



**COMMONWEALTH OF VIRGINIA  
STANDARD CONTRACT**

Contract No. UCPJMU4145

This contract entered into this 4<sup>th</sup> day of November 2014, by **College Scheduler, LLC** 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 November 4, 2014 through November 3, 2015 with nine (9) one-year renewal options.

The contract documents shall consist of:

- (1) This signed form;
- (2) The following portions of the Request for Proposal # MLO-803 dated July 2, 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) The College Scheduler Services Agreement;
  - (e) The Commonwealth of Virginia Addendum Form to Contractor's Form dated January 24, 2014, which shall govern in the event of conflict.
- (3) The Contractor's Proposal dated July 28, 2014 and the following negotiated modification to the Proposal, all of which documents are incorporated herein.
  - (a) Negotiations Summary dated October 15, 2014.

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


CONTRACTOR:

By:   
(Signature)

Robert Strazzarino  
(Printed Name)

Title: CEO

PURCHASING AGENCY:

By:   
(Signature)

NATASHA OWENS  
(Printed Name)

Title: Buyer Senior



**RFP # MLO-803, Student Class Schedule Planner,  
Negotiation Summary for College Scheduler, LLC**

**October 15, 2014**

1. Contractor's pricing schedule for the Purchasing Agency is as follows:
  - a. Annual cost: \$36,000 (*represents a 10% off discount*)
    - i. Annual cost is \$2.00/student with a maximum price of \$40,000 and a minimum price of \$20,000.
  - b. One time set-up fees: \$2,500 (*represents a 50% off discount*)
  - c. Customizations: \$100/hr
2. The following hereby replaces Section VIII, F. *Renewal of Contract* listed on page 18 of the RFP:

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. Price increases may be negotiated only at the time of renewal and shall not exceed 2%. Written notice of the Commonwealth's intention to renew shall be given approximately 90 days prior to the expiration date of each contract period.
3. The Contractor shall waive all registration costs for the Purchasing Agency to send up to four (4) employees to the annual User Group Conference for the during of the contract.
4. Upon termination of the contract and at the request of the University, the Contractor shall send a digital copy of customer data to the University at no additional cost.

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

AGENCY NAME: James Madison University

CONTRACTOR NAME: College Scheduler LLC

DATE: 10-9-14

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



Printed Name

NATASHA AUER

CONTRACTOR by



Title

CEO

Printed Name

Robert Stazzano

JUL. 2009

## COLLEGE SCHEDULER SERVICES AGREEMENT

THIS AGREEMENT (this “**Agreement**”) effective as of the date indicated in the first Service Order attached hereto as **Exhibit A** (the “**Service Order**”), is entered into by and between [College Scheduler LLC] , (“**College Scheduler**”) and the customer identified in the first Service Order attached hereto (“**Customer**”).

### 1. Services.

Subject to the terms and conditions of this Agreement, during the term of this Agreement, College Scheduler shall provide to Customer the services described in the Service Order (the “**Services**”). From time to time, the parties may add new Service Orders, which, upon execution by both parties, will be subject to the terms and conditions of this Agreement.

### 2. Fees and Billing.

**2.1 Fees.** Customer shall pay all fees due according to the Service Order.

**2.2 Billing and Payment Terms.** Unless otherwise indicated in the applicable Service Order, College Scheduler shall invoice Customer in advance for fees for all Services, and payment of fees will be due within 30 days after the date of invoice. All payments must be made in U.S. dollars. Late payments hereunder will accrue interest at a rate of 1 ½% per month, or the highest rate allowed by applicable law, whichever is lower.

**2.3 Taxes.** All payments required by this Agreement exclude all sales, value-added, use, on other taxes and obligations, all of which Customer will be responsible for and will pay in full, except for taxes based on College Scheduler's net income.

### 3. Customer's Obligations.

**3.1 Compliance with Law.** Customer acknowledges that College Scheduler exercises no control over the content of the information passing through the Customer's websites and that it is the sole responsibility of Customer to ensure that the information it transmits and receives complies with all applicable laws and regulations.

**3.2 No Resale .** The Services are for use by Customer only and not for resale to any third party.

### 4. Confidential Information.

**4.1 Confidential Information .** Each party acknowledges that it will have access to certain confidential information of the other party concerning the other party's business, plans, customers,

technology, and products, including the terms and conditions of this Agreement (“**Confidential Information**”). Confidential Information will include, but not be limited to, each party's proprietary software and customer information. Each party shall not use in any way, for its own account or the account of any third party, except as expressly permitted by this Agreement, nor disclose to any third party (except as required by law or to that party's attorneys, accountants and other advisors as reasonably necessary), any of the other party's Confidential Information and shall take reasonable precautions to protect the confidentiality of such information.

**4.2 Exceptions.** Information will not be deemed Confidential Information if such information: (i) is known to the receiving party prior to receipt from the disclosing party directly or indirectly from a source other than one having an obligation of confidentiality to the disclosing party; (ii) becomes known (independently of disclosure by the disclosing party) to the receiving party directly or indirectly from a source other than one having an obligation of confidentiality to the disclosing party; (iii) becomes publicly known or otherwise ceases to be secret or confidential, except through a breach of this Agreement by the receiving party; or (iv) is independently developed by the receiving party.

### 5. Representations and Warranties.

#### 5.1 Warranties by Customer.

(a) **Customer's Business .** Customer represents and warrants that Customer's services, products, materials, data, and information used by Customer in connection with this Agreement as well as Customer's and its permitted users' use of Services (“**Customer's Business**”) does and will not during the term of this Agreement operate in any manner that would violate any applicable law or regulation.

(b) **Breach of Warranties.** In the event of any breach, or reasonably anticipated breach, of any of Customer's warranties herein, in addition to any other remedies available at law or in equity, College Scheduler will have the right to immediately, in College Scheduler's sole discretion, suspend any related Services if deemed reasonably necessary by College Scheduler to prevent any harm to College Scheduler or its business.

**5.2 Warranties and Disclaimers by College Scheduler.** THE SERVICES ARE PROVIDED ON AN “AS IS” BASIS, AND CUSTOMER'S USE OF

THE SERVICES IS AT ITS OWN RISK. COLLEGE SCHEDULER DOES NOT MAKE, AND HEREBY DISCLAIMS, ANY AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT AND TITLE, AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE. College Scheduler does not warrant that the Services will be uninterrupted, error-free, or completely secure.

## **6. Limitations of Liability.**

**6.1 Exclusions.** COLLEGE SCHEDULER WILL NOT BE LIABLE TO CUSTOMER FOR ANY LOST REVENUE, LOST PROFITS, REPLACEMENT GOODS, LOSS OF TECHNOLOGY, RIGHTS OR SERVICES, INCIDENTAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF DATA, OR INTERRUPTION OF CUSTOMER'S BUSINESS, EVEN IF COLLEGE SCHEDULER IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER UNDER THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

**6.2 Maximum Liability.** COLLEGE SCHEDULER'S MAXIMUM AGGREGATE LIABILITY TO CUSTOMER RELATED TO OR IN CONNECTION WITH THIS AGREEMENT WILL BE LIMITED TO THE TOTAL AMOUNT PAID BY CUSTOMER TO COLLEGE SCHEDULER HEREUNDER FOR THE PRIOR 12 MONTH PERIOD.

**6.3 Basis of the Bargain; Fairness of Essential Purpose.** Customer acknowledges that College Scheduler has set its prices and entered into this Agreement in reliance upon the limitations of liability and the disclaimers of warranties and damages set forth herein, and that the same form an essential basis of the bargain between the parties. The parties agree that the limitations and exclusions of liability and disclaimers specified in this Agreement will survive and apply even if found to have failed of their essential purpose.

## **7. Indemnification.**

**7.1 College Scheduler's Indemnification of Customer.** College Scheduler shall indemnify, defend and hold Customer harmless from and against any and all costs, liabilities, losses, and expenses (including, but not limited to, reasonable attorneys' fees) (collectively, "**Losses**") resulting from any claim, suit, action, or proceeding (each, an "**Action**") brought against Customer alleging the infringement of any third party copyright or trade secret resulting from the provision of Services pursuant to this Agreement (but excluding any infringement contributorily caused by Customer's Business); or within 30 days after such expiration or termination, each party shall return all Confidential Information of the other party in its possession at the time of expiration or termination and shall not make or retain any copies of such Confidential Information except as required to comply with any applicable legal or accounting record keeping requirement.

## **8. Term and Termination.**

**8.1 Term.** This Agreement will be effective commencing on the Effective Date, and continuing indefinitely thereafter unless and until terminated according to the provisions of this Section 8. The Agreement will automatically renew for additional terms of one year each.

### **8.2 Termination.**

(a) **For Convenience.** Either party may terminate this Agreement for convenience upon written notice at any time during which no Service Order is in effect.

(b) **For Cause.** Either party will have the right to terminate this Agreement, or the applicable Service Order, if the other party breaches any material term or condition of this Agreement and fails to cure such breach within 30 days after receipt of written notice of the same, except in the case of failure to pay fees, which must be cured within five days after receipt of written notice from College Scheduler. Either party may terminate this Agreement if: (i) the other party becomes the subject of a voluntary petition in bankruptcy or any voluntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors; or (ii) the other party becomes the subject of an involuntary petition in bankruptcy or any involuntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors, if such petition or proceeding is not dismissed within 60 days of filing.

**8.3 No Liability for Termination .** Neither party will be liable to the other for any termination or expiration of this Agreement in accordance with its terms.

**8.4 Effect of Termination .** Upon the effective date of expiration or termination of this Agreement: (a) College Scheduler may immediately cease providing Services hereunder; (b) any and all payment obligations of Customer under this Agreement will become due immediately; (c) within 30 days after such expiration or termination, each party shall return all Confidential Information of the other party in its possession at the time of expiration or termination and shall not make or retain any copies of such Confidential Information except as required to comply with any applicable legal or accounting record keeping requirement.

**8.5 Survival.** The following provisions will survive any expiration or termination of the Agreement: Sections 2, 3, 4, 5, 6, 7, 8.3, 8.4, 8.5, and 9.

## **9. Miscellaneous Provisions.**

**9.1 Force Majeure .** Except for the obligation to pay money, neither party will be liable for any failure or delay in its performance under this Agreement due to any cause beyond its reasonable control, including act of war, acts of God, earthquake, flood, embargo, riot, sabotage, labor shortage or dispute, governmental act or failure of the Internet, provided that the delayed party: (a) gives the other party prompt notice of such cause, and (b) uses its reasonable commercial efforts to correct promptly such failure or delay in performance.

**9.2 Marketing.** Customer acknowledges that College Scheduler may refer to Customer by trade name and trademark, and may briefly describe Customer's Business, in College Scheduler's marketing materials and web site. Customer hereby grants College Scheduler a license to use any Customer trade names and trademarks solely in connection with the rights granted to College Scheduler pursuant to this Section 9.2.

**9.3 Government Regulations.** Customer shall not export, re-export, transfer, or make available, whether directly or indirectly, any regulated item or information to anyone outside the U.S. in connection with this Agreement without first complying with all export control laws and regulations which may be imposed by the U.S. Government and any country or organization of nations within whose jurisdiction Customer operates or does business.

**9.4 Non-Solicitation.** During the period beginning on the Installation Date and ending on the first anniversary of the termination or expiration of this Agreement in accordance with its terms, Customer shall not, and shall ensure that its affiliates do not, directly or indirectly, solicit or attempt to solicit for employment any persons employed by College Scheduler during such period.

**9.5 Governing Law; Dispute Resolution, Severability; Waiver.** This Agreement is made under and will be governed by and construed in accordance with the laws of the State of California (except that body of law controlling conflicts of law) and specifically excluding from application to this Agreement that law known as the United Nations Convention on the International Sale of Goods. Any dispute relating to the terms, interpretation or performance of this Agreement (other than claims for preliminary injunctive relief or other pre-judgment remedies) will be resolved at the request of either party through binding arbitration. Arbitration will be conducted in Alameda County, California, under the rules and procedures of the American Arbitration Association ("AAA"). The parties will request that AAA appoint a single arbitrator. In the event any provision of this Agreement is held by a tribunal of competent jurisdiction to be contrary to the law, the remaining provisions of this Agreement will remain in full force and effect. The waiver of any breach or default of this Agreement will not constitute a waiver of any subsequent breach or default, and will not act to amend or negate the rights of the waiving party.

**9.6 Assignment.** Customer may not assign its rights or delegate its duties under this Agreement either in whole or in part without the prior written consent of College Scheduler, except that Customer may assign this Agreement in whole as part of a corporate reorganization, consolidation, merger, or sale of substantially all of its assets. Any attempted assignment or delegation without such consent will be void. College Scheduler may assign this Agreement in whole or part. This Agreement will bind and inure to the benefit of each party's successors and permitted assigns.

**9.7 Notices.** Any notice or communication required or permitted to be given hereunder may be delivered by hand, deposited with an overnight courier, sent by confirmed facsimile, or mailed by registered or certified mail, return receipt requested, postage prepaid, if to College Scheduler, to the address below, and if to Customer, to the address indicated the Service Order, or at such other address as may hereafter be furnished in writing by either party hereto to the other.

Such notice will be deemed to have been given as of the date it is delivered, mailed or sent, whichever is earlier.

**9.8 Relationship of Parties.** College Scheduler and Customer are independent contractors and this Agreement will not establish any relationship of

partnership, joint venture, employment, franchise or agency between College Scheduler and Customer. Neither College Scheduler nor Customer will have the power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided herein.

Customer's and College Scheduler's authorized representatives have execute this Agreement below to indicate their assent to its terms:

**JAMES MADISON UNIVERSITY**

**COLLEGE SCHEDULER LLC**

Signature:\_\_\_\_\_

Signature:\_\_\_\_\_

Print Name:\_\_\_\_\_

Print Name:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_



## EXHIBIT A

### SERVICE ORDER

College Scheduler will make its college scheduler services available to students of Customer over the World Wide Web, using scheduling data made available by Customer. College Scheduler will display Customer's logo on the Service as described in a mock-up to be agreed upon by College Scheduler and Customer in writing.

- **Web application will generate class schedules from the Customer scheduling data.**
- **All courses and breaks the student has selected and entered will be stored in the College Scheduler system.**
- **Online video tutorials will be available to show all users how to navigate within the application. The colors and graphics within these video tutorials may not match the color scheme of the application.**

Customer will make available on the Internet at all times its most current scheduling information, in a form to be agreed upon in writing by College Scheduler and Customer.

College Scheduler will provide the Services for 12 months beginning on the Effective Date. The term of this agreement will be one (1) year with the option to renew for nine (9) additional one-year periods. College Scheduler will invoice Customer, and Customer will pay the invoice no later than 30 days after receipt of the invoice. Thereafter, this Service Order may be renewed only upon mutual consent.

