan performed on your system.
12. Describe your physical and cyber data center security. Describe what measures are in place to prevent employees from viewing data they are not authorized to see or outsiders from hacking into the system.
13. Describe your approach and policy regarding ownership of customer data that resides in your data center. Describe customer rights and abilities regarding moving and copying. Describe vendor and partner practices related to moving and copying data.
14. Describe any exit strategies you offer.
15. Describe your approach to backups and disaster recovery.

P. Privacy:

1. Provide your privacy statement.
2. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
3. Specify who collects the information.
4. Specify why the information is collected.
5. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
6. Describe how the information is used.
7. Specify how long the information is retained.

8. Describe how the information is stored and kept.
9. Describe how the information is secured.
10. Specify whether you share the information with another party. If information is shared with another party, then respond to Items a. through h. below relative to this information.
 - a. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
 - b. Specify who collects the information.
 - c. Specify why the information is collected.
 - d. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
 - e. Describe how the information is used.
 - f. Specify how long the information is retained.
 - g. Describe how the information is stored and kept.
 - h. Describe how the information is secured.
11. Specify whether you collect information on JMU or any party related to JMU from third parties. Respond to Items a. through i. below relative to this information.
 - a. Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).
 - b. Specify who collects the information.
 - c. Specify why the information is collected.
 - d. Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*).
 - e. Describe how the information is used.
 - f. Specify how long the information is retained.
 - g. Describe how the information is stored and kept.
 - h. Describe how the information is secured.
 - i. Specify whether you share the information with another party.
12. Specify the transaction information collected/maintained.

V. PROPOSAL PREPARATION AND SUBMISSION

A. GENERAL INSTRUCTIONS:

To ensure timely and adequate consideration of your proposal, offerors are to limit all contact, whether verbal or written, pertaining to this RFP to the James Madison University Procurement Office for the duration of this Proposal process. Failure to do so may jeopardize further consideration of Offeror's proposal.

1. RFP Response: In order to be considered for selection, the **Offeror shall submit a complete response to this RFP**; and shall submit to the issuing Purchasing Agency:
 - a. **One (1) original and four (4) copies** of the entire proposal, INCLUDING ALL ATTACHMENTS. Any proprietary information should be clearly marked in accordance with 3.f below.
 - b. **One (1) electronic copy in WORD format or searchable PDF (CD or flash drive)** of the entire proposal, INCLUDING ALL ATTACHMENTS. Any proprietary information should be clearly marked in accordance with 3.f below.
 - c. Should the proposal contain **proprietary information**, provide **one (1) redacted hard copy** of the proposal and attachments **with proprietary portions removed or blacked out**. This copy should be clearly marked "*Redacted Copy*" on the front cover. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable. JMU shall not be responsible for the Contractor's failure to exclude proprietary information from this redacted copy.

No other distribution of the proposal shall be made by the Offeror.

2. The version of the solicitation issued by JMU Procurement Services as amended by any addenda is the mandatory controlling version of the document. Any modification of or additions to the solicitation by the Offeror shall not modify the official version of the solicitation issued by JMU Procurement Services unless accepted in writing by the University. Such modifications or additions to the solicitation by the Offeror may be cause for rejection of the proposal; however, JMU reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal. If the modifications or additions are not identified until after the award of the contract, the controlling version of the solicitation document shall still be the official state form issued by Procurement Services.
3. Proposal Preparation:
 - a. Proposals shall be signed by an authorized representative of the offeror. All information requested should be submitted. Failure to submit all information requested may result in the purchasing agency requiring prompt submissions of missing information and/or giving a lowered evaluation of the proposal. Proposals which are substantially incomplete or lack key information may be rejected by the purchasing agency. Mandatory requirements are those required by law or regulation or are such that they cannot be waived and are not subject to negotiation.
 - b. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.
 - c. Proposals should be organized in the order in which the requirements are presented in the RFP.