#### Fees:

**\$2,500** Set-up fee (one-time fee)

**\$36,000** Service for Year One

\*Price increases may be negotiated only at time of renewal and shall not exceed 2%

#### Effective Date:

November 1<sup>st</sup>, 2014

#### System Live Date:

December 1<sup>st</sup>, 2014

CUSTOMER NAME: JAMES MADISON UNIVERSITY

ADDRESS: 800 SOUTH MAIN STREET HARRISONBURG VA, 22807

PHONE: (540) 568-6211

**REQUEST FOR PROPOSAL**  
**RFP # MLO-803**

**Issue Date:** July 2, 2014  
**Title:** Student Class Schedule Planner  
**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 August 5, 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: Matasha Owens, MPA, CUPO, VCO, Buyer Senior Procurement Services, [owensml@jmu.edu](mailto:owensml@jmu.edu), 540/568-3137, (Fax) 540/568-7936 no 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:

College Scheduler, LLC  
389 Connors Court, Suite E  
Chico, CA 95926

By:   
(Signature in Ink)

Name: Robert Strazzarino  
(Please Print)

Title: CEO / Founder

Date: 7/28/14

Phone: (866) 885-2834

Web Address: <http://www.collegescheduler.com>

Fax #:

Email: [Robert@Collegescheduler.com](mailto:Robert@Collegescheduler.com)

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.**



**Proposal as prepared for: James Madison University**

**RFP #: MLO-803**

# **Student Class Schedule Planner**

**July 14, 2014**

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Attachment F - Sentinel List of Tests .....	<b>Error! Bookmark not defined.</b>
Attachment G - SOC2 & Rackspace.....	<b>Error! Bookmark not defined.</b>





## IV: Statement of Needs

### A: Application Functionality

#### A.1: Features, Functionality and Ease of Use

Describe the features, functionality and ease of use of the proposed Student Class Schedule Planner.

The screenshot shows the PATRIOT SCHEDULER web application. At the top, there is a header bar with a link 'Go to Accessible Version (Text Only)' (labeled A) and a 'Help Videos - Exit' link (labeled B). Below the header is a logo featuring a portrait of a man and a clock, with the text 'PATRIOT SCHEDULER'. The main content area includes a filter section (labeled C) with dropdown menus for 'Course Status' (set to 'Open Classes Only'), 'Term' (set to 'Spring 2014'), 'Parts of Term' (set to 'All Parts of Term Selected'), and 'Campus' (set to '1 of 10 Selected'). Below the filter section are two tables: 'Courses' (labeled D) and 'Breaks' (labeled E). The 'Courses' table has columns for 'Course', 'Options', 'Info', and 'Actions'. It lists 'BIO 100' with a 'view/edit' link. The 'Breaks' table has columns for 'Name', 'Days', and 'Time'. It lists 'Soccer Practice' on 'TR' from '8:00am to 11:00am'. Below these tables is a 'Schedules' section (labeled F) with a 'Generate Schedules' button and a message 'Generated 1 schedule.'. It shows a table with columns for '#', 'Compare', and 'View'. The first row shows '1' and 'Soccer Practice, BIO-100-51064,'.

A : Link to Section 508 fully compliant schedule planner. This text only, fully tab-able feature of Schedule Planner has every single function as the main Schedule Planner. This has been gone through with a fine toothed comb from institutions such as The University of Ohio and The University of Wisconsin-Madison. Developed with JAWS and works with screen reading technologies.

B: Link to help videos section for students. This area has multiple videos that are fully narrated, which will help walk students through each individual action they are capable of taking within Schedule Planner. These include adding courses, breaks, locking sections and going into the view/edit options page (explained in D).

C: This is the filter area, where a student can set specific settings. The 4 displayed are Course Status, which is where a student decides if they want to look for courses that are set to: Open Classes Only, Open and Full, Open and Waitlisted, and other permutations.

The Term Dropdown is simply the term the student is planning for. Some institutions send us three semesters worth of schedules at once. This allows students to plan a year and a half in advance, giving administrators early access to valuable demand data.

The next dropdown, located below Course Status is the Parts of Term dropdown. This is where (if the institution supports this) a student can decide which parts of term courses they are searching for. This applies to courses that run for only 3 weeks, or meet for only 8 weeks during a semester.

The next dropdown is the Campus filter, which allows the students to dictate which campus (or campuses) they are planning to take courses at.

We also have instruction mode, academic career and academic group filters not displayed here.

D: This is the Courses area. Here is where courses appear when a student adds a course into the Planner using the Add Course button. There are a few items in this area. Below the options column is a link to View/Edit. This is the area where students can go in and select / deselect individual sections of courses. The blue Info bubble is a hover, where the institution can display relevant information about the course to students. This includes information like the full course title, course level catalog information. (This area can also be customized to display additional information upon request.) The lock in this area shows whether a section has been locked or not (See A.5). The trash can is where the student can remove this course from the Courses list.

The View/Edit options area is pictured here:

**ACC 101 - Spring 2014**  
*Accounting Principles I*

**\*Please select the classes you wish to include.**

**Save And Close** **Cancel**

**Enabled Options**

<input checked="" type="checkbox"/>	Info	CRN#	Component	Seats Open	Instructor	Day(s) & Time(s)	Location(s)	Campus
<input checked="" type="checkbox"/>		50444	Lecture	3	Mattison, Brenda Lee	MWF - 8:00am - 8:55am	PK 142	Pendleton Campus
<input checked="" type="checkbox"/>		50445	Lecture	1	Mattison, Brenda Lee	MWF - 9:05am - 10:00am	PK 142	Pendleton Campus
<input checked="" type="checkbox"/>		50448	Lecture	15	Obloy, Michael John	TTh - 5:40pm - 7:05pm	PK 142	Pendleton Campus

E: This is the Breaks area. (this description refers to the screenshot above in the area marked “E”) Here students can enter times in which they do *not* want to take class for various reasons (work, athletic practice, taking the kids to/from school etc.). The days are displayed along with the times. A student can have as many breaks as they would like, though if they return no schedules when generating, we will flag the student and tell them to remove some breaks. These breaks also persist throughout terms. If a student were to use Schedule Planner and make a break and log in a year later, the break would still be there.

### Add Break

Breaks are times during the day that you do not wish to take classes.  
Please enter a break between 6am and 10pm.

Break Name:

Start Time: :

End Time: :

Days:

- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday
- ☐ Saturday
- ☐ Sunday

### Breaks

<input checked="" type="checkbox"/>	Name	Days	Time	<input type="button" value="Delete"/>
<input checked="" type="checkbox"/>	<a href="#">Soccer Practice</a>	TR	5:00pm to 7:00pm	<input type="button" value="Delete"/>

F: This is the Generate Schedules Area. Clicking the Generate Schedules button sets off our algorithm and returns all possible combinations of schedules to the student, which are displayed below. Clicking on the *view* button pops up an actual breakdown of the schedule pictured here:

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	ACC-101-50444		ACC-101-50444		ACC-101-50444
8:15	PK 142-Lecture		PK 142-Lecture		PK 142-Lecture
8:30	Mattison, Brenda Lee		Mattison, Brenda Lee		Mattison, Brenda Lee
8:45					
9:00	BIO-100-50267	BIO-100-50267	BIO-100-50267	BIO-100-50267	
9:15	MK 207-Lecture	MK 207-Lecture	MK 207-Lecture	MK 207-Lecture	
9:30	Sparace, Kathryn Francine	Sparace, Kathryn Francine	Sparace, Kathryn Francine	Sparace, Kathryn Francine	
9:45					
10:00	CTC-101-52095		CTC-101-52095		CTC-101-52095
10:15	PK 130-Lab		PK 130-Lab		PK 130-Lab
10:30	Carpenter, Tiffany Suzanne		Carpenter, Tiffany Suzanne		Carpenter, Tiffany Suzanne
10:45					
11:00					
11:15	Soccer Practice	Soccer Practice	Soccer Practice	Soccer Practice	Soccer Practice
11:30					
11:45					
12:00					
12:15					
12:30					
12:45					
1:00					
1:15					

Within this screen, you'll notice a *lock* icon. This lock can be clicked which will lock the section down, allowing the student to specify which *section* of the course they explicitly want to enroll in. If the section they lock happens to be a linked Lab, Lecture or Discussion, they will all be locked. More information about locking appears in section "A.5" below.

In this same screen, there is also a display above the schedule with important information about the courses within the schedule:

**\*You are viewing a potential schedule only and you must still register.**


More Info	CRN#	Subject	Course	Open Seats	Day(s) & Time(s)	Date	Location(s)	Campus	Credits
	50267	BIO	100	6	MTWTh - 9:05am - 10:02am	1/13/2014 - 4/24/2014	MK 207	Pendleton Campus	4
	50444	ACC	101	3	MWF - 8:00am - 8:55am	1/13/2014 - 4/25/2014	PK 142	Pendleton Campus	3
	52095	CTC	101	13	MWF - 10:10am - 11:05am	1/13/2014 - 4/25/2014	PK 130	Pendleton Campus	0
	50126	ENG	101	1	MW - 2:30pm - 3:55pm	1/13/2014 - 4/23/2014	OC 114	Pendleton Campus	3
	50285	BIO	102	5	TTh - 5:40pm - 7:05pm	1/14/2014 - 4/24/2014	FP 423	Pendleton Campus	4
	50286	BIO	102	5	W - 7:15pm - 10:15pm	1/15/2014 - 4/23/2014	FP 521	Pendleton Campus	0
									<b>14</b>

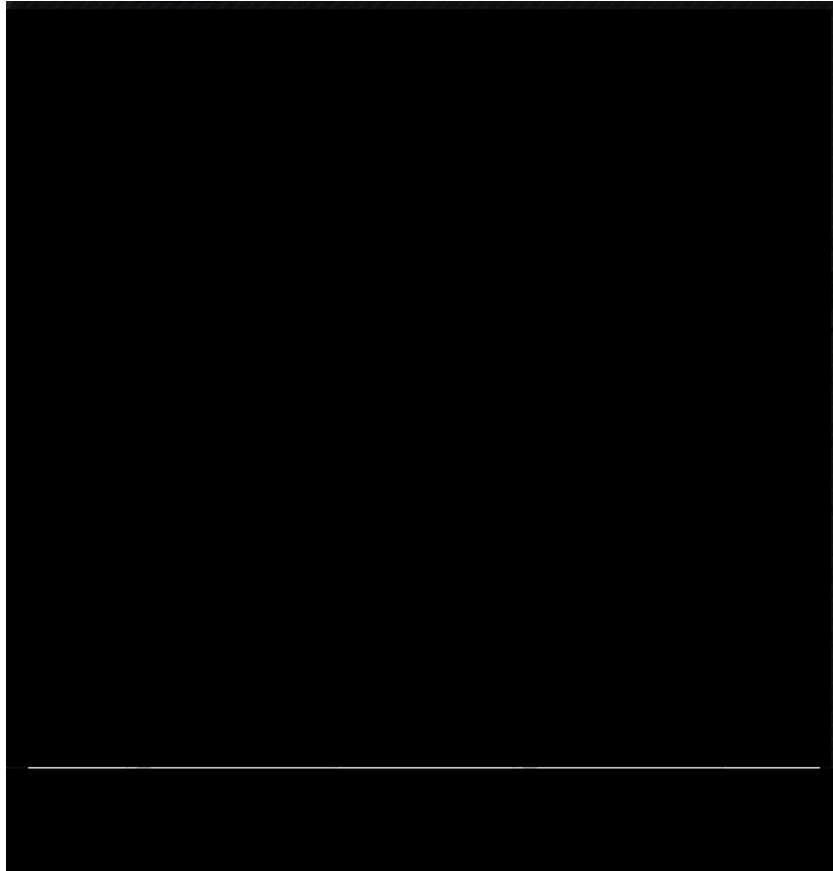
These are the options available to the student when viewing a schedule. The Send To Cart button sends the student's shopping cart back into PeopleSoft, where they can then register.

Back on the main page of the Schedule Planner, the magnifying glass is our preview feature, which gives the student a brief snapshot of what the schedule looks like without having to click the view button:

	ACC 101	CTC 101	ENG 101	
<input checked="" type="checkbox"/>	BIO 100	<input checked="" type="checkbox"/>	BIO 102	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	BIO 102	<input checked="" type="checkbox"/>	CTC 101	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	CTC 101	<input checked="" type="checkbox"/>	ENG 101	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	ENG 101	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
<b>Schedules</b>				
<input type="button" value="Generate Schedule"/>				
	#			
<a href="#">View</a>	1			
Soccer Practice, BIO-100, 50126, BIO-102-50285,5				

The check box is a way for a student to compare up to 4 schedules side by side. Hovering over the individual blocks in the compare will display info to the student as well:

	#	Compare			
Compare	Checkmark Up to 4 Schedules and Click "Compare"				# 1 <sup>x</sup> # 4 <sup>x</sup> # 6 <sup>x</sup> # 8 <sup>x</sup>
<a href="#">View</a>	1		<input checked="" type="checkbox"/>	Soccer Practice, BIO-100-50267, ACC-101-50444, CTC-101-52095, ENG-101-50126, BIO-102-50285,50286,	



On the back end of the Schedule Planner, administrators can log in and have access to various features:



## Basic



[Student Usage Reports](#)



[Student Usage Data Download](#)



[Course Demand Data Download](#)



[Course Demand By Section](#)



[Breaks Data Download](#)

## Advanced



[Manage Users](#)



[Sample Student Login](#)



[Diagnostics](#)



[Enrollment Optimization Engine](#)

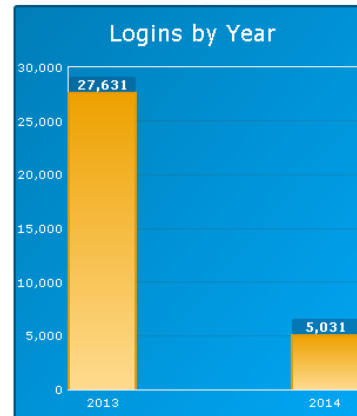
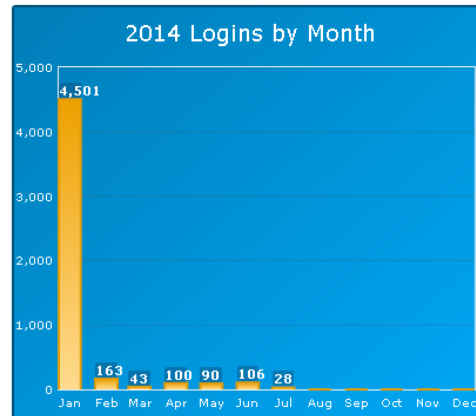
These features are: Student Usage Reports, Student Usage Data Download, Course Demand Data Download, Course Demand By Section, Breaks Data Download, Manage Users, Sample Student Login, Diagnostics, and our Patent Pending Enrollment Optimization Engine.

## Student Usage:

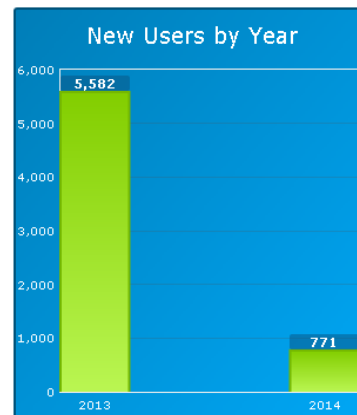
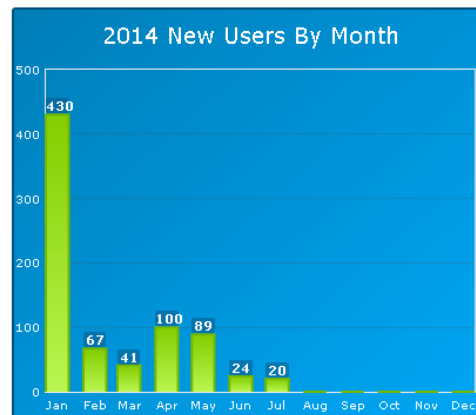
Total Unique Users: 6,353

Total Logins: 32,662

Select Year: 2014 ▼



Select Year: 2014 ▼



This area includes graphs about new user logins over time, as well as logins by month. This is a great way to evaluate the reach of schedule planner on campus.