All pages of the proposal should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, sub letter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one page, the paragraph number and sub letter should be repeated at the top of the next page. The proposal should contain a table of contents which cross references the RFP requirements. Information which the offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at the appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

- d. As used in this RFP, the terms “must”, “shall”, “should” and “may” identify the criticality of requirements. “Must” and “shall” identify requirements whose absence will have a major negative impact on the suitability of the proposed solution. Items labeled as “should” or “may” are highly desirable, although their absence will not have a large impact and would be useful, but are not necessary. Depending on the overall response to the RFP, some individual “must” and “shall” items may not be fully satisfied, but it is the intent to satisfy most, if not all, “must” and “shall” requirements. The inability of an offeror to satisfy a “must” or “shall” requirement does not automatically remove that offeror from consideration; however, it may seriously affect the overall rating of the offeror’s proposal.
 - e. Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.
 - f. Ownership of all data, materials and documentation originated and prepared for the State pursuant to the RFP shall belong exclusively to the State and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by the offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the offeror must invoke the protection of Section 2.2-4342F of the Code of Virginia, in writing, either before or at the time the data is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret materials submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable and will result in rejection and return of the proposal.
4. Oral Presentation: Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to James Madison University. This provides an opportunity for the offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. James Madison University will schedule the time and location of these presentations. Oral presentations are an option of the University and may or may not be conducted. Therefore, proposals should be complete.

Vendor Demo: University top ranked offerors will be scheduled for on-site demos of the offered mobile solution. Notification to selected offerors will be made with as much advance notice as possible.

B. SPECIFIC PROPOSAL INSTRUCTIONS:

Proposals should be as thorough and detailed as possible so that James Madison University may properly evaluate your capabilities to provide the required services. Offerors are required to submit the following items as a complete proposal:

1. Return RFP cover sheet and all addenda acknowledgments, if any, signed and filled out as required.
2. Plan and methodology for providing the goods/services as described in Section IV “*Statement of Needs*” of this Request for Proposal .
3. A written narrative statement to include, but not limited to the expertise, qualifications, and experience of the firm and resumes of specific personnel to be assigned to perform the work.
4. Offeror Data Sheet, included as Attachment A to this RFP.
5. Small Business Subcontracting Plan, included as Attachment B to this RFP. Offeror shall provide a Small Business Subcontracting plan which summarizes the planned utilization of DMBE-certified small businesses which include businesses owned by women and minorities, when they have received DMBE small business certification, under the contract to be awarded as a result of this solicitation. This is a requirement for all prime contracts in excess of \$100,000.
6. Identify the amount of sales your company had during the last twelve months with each VASCUPP Member Institution. A list of VASCUPP Members can be found at: www.VASCUPP.org.
7. Proposed Cost. See Section X. “*Pricing Schedule*” of this Request for Proposal.

VI. **EVALUATION and AWARD CRITERIA**

A. EVALUATION CRITERIA:

Proposals shall be evaluated by James Madison University using the following criteria:

1. Quality of products/services offered and suitability for the intended purposes.
2. Qualifications and experience of Offeror in providing the goods/services.
3. Specific plans or methodology to be used to perform the services.
4. Participation of Small, Women-Owned and Minority (SWAM) Businesses
5. Cost

- B. **AWARD:** Selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each offeror so selected, the agency shall select the offeror which, in its opinion, has made the best proposal, and shall award the contract to that offeror. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reasons why a particular proposal was not deemed to be

the most advantageous. Should the Commonwealth determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the contractor's proposal as negotiated.

VII. GENERAL TERMS AND CONDITIONS *(Rev. 11/26/13 ABS)*

- A. PURCHASING MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and Their Vendors and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available for review at the purchasing office. In addition, the manual may be accessed electronically at <http://www.jmu.edu/procurement> or a copy can be obtained by calling Procurement Services at (540) 568-3145.
- B. APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with applicable federal, state and local laws and regulations.
- C. ANTI-DISCRIMINATION: By submitting their proposals, offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and §10 of the Rules Governing Procurement, Chapter 2, Exhibit J, Attachment 1 (available for review at <http://www.jmu.edu/procurement>). If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*§6 of the Rules Governing Procurement*)

In every contract over \$10,000 the provisions in 1. and 2. below apply:

- 1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.

2. The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- D. ETHICS IN PUBLIC CONTRACTING: By submitting their proposals, offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
- E. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By entering into a written contract with the Commonwealth of Virginia, the Contractor certifies that the Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.
- F. DEBARMENT STATUS: By submitting their proposals, offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- G. ANTITRUST: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.
- H. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS RFPs: Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.
- I. CLARIFICATION OF TERMS: If any prospective offeror has questions about the specifications or other solicitation documents, the prospective offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.
- J. PAYMENT:
1. To Prime Contractor:
 - a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
 - b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

- c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price, regardless of which public agency is being billed.
- d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- e. Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Rules Governing Procurement, Chapter 2, Exhibit J, Attachment 1 § 53; available for review at <http://www.jmu.edu/procurement>*).

2. To Subcontractors:

- a. A contractor awarded a contract under this solicitation is hereby obligated:
 - (1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
 - (2) To notify the agency and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.
 - b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.
3. Each prime contractor who wins an award in which provision of a SWAM procurement plan is a payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by the agency or institution, or other appropriate penalties may be assessed in lieu of withholding such payment.
4. The Commonwealth of Virginia encourages contractors and subcontractors to accept electronic and credit card payments.

K. PRECEDENCE OF TERMS: : Paragraphs A through J of these General Terms and Conditions and the

Commonwealth of Virginia Purchasing Manual for Institutions of Higher Education and their Vendors, shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

- L. QUALIFICATIONS OF OFFERORS: The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the offeror to perform the services/furnish the goods and the offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect offeror's physical facilities prior to award to satisfy questions regarding the offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such offeror fails to satisfy the Commonwealth that such offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- M. TESTING AND INSPECTION: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.
- N. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the contractor in whole or in part without the written consent of the Commonwealth.
- O. CHANGES TO THE CONTRACT: Changes can be made to the contract in any of the following ways:
 - 1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
 - 2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:
 - a. By mutual agreement between the parties in writing; or
 - b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or
 - c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes

Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia Purchasing Manual for Institutions of Higher Education and their Vendors. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

- P. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.
- Q. INSURANCE: By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with § 25 of the Rules Governing Procurement – Chapter 2, Exhibit J, Attachment 1, and 65.2-800 et. Seq. of the Code of Virginia (available for review at <http://www.jmu.edu/procurement>). The bidder or offeror further certifies that the contractor and any subcontractors will maintain these insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:

1. Workers' Compensation – Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirement under the Code of Virginia during the course of the contract shall be in noncompliance with the contract.
 2. Employer's Liability - \$100,000.
 3. Commercial General Liability - \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
 4. Automobile Liability - \$1,000,000 combined single limit. *(Required only if a motor vehicle not owned by the Commonwealth is to be used in the contract. Contractor must assure that the required coverage is maintained by the Contractor (or third party owner of such motor vehicle.)*
- R. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract over \$50,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site (www.eva.virginia.gov) for a minimum of 10 days.
- S. DRUG-FREE WORKPLACE: During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

- T. NONDISCRIMINATION OF CONTRACTORS: A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.
- U. eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION, CONTRACTS, AND ORDERS: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet eprocurement solution by completing the free eVA Vendor Registration. All bidders or offerors must register in eVA and pay the Vendor Transaction Fees specified below; failure to register will result in the bid/proposal being rejected. Vendor transaction fees are determined by the date the original purchase order is issued and the current fees are as follows:
- a. For orders issued July 1, 2011 thru December 31, 2013, the Vendor Transaction Fee is:
 - (i) DMBE-certified Small Businesses: 0.75%, capped at \$500 per order.
 - (ii) Businesses that are not DMBE-certified Small Businesses: 0.75%, capped at \$1,500 per order.
 - b. For orders issued January 1, 2014 and after, the Vendor Transaction Fee is:
 - (i) DMBE-certified Small Businesses: 1%, capped at \$500 per order.
 - (ii) Businesses that are not DMBE-certified Small Businesses: 1%, capped at \$1,500 per order.

For orders issued prior to July 1, 2011 the vendor transaction fees can be found at www.eVA.virginia.gov.

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

- V. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the Commonwealth of Virginia shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.
- W. BID PRICE CURRENCY: Unless stated otherwise in the solicitation, bidders/offerors shall state bid/offer prices in US dollars.