Student Usage Data Download is the area where you can pull a .CSV report of the data represented in the Student Usage Report area.

## Course Demand Data Download:

In this area, administrators can pull reports in .CSV which shows student demand. This is the most powerful reporting area of our software. There are two reports, a summary report and a raw data report. The summary shows unique user course demand for an individual course, whereas the Raw Data



report shows which courses each individual user has 'demanded.' We define demanded as placed in the 'Add Course' area (IV.A.1.D). Example reports below:

#### Course Demand Summary:


A1		fx		Term		
	A	B	C	D	E	F
1	Term	Subject	Course Number	# of Students Requested		
2	Fall 2013	CPT	170	145		
3	Fall 2013	ENG	101	131		
4	Fall 2013	BIO	101	125		
5	Fall 2013	PSY	201	118		
6	Fall 2013	SPC	205	93		
7	Fall 2013	ART	101	85		
8	Fall 2013	ENG	102	77		
9	Fall 2013	MUS	105	75		
10	Fall 2013	MAT	120	73		
11	Fall 2013	SOC	101	73		
12	Fall 2013	MAT	102	70		
13	Fall 2013	RDG	100	64		
14	Fall 2013	MAT	101	62		
15	Fall 2013	HSS	205	57		
16	Fall 2013	ACC	101	57		
17	Fall 2013	MGT	101	52		
18	Fall 2013	CHM	110	50		
19	Fall 2013	MAT	32	47		

#### Raw Data:

H6		fx				
	A	B	C	D	E	F
1	Term	Subject	Course Number	Student ID	Date Modified	
2	Fall 2013	HSS	205	//ozL4cVAidkT/ewsN/csw==	8/12/2013 16:01	
3	Fall 2013	CPT	170	//ozL4cVAidkT/ewsN/csw==	8/12/2013 15:56	
4	Fall 2013	COL	105	//ozL4cVAidkT/ewsN/csw==	8/12/2013 15:56	
5	Fall 2013	ENG	100	//ozL4cVAidkT/ewsN/csw==	8/12/2013 15:53	
6	Fall 2013	MAT	101	//ozL4cVAidkT/ewsN/csw==	8/12/2013 15:53	
7	Fall 2013	NUR	111	/5WLTkR/O7aC5WSnCw7htA==	9/26/2013 7:37	
8	Fall 2013	ART	101	/5WLTkR/O7aC5WSnCw7htA==	10/10/2013 14:43	
9	Fall 2013	ECO	210	/7mSp8rqJBOWh3S03HMCLg==	8/13/2013 13:53	
10	Fall 2013	ENG	101	/7mSp8rqJBOWh3S03HMCLg==	8/13/2013 13:53	
11	Fall 2013	PSY	201	/7mSp8rqJBOWh3S03HMCLg==	8/13/2013 13:55	
12	Fall 2013	ENG	32	/BMw6lVvXyYlYesoh/6A7A==	8/12/2013 18:27	
13	Fall 2013	MAT	32	/BMw6lVvXyYlYesoh/6A7A==	8/12/2013 18:27	


Note that these student IDs will look like EMPLIDs for PeopleSoft.

The next report for administrative use is the Breaks Data Download. This report (again, can be pulled in .CSV) shows scrambled student ID's, times they've added into their 'Breaks' area (IV.A.1.E), and other information relating to the break.


I13      




	A	B	C	D	E	F
1	Student ID	Name	Days	Start Time	End Time	
2	//ApNm9ZrQcht2qLS345yw==	Family Time	MTWRF	1700	2200	
3	//ozL4cVAidkT/ewsN/csw==	hw days	TR	800	2200	
4	//ozL4cVAidkT/ewsN/csw==	no class time	MWF	800	900	
5	//ozL4cVAidkT/ewsN/csw==	work	MWF	1400	2100	
6	/4uNfvBtqxexolBp36h7qw==	break	MTWF	1600	2200	
7	/7mSp8rqJBOWh3S03HMCg==	morning	MTWRFSL	600	930	
8	/9bnHyCY525HutmfnlqwJA==	Work	MTWRF	1600	2200	
9	/A/gu4LTkxv8Nia0qaQNDQ==	Morning Break	MTWRF	800	1000	
10	/A9MeZPONTyUhwZqen1DBQ==	Work	MTWRF	1300	2200	
11	/bgySHEyvBvIofOHclAfTQ==	bran	MTWRF	1700	2200	
12	/bgySHEyvBvIofOHclAfTQ==	dfgh	F	800	2200	
13	/bP+obmxCvvEQEKWvfkGzQ==		1 MTWRF	1430	2200	
14	/HcEDYgYPJrDIVCzpxyIVg==	Work	MTWRF	1600	2200	
15	/hloIYHORfJMnDTI39mJyw==	work	MTWRF	1315	1700	

Below the Breaks Data Download is the Manage Users Area. This is where administrators can decide who has access to the admin area, as well as which permissions they will have.



## Add/Edit Users



	User	Permissions	
	<b>Brett Conner</b> brett@collegescheduler.com	<ul style="list-style-type: none"> <li>Student Usage Reports</li> <li>Student Usage Raw Data</li> <li>Course Demand Raw Data</li> <li>Enrollment Optimization</li> <li>Sample Student Login</li> <li>Diagnostics</li> <li>Enrollment Optimization Administration</li> <li>Admin Users</li> </ul>	
	<b>College Scheduler</b> devteam@collegescheduler.com	<ul style="list-style-type: none"> <li>Student Usage Reports</li> <li>Student Usage Raw Data</li> <li>Course Demand Raw Data</li> <li>Enrollment Optimization</li> <li>Sample Student Login</li> <li>Diagnostics</li> <li>Enrollment Optimization Administration</li> <li>Admin Users</li> </ul>	
		<ul style="list-style-type: none"> <li>Student Usage Reports</li> <li>Student Usage Raw Data</li> </ul>	

Below the Manage Users area is our Sample Student Login, where an administrator can log in as a student and see things from a student's perspective.

Below this area is the Diagnostics button. This page contains diagnostic information regarding the data that is received from PeopleSoft, as well as diagnostic tools for the gateway connections and SOAP actions being used by the data services. This page provides error reporting and configuration settings for the syncing of data between PeopleSoft and Schedule Planner.

## Client Administration Home

Peoplesoft State University



[Home](#) [Basic \(Reports + Data\)](#) [Advanced \(Manage Users And More\)](#)

[Edit Profile](#)



### PeopleSoft Diagnostics:

Automatic Updates (Every minute): ☒ ON ☐ OFF [Save Settings](#)

☒ All ☒ Big Updates ☒ Open Seats ☒ Include Empty Open Seats ☒ Other

Start    End    [Refresh Grid](#)

<div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>...</div> </div> <div> <div>Page size: 10</div> </div> </div> 21521 items in 2153 pages		
Start Date	End Date	Message
7/28/2014 1:34:04 PM	7/28/2014 1:34:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:33:04 PM	7/28/2014 1:33:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:32:04 PM	7/28/2014 1:32:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:31:04 PM	7/28/2014 1:31:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:30:04 PM	7/28/2014 1:30:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:29:04 PM	7/28/2014 1:29:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:28:04 PM	7/28/2014 1:28:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:27:04 PM	7/28/2014 1:27:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:26:04 PM	7/28/2014 1:26:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:25:04 PM	7/28/2014 1:25:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
<div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>...</div> </div> <div> <div>Page size: 10</div> </div> </div> 21521 items in 2153 pages		

Peoplesoft Integration Broker URL and SOAP Actions [View/Edit Settings](#)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Upon completion of the entry filter, the student can then begin to plan courses. The first step a student would take is adding their courses. This can be done in a couple of ways. They can simply select the courses from the dropdowns, they can import the courses from PeopleSoft's "My Planner", or they can add courses via Learning Community if supported by customer. (Additional customization required at no charge.) We are also able to utilize custom-made Degree Planners (clients we did this for are Arizona State University as well as University of Wisconsin-Madison).

The student then can add breaks, or times they are unable to take classes. Once a student has a schedule to their liking, they can lock courses by using the lock feature within the View Schedule page to further drill down into their desired schedule.

Finally, a student can go into the View/Edit area under the options column and select / deselect individual sections of courses. Students can also view disabled sections in this area as well. Disabled sections are sections that do not fit into the students schedule query due to time conflicts with breaks or other courses.

Once a schedule is complete, the student clicks "Send Schedule to Shopping Cart." This imports the courses the student has been planning for into the PeopleSoft delivered shopping cart, wherein the student can then hit register.

Once the student has completed registration, they are able to go back into Schedule Planner. If a student comes back in to Schedule Planner with a "Current Schedule" that they are already registered for, Schedule Planner pulls in this Current Schedule. This is a very fast way for a student to evaluate if a fourth or fifth, or even sixth course could be added into their schedule for the upcoming semester.

Items in the PeopleSoft shopping cart are also brought into Schedule Planner upon entry.

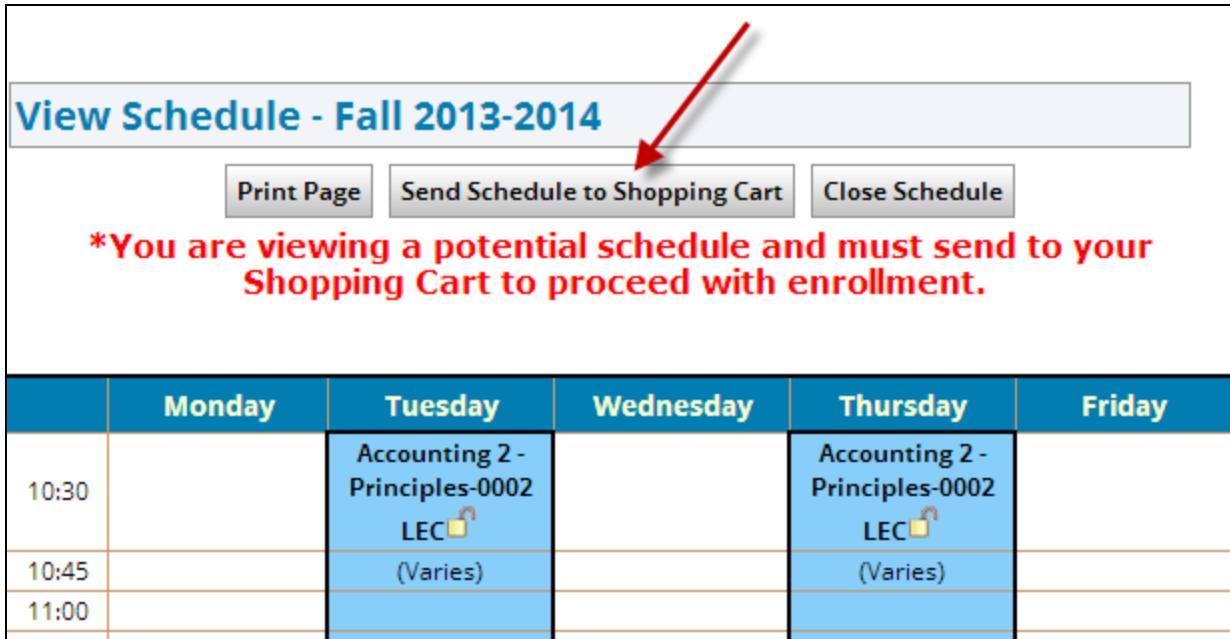
**Ease of Use:**

There is a Help Videos area at the top right of the main student page of the Schedule Planner which contains fully narrated videos in regards to Adding Courses, Breaks, Locks, and going into the View/Edit screen to modify individual sections.

This process, from a user who has never before even seen the software is very intuitive and will take less than 10 minutes to fully understand everything the planner has to offer, as well complete multiple schedule queries. There are text only equivalents to all of the schedule planner help videos available in the Section 508 compliant text only version of the software.

## A.2: Integration with PeopleSoft's Enrollment Shopping Cart and My Planner

Describe how the product integrates with PeopleSoft's Enrollment Shopping Cart and "My Planner".



**View Schedule - Fall 2013-2014**


Print Page   Send Schedule to Shopping Cart   Close Schedule

**\*You are viewing a potential schedule and must send to your Shopping Cart to proceed with enrollment.**

	Monday	Tuesday	Wednesday	Thursday	Friday
10:30		Accounting 2 - Principles-0002 LEC		Accounting 2 - Principles-0002 LEC	
10:45		(Varies)		(Varies)	
11:00					

When a student develops the schedule they desire, they can click on the "Send Schedule to Shopping Cart" button located at the top of the View Schedule screen. What this does is closes the Schedule Planner window, provides the student with an info page (below), and then imports the student's selected courses into PeopleSoft:

At the same time, the student is redirected back to their Enrollment area within the Student Center. It will then present the student with a message that says "You have a schedule pending from Schedule Planner. Please press the Import Cart button below to load your schedule into the enrollment shopping cart." (as seen above). Once this button is clicked, the student then begins confirming the import into PeopleSoft:

 **Thank you. Your schedule is now ready to be imported. Please follow the instructions below.**

**Instructions:**

1. Visit the 'Enrollment' page in Student Center to continue with enrollment.
2. Click the 'Import Cart' button.

my class schedule

class search

add

drop

Add Classes


1

2

3

**1. Select classes to add**

Put classes in your Shopping Cart and when you are satisfied with your class selections, proceed to step 2 of 3.

 You have a schedule pending from Schedule Planner. Please press the **Import Cart** button below to load your schedule into the enrollment shopping cart.

Autumn 2012 Semester | Undergraduate | The Ohio State University

Add a class using one of the following:

Search for Classes

search

----- OR -----

Enter Class Nbr

enter

----- OR -----

Schedule Planner Search

schedule planner

import cart

Autumn 2012 Semester Enrollment Shopping Cart

Your enrollment shopping cart is empty.

Close

{ 21 }

**Class Preferences**

ACCT 100-001
Lecture
Open

Permission Nbr

Session
Regular Academic Session

Career
Undergraduate

Grading
Graded

Units
3.00

Program
Liberal Arts Undergraduate

CANCEL

NEXT

Section	Component	Days & Times	Room	Instructor	Start/End Date
001	Lecture	MoWeFr 8:00AM - 8:50AM	Angel 102	Allison Brown	08/29/2011 - 12/09/2011

**NOTES**

**Class Notes**
This is a test note.  
A \$20 materials fee will be charged for this course to cover the cost of Social Work regulatory documents.

[Search](#)
[Plan](#)
[Enroll](#)
[My Academics](#)

[My Class Schedule](#)
[Add](#)
[Drop](#)
[Swap](#)
[Edit](#)
[Term Information](#)

go to ...