VIII. SPECIAL TERMS AND CONDITIONS (Rev. 10/1/13 ABS)

- A. AUDIT: The Contractor hereby agrees to retain all books, records, systems, and other documents relative to this contract for five (5) years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. The Commonwealth of Virginia, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.
- B. CANCELLATION OF CONTRACT: James Madison University reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.
- C. IDENTIFICATION OF PROPOSAL ENVELOPE: The signed proposal should be returned in a separate envelope or package, sealed and identified as follows:

From: _____

_____	_____	_____
Name of Offeror	Due Date	Time

_____	_____
Street or Box No.	RFP Number

_____	_____
City, State, Zip Code	RFP Title

Name of Purchasing Officer: _____

The envelope should be addressed as directed on the title page of the solicitation.

The offeror takes the risk that if the envelope is not marked as described above, it may be inadvertently opened and the information compromised, which may cause the proposal to be disqualified. Proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope.

- D. LATE PROPOSALS: To be considered for selection, proposals must be received by the issuing office by the designated date and hour. The official time used in the receipt of proposals is that time on the automatic time stamp machine in the issuing office. Proposals received in the issuing office after the date and hour designated are automatically non-responsive and will not be considered. The University is not responsible for delays in the delivery of mail by the U.S. Postal Service, private couriers, or the intra university mail system. It is the sole responsibility of the Offeror to ensure that its proposal reaches the issuing office by the designated date and hour.
- E. UNDERSTANDING OF REQUIREMENTS: It is the responsibility of each offeror to inquire about and clarify any requirements of this solicitation that is not understood. The University will not be bound by oral explanations as to the meaning of specifications or language contained in this solicitation. Therefore, all inquiries deemed to be substantive in nature must be in writing and submitted to the responsible buyer in the Procurement Services Office. Offerors must ensure that written inquiries reach the buyer at least five (5) days prior to the time set for receipt of offerors proposals. A copy of all queries and the respective response will be provided in the form of an addendum to all offerors who have indicated an interest in responding to this solicitation. Your signature on your Offer certifies that you

fully understand all facets of this solicitation. These questions may be sent by Fax to 540/ 568-7936 or 540/568-7935.

- F. RENEWAL OF CONTRACT: This contract may be renewed by the Commonwealth for a period of nine (9) successive one year periods under the terms and conditions of the original contract except as stated in 1. and 2. below. Price increases may be negotiated only at the time of renewal. Written notice of the Commonwealth's intention to renew shall be given approximately 90 days prior to the expiration date of each contract period.
1. If the Commonwealth elects to exercise the option to renew the contract for an additional one-year period, the contract price(s) for the additional one year shall not exceed the contract price(s) of the original contract increased/decreased by no more than the percentage increase/decrease of the other services category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
 2. If during any subsequent renewal periods, the Commonwealth elects to exercise the option to renew the contract, the contract price(s) for the subsequent renewal period shall not exceed the contract price(s) of the previous renewal period increased/decreased by more than the percentage increase/decrease of the other services category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
- G. SUBMISSION OF INVOICES: All invoices shall be submitted within sixty days of contract term expiration for the initial contract period as well as for each subsequent contract renewal period. Any invoices submitted after the sixty day period will not be processed for payment.
- H. OPERATING VEHICLES ON JAMES MADISON UNIVERSITY CAMPUS: Operating vehicles on sidewalks, plazas, and areas heavily used by pedestrians is prohibited. In the unlikely event a driver should find it necessary to drive on James Madison University sidewalks, plazas, and areas heavily used by pedestrians, the driver must yield to pedestrians. For a complete list of parking regulations, please go to www.jmu.edu/parking; or to acquire a service representative parking permit, contact Parking Services at 540.568.3300. The safety of our students, faculty and staff is of paramount importance to us. Accordingly, violators may be charged.
- I. COOPERATIVE PURCHASING / USE OF AGREEMENT BY THIRD PARTIES: It is the intent of this solicitation and resulting contract(s) to allow for cooperative procurement. Accordingly, any public body, *(to include government/state agencies, political subdivisions, etc.)*, cooperative purchasing organizations, public or private health or educational institutions or any University related foundation and affiliated corporations may access any resulting contract if authorized by the Contractor.

Participation in this cooperative procurement is strictly voluntary. If authorized by the Contractor(s), the resultant contract(s) will be extended to the entities indicated above to purchase goods and services in accordance with contract terms. As a separate contractual relationship, the participating entity will place its own orders directly with the Contractor(s) and shall fully and independently administer its use of the contract(s) to include contractual disputes, invoicing and payments without direct administration from the University. No modification of this contract or execution of a separate agreement is required to participate; however, the participating entity and the Contractor may modify the terms and conditions of this contract to accommodate specific governing laws, regulations, policies, and business goals required by the participating entity. Any such modification will apply solely between the participating entity and the Contractor.

The Contractor will notify the University in writing of any such entities accessing this contract. The Contractor will provide semi-annual usage reports for all entities accessing the contract. The University shall not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Contractor to extend the contract. It is understood and agreed that the University is not responsible for the acts or omissions of any entity and will not be considered in default of the contract no matter the circumstances.

Use of this contract(s) does not preclude any participating entity from using other contracts or competitive processes as needed.

J. SMALL BUSINESS SUBCONTRACTING AND EVIDENCE OF COMPLIANCE:

1. It is the goal of the Commonwealth that 40% of its purchases are made from small businesses. This includes discretionary spending in prime contracts and subcontracts. All potential bidders/offers are required to submit a Small Business Subcontracting Plan. Unless the bidder/offeror is registered as a DMBE-certified small business and where it is practicable for any portion of the awarded contract to be subcontracted to other suppliers, the contractor is encouraged to offer such subcontracting opportunities to DMBE-certified small businesses. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received DMBE small business certification. No bidder/offeror or subcontractor shall be considered a Small Business, a Women-Owned Business or a Minority-Owned Business unless certified as such by the Department of Minority Business Enterprise (DMBE) by the due date for receipt of bids or proposals. If small business subcontractors are used, the prime contractor agrees to report the use of small business subcontractors by providing the purchasing office at a minimum the following information: name of small business with the DMBE certification number or FEIN, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product/service provided. **This information shall be submitted to: JMU Office of Procurement Services, Attn: SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807.**
2. Each prime contractor who wins an award in which provision of a small business subcontracting plan is a condition of the award, shall deliver to the contracting agency or institution with every request for payment, evidence of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the small business subcontracting plan. **This information shall be submitted to: JMU Office of Procurement Services, SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807.** When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm with the DMBE certification number or FEIN number, phone number, total dollar amount subcontracted, category type (small, women-owned, or minority-owned), and type of product or service provided. Payment(s) may be withheld until compliance with the plan is received and confirmed by the agency or institution. The agency or institution reserves the right to pursue other appropriate remedies to include, but not be limited to, termination for default.
3. Each prime contractor who wins an award valued over \$200,000 shall deliver to the contracting agency or institution with every request for payment, information on use of subcontractors that are not DMBE-certified small businesses. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office at a minimum the following information: name of firm, phone number, FEIN number, total dollar amount subcontracted, and type of product or service provided. **This information shall be submitted to: JMU Office of Procurement Services, Attn: SWAM Subcontracting Compliance, MSC 5720, Harrisonburg, VA 22807.**