After all of the classes are imported, the student will be taken to this screen:

2011 Fall | Undergraduate | PeopleSoft University

Open
Closed
Wait List

**Add to Cart:**  
Enter Class Nbr  
   
**Find Classes**  
☒ Class Search  
☐ My Requirements  
☐ My Planner

**2011 Fall Shopping Cart**

Delete	Class	Days/Times	Room	Instructor	Units	Status
	<a href="#">ACCT 100-001 (2147)</a>	MoWeFr 8:00AM - 8:50AM	Angel 102	A. Brown	3.00	<span>Open</span>
	<a href="#">BIOLOGY 100-SR1 (1521)</a>	TBA	TBA	Staff	3.50	<span>Open</span>
	BIOLOGY 100-SR1A (1522)	TBA	TBA	Staff		<span>Open</span>
	BIOLOGY 100-SR1B (1523)	TBA	TBA	Staff		<span>Open</span>
	<a href="#">CHEM 103-100 (1231)</a>	Fr 3:00PM - 3:50PM	Angel 125C	Staff	4.00	<span>Open</span>
	CHEM 103-100A (1232)	Mo 4:00PM - 4:50PM	King 100	Staff		<span>Open</span>
	CHEM 103-100L (1233)	MoWeFr 1:00PM - 1:50PM	King 209	L. Baci		<span>Open</span>
	<a href="#">DANCE 110-1 (1045)</a>	MoWeFr 11:00AM - 11:50AM	King 308	D. Shalinger	3.00	<span>Open</span>
	<a href="#">FINANCE 3039-1 (1875)</a>	TuTh 8:00AM - 9:00AM	TBA	T. Hill		<span>Open</span>



Once the student clicks "Proceed to step 2 of 3", they are taken to the Confirm Classes screen:

## 2. Confirm classes

Click Finish Enrolling to process your request for the classes listed below. To exit without adding these classes, click Cancel.

2011 Fall | Undergraduate | PeopleSoft University

<div> <span>● Open</span> <span>■ Closed</span> <span>▲ Wait List</span> </div>						
Class	Description	Days/Times	Room	Instructor	Units	Status
ACCT 100-001 (2147)	General Accounting (Lecture)	MoWeFr 8:00AM - 8:50AM	Angel 102	A. Brown	3.00	●
BIOLOGY 100-SR1 (1521)	General Biology I (Lecture)	TBA	TBA	Staff	3.50	●
BIOLOGY 100-SR1B (1523)	General Biology I (Discussion)	TBA	TBA	Staff		●
BIOLOGY 100-SR1A (1522)	General Biology I (Laboratory)	TBA	TBA	Staff		●
CHEM 103-100 (1231)	Chem Structure and Reactivity (Laboratory)	Fr 3:00PM - 3:50PM	Angel 125C	Staff	4.00	●
CHEM 103-100A (1232)	Chem Structure and Reactivity (Discussion)	Mo 4:00PM - 4:50PM	King 100	Staff		●
CHEM 103-100L (1233)	Chem Structure and Reactivity (Lecture)	MoWeFr 1:00PM - 1:50PM	King 209	L. Baci		●
DANCE 110-1 (1045)	Beginning Dance Composition (Laboratory)	MoWeFr 11:00AM - 11:50AM	King 308	D. Shalinger	3.00	●
FINANCE 3039-1 (1875)	Personal Finance (Seminar)	TuTh 8:00AM - 9:00AM	TBA	T. Hill		●
<div> <span>CANCEL</span> <span>PREVIOUS</span> <span>FINISH ENROLLING</span> </div>						

Finally, the student clicks Finish Enrolling and are taken to the final confirmation page within PeopleSoft:

2011 Fall | Undergraduate | PeopleSoft University

<div> <span>✓ Success: enrolled</span> <span>✗ Error: unable to add class</span> </div>		
Class	Message	Status
ACCT 100	Success: This class has been added to your schedule.	✓
BIOLOGY 100	Success: This class has been added to your schedule.	✓
CHEM 103	Success: This class has been added to your schedule.	✓
DANCE 110	Success: This class has been added to your schedule.	✓
FINANCE 3039	Success: This class has been added to your schedule.	✓
<div> <span>MY CLASS SCHEDULE</span> <span>ADD ANOTHER CLASS</span> </div>		

From here, the student can go back in to Schedule Planner and add another course around their current schedule to see if it's possible to add on another course in the semester they are currently planning for.

### A.3: Help Videos and Tutorials

Describe any help tutorials or videos available to students.

There are a number of videos available to students. On the main schedule page there is a link to the Help Videos located towards the top right. This link can be seen in IV.A.1.B, and the list of videos are adding courses, breaks, locking sections and even going into the view/edit options page.

#### Help Videos

Play Video	Video Name	Length
<a href="#">Play Video</a>	<b>Beginner:</b> Schedule Planner Basics	2 min 50 sec
<a href="#">Play Video</a>	<b>Intermediate:</b> Using Locks to Narrow Down Schedules	1 min 1 sec
<a href="#">Play Video</a>	<b>Advanced:</b> Using Custom Course Options (Use course options to select specific instructors.)	1 min 26 sec

#### A.4: Blocking Times Off

Describe the ability to block time periods the student is not able to take classes for various reasons.

Students can add any breaks they desire simply by going to the Breaks area of the Schedule Planner (IV.A.1.E). The following screen is displayed, and the student can input relevant information about the break. Once the break is saved, it appears pre-checked in the student's Breaks area. These breaks persist among multiple log ins, allowing students to not lose any breaks they input over multiple semesters.

The screenshot shows a web application interface for managing breaks. The main window is titled "Edit Break 'Morning Job'". Below the title is a blue instruction box: "Breaks are times during the day that you do not wish to take classes. Please enter a break between 6am and 10pm." The form contains two sections: "Break Name:" with a text input field containing "Morning Job", and "Start Time:" and "End Time:" fields. Each time field has dropdowns for Hour, Minute, and Time (am/pm). The "Start Time" is set to 8:00 am and the "End Time" is set to 11:00 am. To the right of these fields is a "Days:" section with a "Select All Days" checkbox and checkboxes for each day of the week. "Tuesday" is selected. At the bottom of the form are "Save Break" and "Cancel" buttons. Below the main form is a smaller window titled "Breaks" with an "Add Break" button. It contains a table with columns for a checkbox, Name, Days, Time, and an edit icon.

	Name	Days	Time	
<input checked="" type="checkbox"/>	<a href="#">Morning Job</a>	T	8:00am to 11:00am	

## A.5: Locking Specific Sections

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### **A.7: How Do We Provide Course Demand Information?**

Describe how the system provides the University with course demand information.

Course demand data is accessible in the administrative area of the Schedule Planner. Below the student usage reporting areas are Course Demand reports. There are two reports available, Course Demand Summary and Course Demand Raw Data. The Course Demand Summary report generates a report that summarizes how many students are interested in each course per term. The Course Demand Raw Data report shows exactly which courses each student is interest in. This 2nd report is the data that the first (Course Demand Summary Report) is built from. There are also dedicated course demand reports for students who have “locked” particular sections and also a dedicated course demand report for students who have “unchecked” particular sections in the View Options screen.

Course demand data is also optionally delivered to PeopleSoft database tables by our automated demand data delivery system. This data is accessible from within PeopleSoft and is delivered on a nightly basis.

### **A.8: All Reports Available to the University**

Describe all reports available to the University.

Users that have been granted access to the Administration area have the ability to pull numerous reports. The way these reports are pulled are as follows: An administrator or person with access logs in to the administrative page. There, the user clicks on which type of data they are looking to pull, be it student usage, course demand data, or break data.

There are two areas to click for student usage reports. The top one is a page that displays basic graphs of student usage in terms of new users, total users, and total login statistics. The 2nd option allows the user to pull two .CSV reports, one being Raw Unique User Data, and the other being Raw Login Data. Raw Unique supplies the user with a report that displays unique students and the date they first accessed the Schedule Planner. The Raw Login Data produces a report that displays every time a user has accessed the system.

Below the student usage reporting areas are Course Demand reports. There are two reports available, Course Demand Summary and Course Demand Raw Data. The Course Demand Summary report generates a report that summarizes how many students are interested in each course per term. The Course Demand Raw Data report shows exactly which courses each student is interested in. This 2nd report is the data that the first (Course Demand Summary Report) is built from.

There are also dedicated course demand reports for students who have “locked” particular sections and also a dedicated course demand report for students who have “unchecked” particular sections in the View Options screen.

The final reporting option is Breaks Data Download. In this report you can view a list of all breaks that

students have created.

### A.9: Benefits for the University and the Student

Describe the benefits the University and student will receive by using this product.

The benefits of the Schedule Planner for both the University and the Student are quite large. On the Student side of things, students experience much less frustration when it comes to developing a schedule. This tool is very empowering to students as well, as it allows them to pick the schedule they want without having to sift through hundreds of possible combinations while essentially doing a massive math problem. This also helps students avoid the last minute scramble of discovering a section they wanted was full and having to opt for a class that doesn't necessarily suit their schedule as well, or even worse, the student gives up on that course all together that semester. By allowing students to find that fourth, fifth or even sixth course, the University and the student both realize the same goal: increased enrollment credit hours and increased graduation rates and speed to graduation.

The benefits mentioned above are heavily important to Universities. Across the nation, many institutions and systems of Universities have been developing campaigns such as Finish in Four or Fifteen Credit Semesters, where students are encouraged to take at least 15 credits per semester in order to finish in 4 years. If the University doesn't have access to our Demand Data, it is impossible to determine bottlenecks in course demand, where student's course demand is being unmet. By satisfying this demand, the University realizes an increase in Credit Hours taken, as well as an increase in graduation rates.

Another benefit that the University realizes is a decrease in the amount of server load when it comes time to Register for courses. Students are no longer pinging their PeopleSoft instances every few seconds doing course searches, as they are only searching for courses through our hosted Schedule Planner. The only interaction the student now has with PeopleSoft in terms of Registration is when the student approves the courses from the cart and then hits register.

The Schedule Planner also provides a benefit for the Advisors on campus. We absolutely feel that Advisors are an important part of the process and in no way intend to take them out of the picture. We also feel that since Advisors are so important, they do not need to be spending ten to twenty minutes of an advising appointment assisting a student with what is essentially a math problem of building a schedule. This is something much better suited for a computer algorithm. By building schedules with Scheduler Planner, the Advisor can focus on helping the student decide *which* courses to take, and not necessarily *when* to take them.

## B: Application Technology

### B.1: Anything Not Real-Time, and All Batch Processes

Describe any portion of your technology that is not real-time and list all batch processes.

Seat updates are made once per minute. This is done by a batch process that gathers current seat information from PeopleSoft. Changes to the full list of course offerings are made twice per day, also by batch process. The full course offering build can also be scheduled more frequently than twice a day by a PeopleSoft administrator without having to communicate that change with College Scheduler.

### B.2: Definitions of *Customizable* and *Configurable*

Define what *customizable* and *configurable* mean for your application.

Customizable items in Schedule Planner are modifiable in which data they display and the format that it is displayed in based on software changes made by College Scheduler based on specifications agreed upon between College Scheduler and the client during the implementation process. Configurable items in Schedule Planner are modifiable by the client based on the options inside College Scheduler's Settings area in PeopleSoft. This area includes a dropdown to control Advisor access: guest access, logging in as a student and using quick enroll, or simple email schedule functionality in which an advisor can email a student a potential schedule.

### B.3: Capabilities of the Application Administrator and Client Requirements

Describe capabilities of the application administrator including client requirements.

**Usage Reports** - The application administrator has access to all reports, including summary reports and raw data. The application administrator may also be granted access to the demand reports that are delivered to PeopleSoft by Schedule Planners automatic demand data delivery mechanism.

**User Management** - The application administrator is able to create new users, manage existing user permissions, and control user access to areas of the Administration area. The application administrator is also able to manage the permissions of users of the Enrolment Optimization engine.

**Sample Student Login** - The application administrator is able to launch Schedule Planner to simulate a student login, or an advisor login on behalf of a student.

**Diagnostics** - The application administrator is able to toggle Schedule Planner automatically updating each time it receives updates to its data feeds. They are able to see logs of the timing of data that has been updated in Schedule Planner.

**Gateways and SOAP actions** - The application administrator is able to configure the PeopleSoft gateways paired with their Schedule Planner environments and the SOAP actions they use. We provide a separate development, test, and production Schedule Planner environment to all customers and all

three are provided for the length of the contract.

**Enrollment Optimization Engine** - The application administrator is able to set the permissions of users of the Enrollment Optimization Engine. These permissions include the subjects and campuses under which a user is able to modify the listing priority that sections appear in the generated schedule results.

**College Scheduler Settings** - The application administrator is able to set options various options for use of Schedule Planner including the transmission of data between PeopleSoft and Schedule Planner, allowing student access, My Planner integration, and debug modes.

**Data Scheduling** - The application administrator is also able to specify terms that are sent to Schedule Planner as well as specify the schedule on which course builds and seat chances are generated.

The application administrator will require a web browser with internet access to access the settings areas for Schedule Planner. The application administrator will require proper PeopleSoft permissions to access the College Scheduler Settings panel and proper PeopleSoft permissions to access the PeopleSoft process manager, as well as permissions to access other areas of PeopleSoft to properly administer Schedule Planner, as defined by the client's business practices.





## B.4: Tools & Expertise Required to Support, Troubleshoot, Configure, & Customize


Describe the tools and expertise which university technical staff would use to support, troubleshoot, configure or customize the application.

Support and troubleshooting is accomplished through the diagnostics page in the Administration area. This page contains diagnostic information regarding the data that is received from PeopleSoft, as well as diagnostic tools for the gateway connections and SOAP actions being used by the data services. This page provides error reporting and configuration settings for the syncing of data between PeopleSoft and Schedule Planner.

### Client Administration Home





Peoplesoft State University









 Home **Basic (Reports + Data)** Advanced (Manage Users And More)  Edit Profile



## PeopleSoft Diagnostics:

Automatic Updates (Every minute): ☒ ON ☐ OFF [Save Settings](#)

☒ All ☒ Big Updates ☒ Open Seats ☒ Include Empty Open Seats ☒ Other  
Start    End    [Refresh Grid](#)

  1 2 3 4 5 6 7 8 9 10 ...   Page size: 10 21521 items in 2153 pages		
Start Date	End Date	Message
7/28/2014 1:34:04 PM	7/28/2014 1:34:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:33:04 PM	7/28/2014 1:33:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:32:04 PM	7/28/2014 1:32:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:31:04 PM	7/28/2014 1:31:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:30:04 PM	7/28/2014 1:30:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:29:04 PM	7/28/2014 1:29:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:28:04 PM	7/28/2014 1:28:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:27:04 PM	7/28/2014 1:27:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:26:04 PM	7/28/2014 1:26:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
7/28/2014 1:25:04 PM	7/28/2014 1:25:04 PM	Open Seat Inserts: 0 Open Seat Updates: 0 
  1 2 3 4 5 6 7 8 9 10 ...   Page size: 10 21521 items in 2153 pages		

Peoplesoft Integration Broker URL and SOAP Actions [View/Edit Settings](#)

Schedule Planner also has a settings page within PeopleSoft. This area is used to configure the integration status, sending of data, enabling and disabling for students, My Planner integration, advisor usage settings, as well as controlling which terms are sent to Schedule Planner, which PeopleSoft roles are able to use Schedule Planner, and various debug modes, directory and gateway settings.

College Scheduler Installation

### College Scheduler Installation Settings

Integration Enabled: ☒

Enable for Students: ☒

Debug: ☐

Enroll Requirements: ☒

My Planner: ☒

Incremental File Write: ☐

Private Key

Gateway ID

Catalog Nbr

Message Set Number       Msg Offset

Student Role

AE Directory

IB Directory

Advisor Usage

Personalize   Find      First 1-3 of 3 Last			
Term	Description	Active	
1 0670	2011 Fall	<input checked="" type="checkbox"/>	+ -
2 0680	2012 Spring	<input checked="" type="checkbox"/>	+ -
3 0710	2013 Fall	<input checked="" type="checkbox"/>	+ -

A PeopleSoft administrator is required to access the College Scheduler Settings in PeopleSoft to change active terms. Any PeopleSoft interface upgrades that College Scheduler provides will need to be installed by a PeopleSoft administrator. As part of our service, we provide our PeopleSoft developer via webinar to walk the institution through every step of the interface upgrade.