- K. ADDITIONAL GOODS AND SERVICES: The University may acquire other goods or services that the supplier provides than those specifically solicited. The University reserves the right, subject to mutual agreement, for the Contractor to provide additional goods and/or services under the same pricing, terms, and conditions and to make modifications or enhancements to the existing goods and services. Such additional goods and services may include other products, components, accessories, subsystems, or related services that are newly introduced during the term of this Agreement. Such additional goods and services will be provided to the University at favored nations pricing, terms, and conditions.
- L. AUTHORIZATION TO CONDUCT BUSINESS IN THE COMMONWEALTH: A contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the *Code of Virginia* or as otherwise required by law. Any business entity described above that enters into a contract with a public body shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. A public body may void any contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.
- M. PUBLIC POSTING OF COOPERATIVE CONTRACTS: James Madison University maintains a web-based contracts database with a public gateway access. Any resulting cooperative contract/s to this solicitation will be posted to the publicly accessible website. Contents identified as proprietary information will not be made public.
- N. CRIMINAL BACKGROUND CHECKS OF PERSONNEL ASSIGNED BY CONTRACTOR TO PERFORM WORK ON JMU PROPERTY: The Contractor shall obtain criminal background checks on all of their contracted employees who will be assigned to perform services on James Madison University property. The results of the background checks will be directed solely to the Contractor. The Contractor bears responsibility for confirming to the University contract administrator that the background checks have been completed prior to work being performed by their employees or subcontractors. The Contractor shall only assign to work on the University campus those individuals whom it deems qualified and permissible based on the results of completed background checks. Notwithstanding any other provision herein, and to ensure the safety of students, faculty, staff and facilities, James Madison University reserves the right to approve or disapprove any contract employee that will work on JMU property. Disapproval by the University will solely apply to JMU property and should have no bearing on the Contractor's employment of an individual outside of James Madison University.
- O. NONVISUAL ACCESS TO TECHNOLOGY: All information technology which, pursuant to this Agreement, is purchased or upgraded by or for the use of any State agency or institution or political subdivision of the Commonwealth (the "Technology") shall comply with the following nonvisual access standards from the date of purchase or upgrade until the expiration of this Agreement:
- (i) effective, interactive control and use of the Technology shall be readily achievable by nonvisual means;
 - (ii) the Technology equipped for nonvisual access shall be compatible with information technology used by other individuals with whom any blind or visually impaired user of the Technology interacts;

- (iii) nonvisual access technology shall be integrated into any networks used to share communications among employees, program participants or the public; and
- (iv) the technology for nonvisual access shall have the capability of providing equivalent access by nonvisual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired.

Compliance with the foregoing nonvisual access standards shall not be required if the head of the using agency, institution or political subdivision determines that (i) the Technology is not available with nonvisual access because the essential elements of the Technology are visual and (ii) nonvisual equivalence is not available.

Installation of hardware, software or peripheral devices used for nonvisual access is not required when the Technology is being used exclusively by individuals who are not blind or visually impaired, but applications programs and underlying operating systems (including the format of the data) used for the manipulation and presentation of information shall permit the installation and effective use of nonvisual access software and peripheral devices.

If requested, the Contractor must provide a detailed explanation of how compliance with the foregoing nonvisual access standards is achieved and a validation of concept demonstration.

The requirements of this Paragraph shall be construed to achieve full compliance with the Information Technology Access Act, 2.2-3500 through 2.2-3504 of the *Code of Virginia*.

All information technology which, pursuant to this Agreement, is purchased or upgraded by or for the use of any Commonwealth agency or institution or political subdivision of the Commonwealth (the "Technology") shall comply with Section 508 of the Rehabilitation Act (29 U.S.C. 794d), as amended. If requested, the Contractor must provide a detailed explanation of how compliance with Section 508 of the Rehabilitation Act is achieved and a validation of concept demonstration. (<http://www.section508.gov/>). The requirements of this Paragraph along with the Non-Visual Access to Technology Clause shall be construed to achieve full compliance with the Information Technology Access Act, §§2.2-3500 through 2.2-3504 of the *Code of Virginia*.

- P. CONFIDENTIALITY OF PERSONALLY IDENTIFIABLE INFORMATION: The contractor assures that information and data obtained as to personal facts and circumstances related to clients will be collected and held confidential, during and following the term of this agreement, and will not be divulged without the individual's and the agency's written consent and only in accordance with federal law or the Code of Virginia. Contractors who utilize, access, or store personally identifiable information as part of the performance of a contract are required to safeguard this information and immediately notify the agency of any breach or suspected breach in the security of such information. Contractors shall allow the agency to both participate in the investigation of incidents and exercise control over decisions regarding external reporting. Contractors and their employees working on this project may be required to sign a confidentiality statement.
- Q. EXCESSIVE DOWN TIME: Equipment or software furnished under the contract shall be capable of continuous operation. Should the equipment or software become inoperable for a period of more than 24 hours, the contractor agrees to pro-rate maintenance charges to account for each full day of in operability. The period of in operability shall commence upon initial notification. In the event the equipment or software remains inoperable for more than two (2) consecutive calendar days, the contractor shall promptly replace the equipment or software at no charge upon request of the procuring agency. Such replacement shall be with new, unused product(s) of comparable quality, and must be installed and operational within seven (7) days following the request for replacement.

- R. LATEST SOFTWARE VERSION: Any software product(s) provided under the contract shall be the latest version available to the general public as of the due date of this solicitation.
- S. RENEWAL OF MAINTENANCE: Maintenance of the hardware or software specified in the resultant contract may be renewed by the mutual written agreement of both parties for an additional one-year periods, under the terms and conditions of the original contract except as noted herein. Price changes may be negotiated at time of renewal; however, in no case shall the maintenance costs for a succeeding one-year period exceed the prior year's contract price(s), increased or decreased by more than the percentage increase or decrease in the other services category of the CPI-W section of the US Bureau of Labor Statistics Consumer Price Index, for the latest twelve months for which statistics are available.
- T. SOFTWARE UPGRADES: The Commonwealth shall be entitled to any and all upgraded versions of the software covered in the contract that becomes available from the contractor. The maximum charge for upgrade shall not exceed the total difference between the cost of the Commonwealth's current version and the price the contractor sells or licenses the upgraded software under similar circumstances.
- U. SOURCE CODE: In the event the contractor ceases to maintain experienced staff and the resources needed to provide required software maintenance, the Commonwealth shall be entitled to have, use, and duplicate for its own use, a copy of the source code and associated documentation for the software products covered by the contract. Until such time as a complete copy of such material is provided, the Commonwealth shall have exclusive right to possess all physical embodiments of such contractor owned materials. The rights of the Commonwealth in this respect shall survive for a period of twenty years after the expiration or termination of the contract. All lease and royalty fees necessary to support this right are included in the initial license fee as contained in the pricing schedule.
- V. TERM OF SOFTWARE LICENSE: Unless otherwise stated in the solicitation, the software license(s) identified in the pricing schedule shall be purchased on a perpetual basis and shall continue in perpetuity. However the Commonwealth reserves the right to terminate the license at any time, although the mere expiration or termination of this contract shall not be construed as an intent to terminate the license. All acquired license(s) shall be for use at any computing facilities, on any equipment, by any number of users, and for any purposes for which it is procured. The Commonwealth further reserves the right to transfer all rights under the license to another state agency to which some or all of its functions are transferred.
- W. THIRD PARTY ACQUISITION OF SOFTWARE: The contractor shall notify the procuring agency in writing should the intellectual property, associated business, or all of its assets be acquired by a third party. The contractor further agrees that the contract's terms and conditions, including any and all license rights and related services, shall not be affected by the acquisition. Prior to completion of the acquisition, the contractor shall obtain, for the Commonwealth's benefit and deliver thereto, the assignee's agreement to fully honor the terms of the contract.
- X. TITLE OF SOFTWARE: By submitting a bid or proposal, the bidder or offeror represents and warrants that it is the sole owner of the software or, if not the owner, that it has received all legally required authorizations from the owner to license the software, has the full power to grant the rights required by this solicitation, and that neither the software nor its use in accordance with the contract will violate or infringe upon any patent, copyright, trade secret, or any other property rights of another person or organization.

- Y. WARRANTY AGAINST SHUTDOWN DEVICES: The contractor warrants that the equipment and software provided under the contract shall not contain any lock, counter, CPU reference, virus, worm, or other device capable of halting operations or erasing or altering data or programs. Contractor further warrants that neither it, nor its agents, employees, or subcontractors shall insert any shutdown device following delivery of the equipment and software.

IX. METHOD OF PAYMENT

The contractor will be paid on the basis of invoices submitted in accordance with the solicitation and any negotiations. James Madison University recognizes the importance of expediting the payment process for our vendors and suppliers. We are asking our vendors and suppliers to enroll in the Wells Fargo Bank single use Commercial Card Number process or electronic deposit (ACH) to your bank account so that future payments are made electronically. Additional information is available online at: http://www.jmu.edu/acctgserv/expenditures/vendor_pay_methods.shtml

X. PRICING SCHEDULE

The contractor shall provide pricing for all products and services included in proposal indicating one-time and on-going costs.

XI. ATTACHMENTS

[Attachment A](#): Offeror Data Sheet

[Attachment B](#): Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

[Attachment C](#): Standard Contract Sample

ATTACHMENT A

OFFEROR DATA SHEET

TO BE COMPLETED BY OFFEROR

1. QUALIFICATIONS OF OFFEROR: Offerors must have the capability and capacity in all respects to fully satisfy the contractual requirements.
2. YEARS IN BUSINESS: Indicate the length of time you have been in business providing these types of goods and services.