### B.5: Describe Other Customizations and Associated Costs

Describe other customizations available and associated cost, i.e., hourly and fixed fee.

Customizations that are within the scope and spirit of Schedule Planner are included in the initial setup fee of Schedule Planner and there are not additional costs associated with them. These customizations generally include minor cosmetic changes, changes to the data fields that are displayed to students, showing or hiding filters, and enabling or disabling features. Most customizations fall into this category.

In the event that a customization is deemed beyond the scope of Schedule Planner (such as building entirely new functionality into Schedule Planner that doesn't present opportunities for use at other institutions), College Scheduler would determine specifications for such a request and, if it was deemed necessary, a flat fee for those function(s).

## B.6: How Does Configuration and Customization Affect Future Releases?

Describe how configuration and customization will affect future releases of software.

Customizations to Schedule Planner requested by the client after the launch date are published in the development and test environments provided during the initial setup phase. These environments remain active year-round, for the life of the contract. After the customizations have been evaluated by functional and technical users and approved for production, College Scheduler publishes those changes to the live production server.

## B.7 How will JMU's E-mail Systems be Incorporated?

Describe how JMU's e-mail systems would be incorporated with your system's operation. (*Faculty/Staff – on-premise Exchange and students - Live@Edu*).

**N/A.** JMU's e-mail system(s) would not be incorporated into Schedule Planner.

## B.8: Third Party Emailing

Describe third party e-mailing, if this functionality is part of your solution. What messaging service is utilized by your system? Describe details of how messages look (*from, etc.*)

In advisor mode, the advisor has the ability to send potential schedules via e-mail. This is accomplished using our server-side e-mail system. Below is a screenshot of the standard e-mails sent in advisor mode. The fields sent in this e-mail are customizable.

noreply@collegescheduler.com

to me ▾

Your recommended schedule for the Summer Quarter 2014 term is below. You must log into your Student Center to place these course in your shopping cart and register. Class availability is subject to change depending on the time of your registration.

Subject	Course	Section	Class #	Open Seats	Day(s) & Time(s)	Date	Location(s)	Campus
Accounting 210	80	10024	16	M - 6:10pm - 10:00pm	6/23/2014 - 9/1/2014	SH C243	Main	
Accounting 211	80	10025	20	W - 6:10pm - 10:00pm	6/25/2014 - 9/3/2014	SH C243	Main	

## C: Reporting

### C.1: Approach / Strategy for ad-hoc Reporting

Describe application approach/strategy for reporting including the approach to ad-hoc reporting for power users as well as the occasional user.

Data is delivered to database tables within PeopleSoft. This data is accessible for PeopleSoft power users and IT staff in creating complex reports that may require additional data from other parts of the PeopleSoft application or data that is delivered to PeopleSoft by other third-party software. Ad-Hoc reporting can be done in whatever reporting environment the institution chooses, we simply deliver our demand to PeopleSoft tables and the institution can use those.

[REDACTED]  
[REDACTED]  
[REDACTED]

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[REDACTED]  
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[REDACTED]



Help videos are provided inside the user interface. These videos cover the Schedule Planner interface and guide users on how to navigate Schedule Planner through the complete process of scheduling. These videos are also accessible to faculty and support staff as training and reference resources.

## Help Videos

Play Video	Video Name	Length
<a href="#">Play Video</a>	<b>Beginner:</b> Schedule Planner Basics	2 min 50 sec
<a href="#">Play Video</a>	<b>Intermediate:</b> Using Locks to Narrow Down Schedules	1 min 1 sec
<a href="#">Play Video</a>	<b>Advanced:</b> Using Custom Course Options (Use course options to select specific instructors.)	1 min 26 sec

Technical staff are provided additional training in the form of setup webinars. These webinars are a live, guided installation of Schedule Planner, hosted by College Scheduler, for attendance by IT staff to install and set up Schedule Planner in the university student information system. IT staff is able to interact with and ask questions to the PeopleSoft developer provided by College Scheduler during this implementation process.

These training resources are provided as part of the Schedule Planner product, at no additional cost.

### D.2: Tertiary Services That May Be Included in Contract

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:

There are no tertiary services.

### D.3: Support Options, Responsibilities of Offeror, IT, and Customer

Describe the support options available through your company including on-going support of the application. Describe what portions of support to be performed by IT, the customer versus the vendor.

Future enhancements to Schedule Planner provided by College Scheduler are also provided a webinar with IT staff to install updates to the interface. These installation and upgrade webinars are provided at no additional charge. Customer is responsible for migrating Schedule Planner interface and enhancements between any additional environments that they might have. Custom migration and installation guides are provided for each customer for each future enhancement as well as initial installation at no additional charge.

#### **D.4: SLA of Support Provided to End-Users**

If support is provided to end-users directly as part of your services, provide the SLA under which you would operate.

College Scheduler does not provide support for the actual student end-users. The institution can contact the support team if any issues arise, please see our attached SLA.

See attachment D.

### **E: General**

#### **E.1: Typical Implementation Time and Project Plan**

Describe typical implementation timeline and project plan and include examples of previously used project plans.

Our standard implementation time frame is 4 weeks. The great majority of that time is spent with university functional users evaluating the system before go-live. Implementations have been completed and open for use by students in as little as one week. Project time frames depend on the client's needs.

#### **E.2: Approach to Test and Production Environments**

Describe your approach to test and production environments including licensing requirements and any additional costs.

Development, test, and production servers hosting independent instances of Schedule Planner are all provided at no additional cost, including no additional licensing costs. Development and test servers are kept up year-round for training and testing purposes. These hosted instances of Schedule Planner are paired with client development, test, and production PeopleSoft instances. Builds, changes, and updates (barring hot-fixes deemed critical by College Scheduler) are published to development and test servers for evaluation by technical and functional users prior to being moved into production.

#### **E.3: Accessibility Including WATG**

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)**.

College Scheduler provides a full text-only version of the student scheduling planning software that complies with all Section 508 federal requirements. We do not have images, AJAX requests, or Javascript-only features in our accessible version of our software. The text-only version complies with the Technical and Ease of Use guidelines outlined by the Web Accessibility and Template Guide provided by VADSA. (<http://www.w3.org/TR/WCAG10/>) We regularly test the Section 508 Text only area of our site to construct the detailed VPAT documents that we provide.

Please see the attached documentation for information regarding accessibility testing. These documents include:

VPAT - Schedule Planner 2.0.1 - Admin Area.pdf

VPAT - Schedule Planner 2.0.1 - Standard Version

VPAT - Schedule Planner 2.0.1 - Text Only Version

See attachment E.

Below are several screen shots from our text-only version of Schedule Planner.

## Main Navigation

[Step 1: Options](#)[Step 2: Courses](#)[Step 3 \(Optional\): Breaks](#)[Step 4: Generate Schedules](#)[Help](#)[Log out](#)

### Select Courses

Instructions: Please checkmark all courses you want in your schedule.

[Add Course](#)

<input checked="" type="checkbox"/>	Accounting 100	<a href="#">Information</a>	<a href="#">View Sections</a>	<a href="#">Delete Course</a>	
<input checked="" type="checkbox"/>	Chemistry 103	<a href="#">Information</a>	<a href="#">Unlock Class</a>	<a href="#">Lock Info</a>	<a href="#">Delete Course</a>
<input checked="" type="checkbox"/>	Dance 110	<a href="#">Information</a>	<a href="#">View Sections</a>	<a href="#">Delete Course</a>	
<input checked="" type="checkbox"/>	Finance 3039	<a href="#">Information</a>	<a href="#">View Sections</a>	<a href="#">Delete Course</a>	
<input checked="" type="checkbox"/>	Latin 110	<a href="#">Information</a>	<a href="#">View Sections</a>	<a href="#">Delete Course</a>	

[Previous Step: Select Options](#)[Next Step \(Optional\): Select Breaks](#)[Next Step: Generate Schedules](#)

[Go Back to Non-Accessible Schedule Planner](#)

## Add Course

Select Subject:

Choose this Subject

Cancel

## Main Navigation

Step 1: Options

Step 2: Courses

Step 3 (Optional): Breaks

Step 4: Generate Schedules

Help

Log out

## Select Breaks

Add Break



The break, Soccer Practice, is on Tuesday and Thursday from 1:00pm to 3:00pm

Edit Break

Delete Break

Previous Step: Select Courses

Next Step: Generate Schedules

Go Back to Non-Accessible Schedule Planner

## Main Navigation

[Step 1: Options](#)[Step 2: Courses](#)[Step 3 \(Optional\): Breaks](#)[Step 4: Generate Schedules](#)[Help](#)[Log out](#)

## Select Schedule

[Generate Schedules](#)

Generated 10 schedules.

- |                                  |   |
|----------------------------------|---|
| <a href="#">View Schedule 1</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 001, Lat 110 section(s) 1, Finance 3039 section(s) 1, |
| <a href="#">View Schedule 2</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 001, Lat 110 section(s) 1, Finance 3039 section(s) 2, |
| <a href="#">View Schedule 3</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 001, Lat 110 section(s) 1, Finance 3039 section(s) 3, |
| <a href="#">View Schedule 4</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 001, Lat 110 section(s) 2, Finance 3039 section(s) 1, |
| <a href="#">View Schedule 5</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 001, Lat 110 section(s) 2, Finance 3039 section(s) 2, |
| <a href="#">View Schedule 6</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 002, Lat 110 section(s) 1, Finance 3039 section(s) 1, |
| <a href="#">View Schedule 7</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 002, Lat 110 section(s) 1, Finance 3039 section(s) 2, |
| <a href="#">View Schedule 8</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 002, Lat 110 section(s) 1, Finance 3039 section(s) 3, |
| <a href="#">View Schedule 9</a>  | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 002, Lat 110 section(s) 2, Finance 3039 section(s) 1, |
| <a href="#">View Schedule 10</a> | Chemistry 103 section(s) 100, 100A, 100L, Dance 110 section(s) 1, Acct 100 section(s) 002, Lat 110 section(s) 2, Finance 3039 section(s) 2, |

[Previous Step \(Optional\): Select Breaks](#)[Previous Step: Select Courses](#)[Go Back to Non-Accessible Schedule Planner](#)

### E.4: Relationship with Any Third Party Vendors

Describe your relationship with the vendor(s) of any third party tools included in this proposal including licensing, costs, support for the product(s), and versions (*e.g. full or modified*).

No third party tools are included or offered in this proposal.

### E.5: Strategic Relationship with Customer

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.

Schedule Planner is an evolving tool that draws from the ideas and practical enhancements created for the clients it serves. A successful relationship to College Scheduler is one where clients are served by the most effective tool possible. This is accomplished by creating enhancements and new features that are a direct result of interaction between College Scheduler and our clients.

We regularly develop new and innovative features in partnership with the clients we serve. These relationships are greatly beneficial to both parties as we are able to create an even more feature-rich product and provide those new features back to the clients we developed them in partnership with, as well as our other clients through our yearly release program.

The development relationship between College Scheduler and clients begins with a feature or enhancement that a client or group of clients want. Through our truly excellent relationships with our clients, we are able to partner in developing these new ideas. We welcome new clients into this group of development partners to provide each other with mutual benefit!

#### **E.6: Active User Groups and Functions**

Describe active user groups and how they function.

College Scheduler is hosting our second annual User Group Conference in October of 2014. The user group conference is open to all College Scheduler customers and it consists of two days of presentations regarding the best way to utilize College Scheduler, product roadmap feedback directly from our customers, and social gatherings to get to know our customers more personally.

#### **E.7: Licensing**

Describe licensing. If licensing is based on number of users, describe the models used to obtain numbers both for current and future usage.

20k/yr minimum to 40k/yr maximum based on \$2/student/yr.

[REDACTED]

[REDACTED]

[REDACTED]

## **F.2: Toolsets From Which Application is Derived**

Describe the toolset from which your application is derived.

We use ASP.NET 4.5 for our web server application code and we use SQL Server 2012 for our database layer. Our code base is maintained in a private source control repository using “Git” source control. We use NUnit for unit testing our application framework and we use an on-site, behind the firewall Atlassian product called JIRA for project management.

## **F.3: Hardware and Software Requirements**

Describe hardware and software requirements for the proposed system(s) along with any sizing assumptions made to arrive at those requirements.

The Schedule Planner application is fully hosted and has no requirements other than PeopleSoft 8.9/9 and integration broker enabled. It has been designed to work with all modern web browsers including Google Chrome, Mozilla Firefox, Internet Explorer (version 8 and higher) and Safari

## **F.4: Supported Server Hardware / Virtualized Platforms**

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?

Schedule Planner is fully hosted by College Scheduler in the Dallas Fort Worth datacenter owned by Rackspace, Inc. (RAX). The Schedule Planner interface requires PeopleSoft 8.9 or 9+ and later to function. This makes Schedule Planner completely independent of hardware and software requirements.

## **F.5: Scalability**

Describe how scalability is accomplished as the criticality of the system(s) and number of users increase.

Our application server clusters can be expanded to multiple nodes as the load is scaled up on the systems. We always have at least 3 application server nodes for each customer facing application. Our database servers are monitored at all times for resource usage and have the ability to be upgraded without downtime. As the number of users increase, it's a simple matter of adding another web server and adding that web server to the load balancer pool.

## **F.6: Average Client Response Time**

Describe the average client response time for all the various functions of the proposed system.

Our average client response time is 3 seconds or less for all operations.



### **F.7: Services Not Available During Scheduled Maintenance**

Describe services not available during scheduled maintenance.

All web servers are highly available and all database servers are highly available. During maintenance (such as installing OS patches) only one of the nodes is down at a time so there is no downtime. The only exception to this is an up to 10 second time window in which we update the institution's software to add a feature or customization or fix an issue. In that case, the user's session is still maintained (they are not logged out) and they receive a friendly message if they issue a request in those 10 seconds.

### **F.8: Client Operating System and Browser Requirements**

Describe the client operating system and browser requirements for your application. List any additional client-side software required for development/management of your toolset.

**All modern web browsers are supported, Internet Explorer 7 and below are not supported. Chrome, Firefox, IE 8+, Safari, iPhone and Android native browsers are all supported.**

### **F.9: Any Application Aspects Not Supported By Macintosh**

Describe any aspects of your application that do not support the Macintosh. Describe any changes to default browser or client security settings.

N/A. Schedule Planner is a hosted software solution with single sign on from PeopleSoft.

### **F.10: Functionality Loss & Other Difficulties If Ran Using Regular User Account**

Describe any functionality loss, installation problems, upgrade problems, or other difficulties if client applications are run using a regular user account.

N/A. Schedule Planner is a hosted software solution with single sign on from PeopleSoft.

### **F.11: Mobile Technology Support**

Describe your support for mobile technologies including technology used, distribution method, functionality, integration and development toolset and security.

Schedule Planner software functions on smart phones with standard web browsers and internet access. It is not distributed.

### **F.12: SLA**

Describe your to stay current with versions of software utilized by your product.

You will find our Service Level Agreement (SLA) attached to this RFP.

See attachment D.

### F.13: Compatibility Matrix

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.

Schedule Planner is a hosted application that is available over the internet. A device with a connection to the internet and a compatible browser is required to use Schedule Planner. Virtual environments like Citrix® and VMware® may not fully support all of the functionality in Schedule Planner for all types of configurations.

#### Browser settings

All browsers must have cookies and JavaScript enabled to use Schedule Planner

**Schedule Planner Compatibility Matrix**

System	IE 8 and higher	Google Chrome	Safari	Mozilla Firefox
Windows 7	Supported	Supported	Supported	Supported
Windows 8	Supported	Supported	Supported	Supported
Windows 8.1	Supported	Supported	Supported	Supported
Windows Phone 8	Supported	Supported	Not Applicable	Supported
Windows Phone 8.1	Supported	Supported	Not Applicable	Supported
Android 4.1x	Not Applicable	Supported	Not Applicable	Supported
Android 4.2x	Not Applicable	Supported	Not Applicable	Supported
Android 4.3x	Not Applicable	Supported	Not Applicable	Supported
Android 4.4x	Not Applicable	Supported	Not Applicable	Supported
MAC OS 10.6	Not Applicable	Supported	Supported	Supported
MAC OS X 10.7	Not Applicable	Supported	Supported	Supported
MAC OSX 10.8	Not Applicable	Supported	Supported	Supported
MAC OSX 10.9	Not Applicable	Supported	Supported	Supported
IOS 4.0	Not Applicable	Supported	Supported	Supported
IOS 5.0	Not Applicable	Supported	Supported	Supported
IOS 6.0	Not Applicable	Supported	Supported	Supported
IOS 7.0	Not Applicable	Supported	Supported	Supported

### F.14: Support for Real-Time Access to Data

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*).

No direct connections to our database are allowed. Our systems are on a private network segment that is unavailable to the public internet. Our automated course demand delivery system makes nightly data deliveries to PeopleSoft tables. From within PeopleSoft, actions can be triggered to deliver of all reports to PeopleSoft tables in real time. Real-time course data is also kept available via the download links in the Administration area.

### **F.15: Support for Integration With Customer's Existing Systems**

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.

Schedule Planner is an Integration Broker hosted web service using the PeopleSoft Service Listening Connector. This is the only connector.

### **F.16: Support for Application As Part of the PeopleSoft Application Portal**

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 security for Schedule Planner is not linked to PeopleSoft authentication so there is no need to support or include any SSO technologies used by the customer. In regards to the support for including Schedule Planner as part of the PS Portal, this is not applicable. Schedule Planner is an external application that opens in a separate browser window and is not included as part of the PS Portal.

### **F.17: Support for Web Services / Service Oriented Architecture**

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.

Our product uses a simple web service communication on the standard Integration Broker interface that is built into PeopleSoft. We do not use Java for any of our technologies and there are no other backend web service operations. Everything goes through the standard integration broker and conforms to the specifications required by PeopleSoft.

### **F.18: Ability to Create Consumable Web Standards and Pulling XML Based Content**

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.

Through our automatic course demand delivery mechanism, we push data to PeopleSoft database tables in a secure fashion. We do not open any services for an outside party to pull data.

### **F.19: Operational Monitoring and Reporting Capabilities**

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*).

Administration users are able to access the diagnostics area of Schedule Planner to monitor traffic between PeopleSoft and Schedule Planner. Demand reports are available to monitor usage, and are also

available through the Administration area. These services are accessed using a web browser and internet connection.

Server metrics and storage data are private and are not available to clients.

## **G: Security**

### **G.1: Authentication Before Gaining Access to Data and Services**

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.

There is no support for directly connecting to our database. All database servers are behind the firewall and not publically accessible in any way. There is a password protected administrative area where usage and course demand reports can be downloaded in spreadsheet format.

### **G.2: Authorization Credentials to Make Authorization Decisions**

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.*).

Our admin area currently uses a separate email and password and does not integrate into LDAP or Active Directory. The password screen is protected by SSL and permissions are managed within the admin area in the “Manage Users” screen.

### **G.3: Auditing and Logging Capabilities and Data**

Describe auditing and logging capabilities and data. Include the information recorded with each event.

The logging capabilities are contained in the student usage reports logins and course demand data. This information is accessed through the admin area and is also delivered to PeopleSoft tables on a nightly basis.

### **G.4: Effects of Auditing and Logging On a Production Implementation**

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.

Auditing and logging capability is built into the product. All student actions result in information being recorded (desired courses, desired breaks, etc). Data logs are all delivered to PeopleSoft database tables in addition to being made available in the Administration area. There is no significant performance impact to delivering this data to PeopleSoft.

## **H: Maintenance and Support**

### **H.1: Offeror's Maintenance Philosophy**

Describe the maintenance philosophy including frequency of updates, approach to completing updates, and model for obtaining them.

Schedule Planner features are offered on a yearly release schedule. At times new features are offered in between yearly releases. Features can be previewed before being moved into production by installing them into the development and test servers for evaluation. Once a feature is deemed ready for production by the client, that feature is then applied to the production environment.

### **H.2: Capabilities of Remote Support**

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.

Remote support is available in the event that support is needed by customer IT staff. We provide a PeopleSoft developer to participate in a webinar with the client, when appropriate. In this event, the webinar and developer are provided free of charge. Remote support is provided from within the United States and is available as part of our service, at no additional cost.

There are no additional (paid) maintenance options or tiers.

### **H.3: Services That May Be Required Not Covered Under Maintenance Contract**

Describe services that may be required in the normal course of operating the system that are not covered under the maintenance contract.

We have never encountered a situation in which we had to charge a customer for support. All support and maintenance is included in the yearly service fee.

### **H.4: Maintenance Costs for First Year & Additional Five(5) Years**

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.

The proposed pricing plan is calculated as:

One time set-up fee of \$5,000. This includes all future maintenance and consulting costs.

\$2.00 / Student with a Maximum Price Per Year of \$40,000 and a Minimum Price Per Year of \$20,000.

At the time of writing of this proposal, a Q3/Q4 Discount is in effect for 10% off the yearly price. Since Customer qualifies for the maximum price of \$40,000 (according to the student headcount delivered to us by Customer of 20,200), with the discount the yearly price is \$36,000 (.9 of \$40,000).

Therefore, Year 1 Price is \$5,000 Setup + \$36,000 yearly = \$41,000.

Year 2 - \$36,000

Year 3 - \$36,000

Year 4 - \$36,000

Year 5 - \$36,000

#### **H.5: Procedures for Obtaining All Types of Maintenance**

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.*)

All support is available through e-mail or phone call directly to College Scheduler. We provide e-mail addresses of our development team as well as support phone numbers. All customers and IT staff will be in contact with the Project Manager responsible for the delegation and resolution of all issues regarding Schedule Planner. The most highly-qualified staff are always assembled to resolve an issue that may arise. In the event that an issue is not able to be resolved using the intended strategy, or is unable to be accomplished in a timely manner, the Project Manager can be notified in order to develop a new strategy to resolve the issue.

#### **H.6: Continuing Research and Development to Detect and Correct Problems**

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.

We are constantly looking to improve the software in terms of receiving feature requests and optimizing the response time of the system. This is handled by a dedicated R&D team that makes up a portion of our total software development staff. (See H.10 for additional detail)

#### **H.7: Offeror's Approach to Security Reviews During Development Lifecycle**

Describe your approach to security reviews during each phase of the software development lifecycle.

We constantly run through all functions of the software to ensure new features are not vulnerable to cross site scripting, SQL injection, etc. In addition, we are a customer of White Hat Security which scans our software for vulnerabilities. We use the WhiteHat Sentinel Standard Edition software and it is attached. ("Sentinel List of Tests- We Use Standard Edition (SE).pdf")

See attachment F.

#### **H.8: Offeror's Approach to Delivering New Information On Issues Found at Other Customers**

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.

If a system problem is noticed at another customer and we determine that it affects multiple customers, we will push a maintenance patch to the software which results in 10 seconds or less of downtime. This is done outside of normal business hours. If the problem involves the PeopleSoft interface, our PeopleSoft developer will email IT the patch and is available free of charge for a webinar to update the interface.

#### **H.9: Offeror's Procedure to Handling Upgrades**

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.

Updates and upgrades to Schedule Planner do not impact any customer desktop computers, etc. All software is hosted in the cloud. Any patches and fixes (outside of PeopleSoft interface code) are handled by College Scheduler. Any updates to the PeopleSoft side code are handled by delivering the patch or update source code to IT staff as well as documentation on how to install the updates. When necessary, a webinar and PeopleSoft developer will be provided to the customer at no additional charge to assist in installing new software. New features are offered on a yearly basis.

#### **H.10: System Enhancements for Release In Next 12 Months**

Describe the nature of system enhancements in development that are scheduled for release in the next twelve months.

Within the next 12 months we intend to release updates to improve mobile and tablet functionality. These updates will bring responsive support to the Schedule Planner application to greatly improve functionality and usability to tablet and mobile devices. This new responsive design will come with a redesigned interface to improve end user bandwidth requirements.

#### **H.11: Responsibilities of Offeror and Customer**

Describe all responsibilities of both the contractor and James Madison University in the isolation and diagnosis of system failures.

The customer is responsible for maintaining the diagnostics area of Schedule Planner to monitor any changes that might occur in the data feed they are sending to Schedule Planner. The customer is also responsible for maintaining the College Scheduler Interface within PeopleSoft, including the batch process scheduling. The customer is also responsible for making available their most current scheduling information through the PeopleSoft Integration broker at all times. The customer is also responsible to

maintain reasonable availability for resolving issues.

College Scheduler will be responsible for monitoring data feeds, the hosted portion of the Schedule Planner software, and user interface.

## **H.12: Escalation Procedure**

For issues not resolved in a timely manner or responded to within the timeframes outlined in the attached SLA, those items may be escalated. In order to escalate an issue, an e-mail or phone call to the project manager should be placed in order to explain the situation and the requirements that should be met for the issue to be escalated. Contact information for the project manager will be provided as part of the support information during the project planning and initial kickoff phase.

See attachment D.

## **I: Hosted Applications**

### **I.1: Geographic Location of Services and Data Storage**

Describe where services and data storage are located geographically.

Our entire infrastructure is located in the Dallas Forth Worth data center owned by Rackspace, Inc.

### **I.2: How Are Applications Secured Inside Offeror's Firewall**

Describe how applications are secured inside your firewall.

All web and databases servers are inside a private network behind our firewall. There is no public IP address assigned to any web or database server. The only way to get to any servers is to VPN to our Cisco firewall device. Access to the servers is done via encrypted remote desktop sessions once you have VPN's into our private network in the DFW data center.

### **I.3: Offeror's Approach to Hosting Applications on Servers**

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.

All web applications run in their own Internet Information Services Website. That means that all objects residing in memory are in separate dedicated containers for each university. On the database layer, every university has their own database and their own security credentials for that database. So at both the web layer and database layer each customer is partitioned separately. Our firewall devices and load balancer devices are shared across all universities. The servers that provide the IIS Websites are all dedicated to College Scheduler and not shared with any other Rackspace customers.



#### **I.4: Network Layer Security**

Describe the network layer security you provide.

The entire application is protected with SSL. We provide the SSL certificates free of charge. Communication between our web and database servers takes place inside of our private network and not the public internet.

#### **I.5: Methodology for Handling Patches and Software Updates**

Describe your methodology for handling patches and software updates.

We install operating system updates monthly on our web servers and database servers. It's a very simple process, they are all running Windows Server and Windows Update provides the updates automatically. In addition, if a restart is required after an update is installed, there is always at least one server that remains online in each load balancing pool so that there is zero downtime.

#### **I.6: Approach to Screening Employees and Level of Experience**

Describe your approach to screening employees and the level of experience preferred.

We contact all employee references and we prefer to have software developers with a minimum of 5+ years industry experience. All of our current software developers meet or exceed that 5 year requirement.

#### **I.7: Approach to Tracking Attacks**

Describe how you track attacks. Describe your approach to informing JMU about attacks.

We have a dedicated Alert Logic Threat Manager device that monitors traffic through our infrastructure. (<https://www.alertlogic.com/products-services/threat-manager/>)

If a data breach did occur (keep in mind it would only be Student IDs that are readable, all other student info is AES 256 encrypted at all times in our database.) then we would notify our customers (JMU) within 48 hours of the incident.

#### **I.8: Audit and Security Infrastructure Testing Processes & Frequency**

Describe the audit and security infrastructure testing process you utilize and the frequency of those audits/tests.

Datacenter procedures are handled by Rackspace. Please see their attached SOC 2 report for information regarding audits, security and infrastructure testing.

See attachment G.

### **I.9: Approach to Security Reviews During Each Phase of Development Lifecycle**

Describe your approach to security reviews during each phase of the software development lifecycle.

Any changes to code that revolve around the packet of student information that we have are subject to code review. This part of the application is very clear and segmented, the data is always stored encrypted at rest. In addition, we are a customer of White Hat Security which scans our software for vulnerabilities. We use the WhiteHat Sentinel Standard Edition software and it is attached. ("Sentinel List of Tests- We Use Standard Edition (SE).pdf")

See attachment F.

### **I.10: Vulnerability Detection and Response Process**

Describe the vulnerability detection and response process surrounding your product and hosting infrastructure. Describe your patch release strategy for problems found.

If a vulnerability is detected (through our WhiteHat security scanner service or via a code review or customer support request) we have the ability to patch customer systems at any point in time, even during the day while students are using the system. (We haven't had to do this, but it's good to know that we do have the ability to do this with only 10 seconds of downtime and students will maintain their active sessions and not be logged out.)

### **I.11: Penetration Test and Vulnerability Scan Results**

If hosted, provide results of the latest penetration test and vulnerability scan performed on your system.

We do not have a penetration testing plan in place. We only have ports 80 and 443 open to our web servers and they are behind a firewall with no public IP addresses. We have a dedicated Alert Logic Threat Manager device that monitors traffic coming through our infrastructure.  
(<https://www.alertlogic.com/products-services/threat-manager/>)

### **I.12: Physical and Cyber Data Center Security**

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.

Rackspace Data centers feature redundant Heating Ventilation Air Conditioning (HVAC) units which maintain consistent temperature and humidity (SOC2.01). HVAC systems are inspected regularly and air filters are changed as needed. Redundant lines of communication exist to telecommunication providers providing Rackspace customers with failover communication paths in the event of data communications interruption (SOC 2.02).

Data centers are equipped with fire detection and suppression systems (dry-pipe, pre-action water-based in DFW1, DFW2, IAD1, IAD2 and LON3; Hi Fog Nitrogen in LON1; FM200 gas system in Hong Kong), and fire extinguishers (SOC 2.05). Fire detection systems, sprinkler systems and chemical fire extinguishers are inspected at least annually (SOC 2.06). Data center and office facilities are equipped with uninterruptible power supplies (UPS) to mitigate the risk of short-term utility power failures and

fluctuations (SOC 2.07). The UPS power subsystem is at least n+1 redundant with instantaneous failover in the event of a primary UPS failure. The UPS systems are inspected and/or serviced at least annually by a third party contractor (SOC 2.08). Data center and office facilities are equipped with diesel generators to mitigate the risk of long-term utility power failures and fluctuations (SOC 2.09). Generators are run at least every 120 days and maintained at least annually by a third party contractor to maintain appropriate operability in the event of an emergency (SOC 2.10) (E).