Years_____ Months_____

3. REFERENCES: Indicate below a listing of at least five (5) organizations, either commercial or governmental/educational, that your agency is servicing. Include the name and address of the person the purchasing agency has your permission to contact.

CLIENT	LENGTH OF SERVICE	ADDRESS	CONTACT PERSON/PHONE #
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4. List full names and addresses of Offeror and any branch offices which may be responsible for administering the contract.

5. RELATIONSHIP WITH THE COMMONWEALTH OF VIRGINIA: Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the [CODE OF VIRGINIA](#), SECTION 2.2-3100 – 3131?

[☐] YES [☐] NO

IF YES, EXPLAIN:_____

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ATTACHMENT B

Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Offeror Name: _____ **Preparer Name:** _____
Date: _____

Is your firm a **Small Business Enterprise** certified by the Department of Minority Business Enterprise?

Yes _____ No _____

If yes, certification number: _____ Certification date: _____

Is your firm a **Woman-owned Business Enterprise** certified by the Department of Minority Business Enterprise? Yes _____ No _____

If yes, certification number: _____ Certification date: _____

Is your firm a **Minority-Owned Business Enterprise** certified by the Department of Minority Business Enterprise? Yes _____ No _____

If yes, certification number: _____ Certification date: _____

Instructions: *Populate the table below to show your firm's plans for utilization of small, women-owned and minority-owned business enterprises in the performance of the Collection Services contract. Describe plans to utilize SWAMs businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc.*

Small Business: "Small business " means a business, independently owned or operated by one or more persons who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years.

Woman-Owned Business Enterprise: A business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM**

Program, all certified women-owned businesses are also a small business enterprise.

Minority-Owned Business Enterprise: A business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals. **For purposes of the SWAM Program, all certified minority-owned businesses are also a small business enterprise.**

All small, women, and minority owned businesses must be certified by the Commonwealth of Virginia Department of Minority Business Enterprise (DMBE) to be counted in the SWAM program. Certification applications are available through DMBE at 800-223-0671 in Virginia, 804-786-6585 outside Virginia, or online at www.dmb.virginia.gov (Customer Service).

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ATTACHMENT B (CNT'D)

Small, Women and Minority-owned Businesses (SWaM) Utilization Plan

Procurement Name and Number: _____
 Listing of Sub-Contractors, to include, Small, Woman Owned and Minority Owned Businesses
 for this Bid/Proposal and Subsequent Contract

 Date Form Completed

Offeror / Proposer:

 Firm Address Contact Person/No.

Sub-Contractor's Name and Address	Contact Person & Phone Number	DMBE Certification Number or FEIN No.	Services or Materials Provided	Total Subcontractor Contract Amount (to include change orders)	Total Dollars Paid Subcontractor to date (to be submitted with request for payment from JMU)	Federal Employer Identification Number

(Form shall be submitted with proposal and if awarded, again with submission of each request for payment)

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ATTACHMENT C



**COMMONWEALTH OF VIRGINIA
STANDARD CONTRACT**

Contract No. _____

This contract entered into this _____ day of _____, 20____, by _____ hereinafter called the "Contractor" and Commonwealth of Virginia, James Madison University called the "Purchasing Agency".

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide the services to the Purchasing Agency as set forth in the Contract Documents.

PERIOD OF PERFORMANCE: From _____ through _____

The contract documents shall consist of:

- (1) This signed form;
- (2) The following portions of the Request for Proposals dated _____:
 - (a) The Statement of Needs,
 - (b) The General Terms and Conditions,
 - (c) The Special Terms and Conditions together with any negotiated modifications of those Special Conditions;
 - (d) List each addendum that may be issued
- (3) The Contractor's Proposal dated _____ and the following negotiated modification to the Proposal, all of which documents are incorporated herein.
 - (a) Emails and written negotiations are to be incorporated by specific reference for each one of relevance.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

PURCHASING AGENCY:

By: _____
(Signature)

By: _____
(Signature)

(Printed Name)

(Printed Name)

Title: _____

Title: _____