Physical access to Rackspace locations is secure to prevent unauthorized access to system resources. Rackspace has data in eight data centers and numerous offices globally, and all offer a secure environment. Proximity cards are used at Rackspace facilities to appropriately secure access to specific areas and building access (SOC1.1). Only authorized Rackspace personnel have access to data center facilities (SOC2.14), but not all employees have access to sensitive parts of the data center. The data center floor is sectioned off from the rest of the facility, and two factor authentication is used to gain access to sensitive areas of the data center facilities (SOC2.13). This access is role-based and limited to critical personnel only. To further protect from unauthorized access, close circuit video surveillance has been installed at all entrance points on the interior and exterior of the buildings housing data centers and is monitored by authorized Rackspace personnel (SOC2.15). These videos are saved for up to 90 days for review of any incidents.

Rackspace protects its network and customers from infection by computer viruses, malicious code and unauthorized software through the use of anti-virus and ISOC tools. The ISOC monitors traffic coming into Rackspace in real-time and is staffed 24/7/365. This traffic is analyzed by tools to help reduce the chance that viruses and attack e-mails infect the network. If Rackspace is attacked and bypasses the ISOC preventive controls, other tools are in place to detect the breach and the incident response procedure kicks into action. To help protect the business and customers from this type of breach, anti-virus protection is used to scan servers for viruses; and, if infected files are found, then the server configures alerts at the console for customers that have selected the AV option (SOC3.5). Rackspace considers internal systems as a customer of the anti-virus team to ensure the process is working correctly and problems are found early before it can impact external customers negatively. To help ensure anti-virus is working properly, Rackspace maintains current virus signature updates.

Please see the attached Rackspace SOC2 report for information on this topic.

See attachment G.

### **I.13: Ownership of Customer Data**

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.

Clients own their data that resides in the private database. Customer data may be moved between servers on our private network as needed to support the Schedule Planner application and hosting environments.

### **I.14: Exit Strategies**

Describe any exit strategies you offer.

Subsequent to the termination of the contract, we will send a hard or digital copy of customer data upon request.

### **I.15: Approach to Backups and Disaster Recovery**

Describe your approach to backups and disaster recovery.

We backup systems nightly and store backups for one month. In the event of a database failure, the recovery time objective is to be back up within 24 to 48 hours. We have nightly snapshots, so the recovery point would be up to 24 hours old from the time of system failure.

We do not have a disaster recovery site at this time.

## **J: Privacy**

### **J.1: Privacy Statement**

This Privacy Policy governs the manner in which College Scheduler LLC collects, uses, maintains and discloses information collected from users (each, a "User") of Schedule Planner. This privacy policy applies to all products and services offered by College Scheduler LLC.

#### **Personal identification information**

We do not collect personally identifiable information from Users of Schedule Planner. Any data that is collected from the User is identifiable back to the Student ID that made the request, or is accessing Schedule Planner.

#### **Non-personal identification information**

We may collect non-personal identification information about Users whenever they interact with our Site. Non-personal identification information includes any user interaction with Schedule Planner, including courses, terms, sections and break data they may submit or interact with.

#### **Web browser cookies**

Our Site uses "cookies" to enhance User experience. User's web browser places cookies on their hard drive for record-keeping purposes and sometimes to track information about them.

#### **How we use collected information**

College Scheduler LLC may collect and use Users information for the following purposes:

- Improving user experience
- Developing new features
- Enhancing Schedule Planner performance
- Diagnosis of technical issues

### **How we protect your information**

We adopt appropriate data collection, storage and processing practices and security measures to protect against unauthorized access, alteration, disclosure or destruction of information and data stored on our Site. Sensitive and private data exchange between the Site and its Users happens over a SSL secured communication channel and is encrypted.

### **Sharing your personal information**

We do not sell, trade, or rent Users personal identification information to others. We may share generic aggregated demographic information not linked to any personal identification information regarding visitors and users with our business partners or customers for the purposes outlined above.

### **J.2: Type / Specific Information Collected**

Identify the type/specific information being collected (*User Data – Anonymous or Personally Identifiable*).

Through our batch processes, we are collecting information from the university course catalog and current seat information. Upon signing in to Schedule Planner, the following user data is collected:

- Student ID
- Current Term Code
- Currently Enrolled Section CRNs
- Current Shopping Cart CRNs
- Optional: My Planner planned terms in PeopleSoft.

All data besides Student ID is always encrypted using industry recommended AES 256bit encryption. We collect no personal information and all data is only identifiable to a Student ID. Reporting tools record actions taken within Schedule Planner and are able to attribute those actions to specific Student IDs.

### **J.3: Who Collects J.2**

Specify who collects the information.

Data is collected by the Schedule Planner application. There is no intermediary.

### **J.4: Why Collect J.2**

Specify why the information is collected.

The data that is collected is used specifically for Schedule Planner. The data we collect is the minimum amount of data needed to operate the functions within the application. No data beyond what is required for Schedule Planner functions or for reports delivered to the client, is collected.

### **J.5: How J.2 is Collected**

Describe how the information is collected (*explicitly, via Cookies, via Web Bugs, etc.*)

PeopleSoft Data is collected by a web service call that requests course scheduling information and open seat information. This web service sits on Integration Broker and is locked down by SSL and a Firewall Rule.

Student Data is collected by a single sign on web service that is called when the student clicks the “Schedule Planner” link inside PeopleSoft. It is also protected by SSL.

### **J.6: How J.2 is Used**

Describe how the information is used.

The information collected is used to operate Schedule Planner and generate the reporting data. We also aggregate the data to provide an anonymous count of unique students across all universities who have used the system.

### **J.7: How Long Is J.2 Retained**

Specify how long the information is retained.

Course catalog and seat information is retained until updates are received for that data. After course data is updated, it is retained for one month in the form of a backup. Student data is stored indefinitely for use in the reporting tools and data provided by Schedule Planner.

### **J.8: How is J.2 Retained and Stored**

Describe how the information is stored and kept.

Information is stored in the Rackspace, Inc. data center in Dallas Fort Worth. Please see the attached Rackspace SOC2 report for more information.

See attachment G.

### **J.9: How is J.2 Secured**

Describe how the information is secured.

Data is secured in the Rackspace data center located in Dallas Fort Worth. It is kept secure through both physical and cyber means as described in the Rackspace SOC2 report attached. All student data except for the student ID is always encrypted at rest in our databases using AES 256bit encryption.

See attachment G.

#### **J.10: Sharing of Data**

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.

We do not share data with third parties.

#### **J.11: Information Collected on JMU from Third Parties**

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.

We do not collect information on JMU or any party related to JMU from third parties.

#### **J.12: Transaction Information Collected and Maintained**

Specify the transaction information collected/maintained.

We are not committing any sort of transaction in the schedule planner. We are simply retaining the user's preferences (courses, breaks, locks) for reporting purposes.

### **V: Proposal Preparation and Submission**

#### **B: Specific Proposal Instructions**

##### **B.4: Offeror Data Sheet**

Offeror Data Sheet, included as Attachment A to this RFP.

See attachment A

##### **B.5: Small Business Subcontracting Plan**

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.

See attachment B

### **B.6: Business with other VASCUPP Members**

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](http://www.VASCUPP.org).

Members of VASCUPP that we have done business with in the last twelve (12) months and corresponding amount of sales:

George Mason University: \$35,000

Old Dominion University: \$35,000

Virginia Commonwealth University: \$30,000

### **B.7: Proposed Cost**

Proposed Cost. See Section X. "*Pricing Schedule*" of this Request for Proposal.

The proposed pricing plan is calculated as:

One time set-up fee of \$5,000. This includes all future maintenance and consulting costs.

\$2.00 / Student with a Maximum Price Per Year of \$40,000 and a Minimum Price Per Year of \$20,000.

At the time of writing of this proposal, a Q3/Q4 Discount is in effect for 10% off the yearly price. Since Customer qualifies for the maximum price of \$40,000 (according to the student headcount delivered to us by Customer of 20,200), with the discount the yearly price is \$36,000 (.9 of \$40,000).

Therefore, Year 1 Price is \$5,000 Setup + \$36,000 yearly = \$41,000.

Year 2 - \$36,000

Year 3 - \$36,000

Year 4 - \$36,000

Year 5 - \$36,000

Sample Contract, see attachment C



## **Attachments:**

## Attachment A - Offeror Data Sheet

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 9 Months 3

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 #
University of Wisconsin-Madison	3 years	500 Lincoln Drive, Madison, WI 53706	Aaron Apel, (608)265-0513
California State University, Chico	9 years	400 W 1st Street, Chico, CA 95929	Jean Irving, (530) 898-5944
Duke University	1 year	Durham, NC 27708	Bruce Cunningham, (919) 684-9007
The Ohio State University	2 years	281 W. Lane Avenue, Columbus, OH 43210	Jack Miner, (614) 292-6446
University of Connecticut	2 years	Storrs, CT 06269	Stacy Storrs, (860)486-2000

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

College Scheduler, LLC 389 Connors Court, Suite E, Chico, CA 95926

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: N/A

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

Offeror Name: College Scheduler, LLC Preparer Name: Robert Strazzarino Date: 7/8/14

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 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](http://www.dmbv.virginia.gov) (Customer Service).**

Procurement Name and Number: RFP# MLO-803

Listing of Sub-Contractors, to include, Small, Woman Owned and Minority Owned Businesses  
for this Bid/Proposal and Subsequent Contract

7/8/14

Date Form Completed

Offeror / Proposer:

College Scheduler, LLC

389 Connors Court, Suite E, Chico, CA 95926

Brett Conner, 9255508824

Firm

Address

Contact Person/No.

Sub-Contractor's Name and Address	Contact Person & Phone Number	DMBE Certification Number	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)

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

## **Attachment C - Contract**

### **College Scheduler Services Agreement**

This Agreement (this “Agreement”) effective as of the date indicated in the first Service Order attached hereto as Exhibit A (the “Service Order”), is entered into by and between [College Scheduler LLC], (“College Scheduler”) and the customer identified in the first Service Order attached hereto (“Customer”).

### **Services.**

Subject to the terms and conditions of this Agreement, during the term of this Agreement, College Scheduler shall provide to Customer the services described in the Service Order (the “Services”). From time to time, the parties may add new Service Orders, which, upon execution by both parties, will be subject to the terms and conditions of this Agreement.

**Fees and Billing.**

**Fees.** Customer shall pay all fees due according to the Service Order.

**Billing and Payment Terms.** Unless otherwise indicated in the applicable Service Order, College Scheduler shall invoice Customer in advance for fees for all Services, and payment of fees will be due within 30 days after the date of invoice. All payments must be made in U.S. dollars. Late payments hereunder will accrue interest at a rate of 1 ½% per month, or the highest rate allowed by applicable law, whichever is lower.

**Taxes.** All payments required by this Agreement exclude all sales, value-added, use, on other taxes and obligations, all of which Customer will be responsible for and will pay in full, except for taxes based on College Schedulers' net income.

**Customer's Obligations.**

**Compliance with Law.** Customer acknowledges that College Scheduler exercises no control over the content of the information passing through the Customer's websites and that it is the sole responsibility of Customer to ensure that the information it transmits and receives complies with all applicable laws and regulations.

**No Resale.** The Services are for use by Customer only and not for resale to any third party.

### **Confidential Information.**

**Confidential Information.** Each party acknowledges that it will have access to certain confidential information of the other party concerning the other party's business, plans, customers, technology, and products, including the terms and conditions of this Agreement (“Confidential Information”). Confidential Information will include, but not be limited to, each party's proprietary software and customer information. Each party shall not use in any way, for its own account or the account of any third party, except as expressly permitted by this Agreement, nor disclose to any third party (except as required by law or to that party's attorneys, accountants and other advisors as reasonably necessary), any of the other party's Confidential Information and shall take reasonable precautions to protect the confidentiality of such information.

**Exceptions.** Information will not be deemed Confidential Information if such information: (i) is known to the receiving party prior to receipt from the disclosing party directly or indirectly from a source other than one having an obligation of confidentiality to the disclosing party; (ii) becomes known (independently of

disclosure by the disclosing party) to the receiving party directly or indirectly from a source other than one having an obligation of confidentiality to the disclosing party; (iii) becomes publicly known or otherwise ceases to be secret or confidential, except through a breach of this Agreement by the receiving party; or (iv) is independently developed by the receiving party.

#### **Representations and Warranties.**

##### **Warranties by Customer.**

**Customer's Business.** Customer represents and warrants that Customer's services, products, materials, data, and information used by Customer in connection with this Agreement as well as Customer's and its permitted users' use of Services ("Customer's Business") does and will not during the term of this Agreement operate in any manner that would violate any applicable law or regulation. **Breach of Warranties.** In the event of any breach, or reasonably anticipated breach, of any of Customer's warranties herein, in addition to any other remedies available at law or in equity, College Scheduler will have the right to immediately, in College Scheduler's sole discretion, suspend any related Services if deemed reasonably necessary by College Scheduler to prevent any harm to College Scheduler or its business.

##### **Warranties and Disclaimers by College Scheduler.**

**THE SERVICES ARE PROVIDED ON AN "AS IS" BASIS, AND CUSTOMER'S USE OF THE SERVICES IS AT ITS OWN RISK. COLLEGE SCHEDULER DOES NOT MAKE, AND HEREBY DISCLAIMS, ANY AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT**

**LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT AND TITLE, AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE. College Scheduler does not warrant that the Services will be uninterrupted, error-free, or completely secure.**

##### **Limitations of Liability.**

**Exclusions. COLLEGE SCHEDULER WILL NOT BE LIABLE TO CUSTOMER FOR ANY LOST REVENUE, LOST PROFITS, REPLACEMENT GOODS, LOSS OF TECHNOLOGY, RIGHTS OR SERVICES, INCIDENTAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF DATA, OR INTERRUPTION OF CUSTOMER'S BUSINESS, EVEN IF COLLEGE SCHEDULER IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER UNDER THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.**

**Maximum Liability. COLLEGE SCHEDULER'S MAXIMUM AGGREGATE LIABILITY TO CUSTOMER RELATED TO OR IN CONNECTION WITH THIS AGREEMENT WILL BE LIMITED TO THE TOTAL AMOUNT PAID BY CUSTOMER TO COLLEGE SCHEDULER HEREUNDER FOR THE PRIOR 12 MONTH PERIOD.**

**Basis of the Bargain; Failure of Essential Purpose.** Customer acknowledges that College Scheduler has set its prices and entered into this Agreement in reliance upon the limitations of liability and the disclaimers of warranties and damages set forth herein, and that the same form an essential basis of the bargain between the parties. The parties agree that the

limitations and exclusions of liability and disclaimers specified in this Agreement will survive and apply even if found to have failed of their essential purpose.

#### **Indemnification.**

**College Scheduler's Indemnification of Customer.** College Scheduler shall indemnify, defend and hold Customer harmless from and against any and all costs, liabilities, losses, and expenses (including, but not limited to, reasonable attorneys' fees) (collectively, "Losses") resulting from any claim, suit, action, or proceeding (each, an "Action") brought against Customer alleging the infringement of any third party copyright or trade secret resulting from the provision of Services pursuant to this Agreement (but excluding any infringement contributorily caused by Customer's Business); or within 30 days after such expiration or termination, each party shall return all Confidential Information of the other party in its possession at the time of expiration or termination and shall not make or retain any copies of such Confidential Information except as required to comply with any applicable legal or accounting record keeping requirement.

#### **Term and Termination.**

**Term.** This Agreement will be effective commencing on the Effective Date, and continuing indefinitely thereafter unless and until terminated according to the provisions of this Section 8. The Agreement will automatically renew for additional terms of one year each.

#### **Termination.**

**For Convenience.** Either party may terminate this Agreement for convenience upon written

notice at any time during which no Service Order is in effect.

**For Cause.** Either party will have the right to terminate this Agreement, or the applicable Service Order, if the other party breaches any material term or condition of this Agreement and fails to cure such breach within 30 days after receipt of written notice of the same, except in the case of failure to pay fees, which must be cured within five days after receipt of written notice from College Scheduler. Either party may terminate this Agreement if: (i) the other party becomes the subject of a voluntary petition in bankruptcy or any voluntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors; or (ii) the other party becomes the subject of an involuntary petition in bankruptcy or any involuntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors, if such petition or proceeding is not dismissed within 60 days of filing.

**No Liability for Termination.** Neither party will be liable to the other for any termination or expiration of this Agreement in accordance with its terms.

**Effect of Termination.** Upon the effective date of expiration or termination of this Agreement: (a) College Scheduler may immediately cease providing Services hereunder; (b) any and all payment obligations of Customer under this Agreement will become due immediately; (c) within 30 days after such expiration or termination, each party shall return all Confidential Information of the other party in its possession at the time of expiration or termination and shall not make or retain any copies of such Confidential Information except as required to comply with any applicable legal or accounting record keeping requirement.

**Survival.** The following provisions will survive any expiration or termination of the

**Agreement:** Sections 2, 3, 4, 5, 6, 7, 8.3, 8.4, 8.5, and 9.

**Miscellaneous Provisions.**

**Force Majeure.** Except for the obligation to pay money, neither party will be liable for any failure or delay in its performance under this Agreement due to any cause beyond its reasonable control, including act of war, acts of God, earthquake, flood, embargo, riot, sabotage, labor shortage or dispute, governmental act or failure of the Internet, provided that the delayed party: (a) gives the other party prompt notice of such cause, and (b) uses its reasonable commercial efforts to correct promptly such failure or delay in performance.

**Marketing.** Customer acknowledges that College Scheduler may refer to Customer by trade name and trademark, and may briefly describe Customer's Business, in College Scheduler's marketing materials and web site. Customer hereby grants College Scheduler a license to use any Customer trade names and trademarks solely in connection with the rights granted to College Scheduler pursuant to this Section 9.2.

**Government Regulations.** Customer shall not export, re-export, transfer, or make available, whether directly or indirectly, any regulated item or information to anyone outside the U.S. in connection with this Agreement without first complying with all export control laws and regulations which may be imposed by the U.S. Government and any country or organization of nations within whose jurisdiction Customer operates or does business.

**Non-Solicitation.** During the period beginning on the Installation Date and ending on the first anniversary of the termination or expiration of this Agreement in accordance with its terms, Customer shall not, and shall ensure that its affiliates do not, directly or indirectly, solicit or attempt to solicit for employment any persons employed by College Scheduler during such period.

**Governing Law; Dispute Resolution, Severability; Waiver.** This Agreement is made under and will be governed by and construed in accordance with the laws of the State of California (except that body of law controlling conflicts of law) and specifically excluding from application to this Agreement that law known as the United Nations Convention on the International Sale of Goods. Any dispute relating to the terms, interpretation or performance of this Agreement (other than claims for preliminary injunctive relief or other pre-judgment remedies) will be resolved at the request of either party through binding arbitration. Arbitration will be conducted in Alameda County, California, under the rules and procedures of the American Arbitration Association ("AAA"). The parties will request that AAA appoint a single arbitrator. In the event any provision of this Agreement is held by a tribunal of competent jurisdiction to be contrary to the law, the remaining provisions of this Agreement will remain in full force and effect. The waiver of any breach or default of this Agreement will not constitute a waiver of any subsequent breach or default, and will not act to amend or negate the rights of the waiving party.

**Assignment.** Customer may not assign its rights or delegate its duties under this Agreement either in whole or in part without the prior written consent of College Scheduler, except that Customer may assign this



Agreement in whole as part of a corporate reorganization, consolidation, merger, or sale of substantially all of its assets. Any attempted assignment or delegation without such consent will be void. College Scheduler may assign this Agreement in whole or part. This Agreement will bind and inure to the benefit of each party's successors and permitted assigns. Notices. Any notice or communication required or permitted to be given hereunder may be delivered by hand, deposited with an overnight courier, sent by confirmed facsimile, or mailed by registered or certified mail, return receipt requested, postage prepaid, if to College Scheduler, to the address below, and if to Customer, to the address indicated the Service Order, or at such other address as may hereafter be furnished in writing by either party hereto to the other. Such notice will be deemed to have been given as of the date it is delivered, mailed or sent, whichever is earlier. Relationship of Parties. College Scheduler and Customer are independent contractors and this

Agreement will not establish any relationship of partnership, joint venture, employment, franchise or agency between College Scheduler and Customer. Neither College Scheduler nor Customer will have the power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided herein.

**9.9 Entire Agreement; Counterparts.** This Agreement, including all documents incorporated herein by reference, constitutes the complete and exclusive agreement between the parties with respect to the subject matter hereof, and supersedes and replaces any and all prior or contemporaneous discussions, negotiations, understandings and agreements, written and oral, regarding such subject matter. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute one and the same instrument.

Customer's and College Scheduler's authorized representatives have execute this Agreement below to indicate their assent to its terms:

**JAMES MADISON UNIVERSITY**  
Signature:  
Print Name:  
Title:

**COLLEGE SCHEDULER LLC**  
Signature:  
Print Name:  
Title:

## EXHIBIT A

### SERVICE ORDER

College Scheduler will make its college scheduler services available to students of Customer over the World Wide Web, using scheduling data made available by Customer. College Scheduler will display Customer's logo on the Service as described in a mock-up to be agreed upon by College Scheduler and Customer in writing.

- **Web application will generate class schedules from the Customer scheduling data.**
- **All courses and breaks the student has selected and entered will be stored in the College Scheduler system.**
- **Online video tutorials will be available to show all users how to navigate within the application. The colors and graphics within these video tutorials may not match the color scheme of the application.**

Customer will make available on the Internet at all times its most current scheduling information, in a form to be agreed upon in writing by College Scheduler and Customer.

College Scheduler will provide the Services for 12 months beginning on the the Effective Date. The term of this Service Order will automatically renew for two additional 12 months terms unless Customer gives notice of termination no later than 30 days after the end of the then-current term. Yearly fees for any renewal will be due on the first day of the renewal term. College Scheduler will invoice Customer, and Customer will pay the invoice no later than 30 days after receipt of the invoice. Thereafter, this Service Order may be renewed only upon mutual consent.

Each 3 year renewal term may only cause an increase in the yearly fee by no more than 10%.

#### **Fees:**

**\$5,000** Set-up fee (one-time fee, September 1st, 2014)

**\$36,000** Service For Year Starting October 1<sup>st</sup>, 2014 (due by September 30<sup>th</sup>, 2014)

#### **Effective Date:**

September 1st, 2014

#### **System Live Date:**

October 1<sup>st</sup>, 2014

CUSTOMER NAME: JAMES MADISON UNIVERSITY

ADDRESS: 800 SOUTH MAIN STREET HARRISONBURG VA, 22807

PHONE: (540) 568-6211

## Attachment D - Service Level Agreement



# College Scheduler Service Level Agreement (SLA)

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NOT FOR DISTRIBUTION

5 Pages Redacted due to Proprietary/Confidential Information













## Attachment E - VPATs

# **Attachments Cover Page**

VPAT Documents

## Student Schedule Planner 2.0.1 — Admin Area

### Section 508 Voluntary Product Accessibility Template

The purpose of the Voluntary Product Accessibility Template is to assist federal contracting officials in making preliminary assessments regarding the availability of commercial electronic and information technology products and services with features that support accessibility. It is assumed that offerers will provide additional contact information to facilitate more detailed inquiries.

The first table of the template provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Summary Table describes the subsections of subparts B and C of the Standards. The second column describes the supporting features of the product or refers you to the corresponding detailed table, "e.g., equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

#### Summary Table Voluntary Product Accessibility Template

Guideline	Applicable	Compliance
Section 1194.21 <a href="#">Software Applications and Operating Systems</a>	Applicable	Supports
Section 1194.22 <a href="#">Web-Based Intranet and Internet Information and Applications</a>	Applicable	Supports
Section 1194.23 Telecommunications Products	Not applicable	-
Section 1194.24 <a href="#">Video and Multimedia Products</a>	Applicable	Supports
Section 1194.25 Self-Contained, Closed Products	Not applicable	-

Section 1194.26 Desktop and Portable Computers	Not applicable	-
Section 1194.31 <a href="#">Functional Performance Criteria</a>	Applicable	Supports
Section 1194.41 <a href="#">Information, Documentation, and Support</a>	Applicable	Supports

<b>Section 1194.21 Software Applications and Operating Systems – Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supports With Exceptions	Users cannot view descriptions of permissions for each user with keyboard.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is	Supports	Schedule Planner does not disrupt or disable Windows operating system accessibility features such as filter keys, toggle keys, sticky keys, and the on-screen keyboard.

available to the product developer.		
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supports	Focus in the schedule planner is displayed by the web browser.
(d) Sufficient information about a user interface element including the identity, operation, and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Does Not Support	Most images do not currently have an ALT tag.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supports	There are no bitmap images in the schedule planner.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supports With Exceptions	Most text is available but information inside info hovers is not visible.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports	Software can be used without CSS and colors are not necessary.
(h) When animation is displayed, the information	Supports	Schedule Planner does not use

shall be displayable in at least one nonanimated presentation mode at the option of the user.		animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supports	Percentages for classes are colored red/green/yellow but the percentages are also printed out as text.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supports	The product is a web application so any color and contrast modifications would be done in the operating system, browser, or actual monitor the students are using.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2Hz and lower than 55Hz.	Supports	No elements that flash or blink are in the software.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports With Exceptions	Not all form field tabs have the proper label tag associated with them.

## **Section 1194.22 Web-Based Intranet and Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and Explanations
(a) A text equivalent for every nontext element shall be provided (e.g., via "alt", "longdesc", or in element content).	Does Not Support	Not all images have an ALT tag.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable.	No videos.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supports	Percentages for classes are colored red/green/yellow but the percentages are also printed out as text.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not applicable	CSS can be disabled and the application is still readable.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	No image maps
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not applicable	There are no image maps.
(g) Row and column headers shall be identified for data tables.	Supports With Exceptions	One grid in admin area does not have table headers. That module is "Enrollment Optimization"
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supports With Exception	One grid in admin area does not have table headers. That module is "Enrollment Optimization"



(i) Frames shall be titled with text that facilitates frame identification and navigation	Not applicable	There are no frames.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2Hz and lower than 55Hz.	Supports	The page will only re-load when a button element is clicked, it will not flicker on a regular basis.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a website comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not applicable	The admin area does not have a text-only equivalent.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Does Not Support	Screen reader cannot detect overlay windows, this affects the edit user and edit permissions screens.
(m) When a web page requires that an applet, plug-in, or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with § 1194.21(a) through (l).	Not applicable	No plugins or applets required.
(n) When electronic forms are designed to be completed online, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports With Exceptions	There is not always a label associated with each input form element. (The "label for='[input element name]'" )

(o) A method shall be provided that permits users to skip repetitive navigation links.	Does Not Support	Currently no way to skip over navigation.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	We do not have a timed response requirement in the software.

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

<b>Section 1194.24 Video and Multimedia Products — Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and standalone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives,	Not applicable	The software is only operated within a web browser.

decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.		
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not applicable	The software is only operated within a web browser.
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	Not applicable	No video.
(d) All training and informational video and multimedia productions that support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	Not applicable	No video.
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	Not applicable	No video.

### Section 1194.31 Functional Performance Criteria — Detail

Criteria	Supporting Features	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or	Supports With Exceptions	Not all elements of the page read properly. These are addressed in accessibility roadmap.

visually impaired shall be provided.		
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports	All text can be sized by browser settings and is not hard-coded in CSS.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provide	Supports With Exceptions	Speakers can be turned up on the computer to assist hard of hearing. Screen reader will not, however, be able to be heard by a deaf person.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Not applicable	No audio.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Supports	No user speech is required.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall	Supports With Exceptions	Keyboard access to all functionality in admin area except for info hovers.

be provided.		
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<b>Section 1194.41 Information, Documentation, and Support – Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) Product support documentation provided to end users shall be made available in alternate formats upon request, at no additional charge.	Not applicable	No documentation in admin area.
(b) End users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Not applicable	There is not an alternate format of the admin area.
(c) Support services for products shall accommodate the communication needs of end users with disabilities.	Not applicable	There is no help or support area in the admin area.

# Student Schedule Planner 2.0.1 – Standard Version

## Section 508 Voluntary Product Accessibility Template

The purpose of the Voluntary Product Accessibility Template is to assist federal contracting officials in making preliminary assessments regarding the availability of commercial electronic and information technology products and services with features that support accessibility. It is assumed that offerers will provide additional contact information to facilitate more detailed inquiries.

The first table of the template provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Summary Table describes the subsections of subparts B and C of the Standards. The second column describes the supporting features of the product or refers you to the corresponding detailed table, "e.g., equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

### Summary Table Voluntary Product Accessibility Template

Guideline	Applicable	Compliance
Section 1194.21 <a href="#">Software Applications and Operating Systems</a>	Applicable	Supports
Section 1194.22 <a href="#">Web-Based Intranet and Internet Information and Applications</a>	Applicable	Supports
Section 1194.23 Telecommunications Products	Not applicable	-
Section 1194.24 <a href="#">Video and Multimedia Products</a>	Applicable	Supports
Section 1194.25 Self-Contained, Closed Products	Not applicable	-

Section 1194.26 Desktop and Portable Computers	Not applicable	-
Section 1194.31 <a href="#">Functional Performance Criteria</a>	Applicable	Supports
Section 1194.41 <a href="#">Information, Documentation, and Support</a>	Applicable	Supports

### Section 1194.21 Software Applications and Operating Systems – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supports With Exceptions	User can tab to all elements except schedule preview icon and info hover icons.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is	Supports	Schedule Planner does not disrupt or disable Windows operating system accessibility features such as filter keys, toggle keys, sticky keys, and the on-screen keyboard.

available to the product developer.		
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supports	Focus in the schedule planner is displayed by the web browser.
(d) Sufficient information about a user interface element including the identity, operation, and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Does Not Support	School logo image currently does not have an ALT tag.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supports	There are no bitmap images in the schedule planner.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supports With Exceptions	All text is readable except for text inside info hover icons.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports	User assistive technology should override styles in web pages. Software is usable without CSS.
(h) When animation is displayed, the information	Supports	Schedule Planner does not use



shall be displayable in at least one nonanimated presentation mode at the option of the user.		animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supports	There is no color coding in the schedule planner.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supports	The product is a web application so any color and contrast modifications would be done in the operating system, browser, or actual monitor the students are using.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2Hz and lower than 55Hz.	Supports	No elements that flash or blink are in the software.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports With Exceptions	Not all form elements have the associated label element.

## **Section 1194.22 Web-Based Intranet and Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and Explanations
(a) A text equivalent for every nontext element shall be provided (e.g., via "alt", "longdesc", or in element content).	Does Not Support	School logo image currently does not have an ALT tag.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Supports	All training videos have a text-only equivalent.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supports	No information is dependent on color in schedule planner.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not applicable	CSS can be disabled and the application is still readable.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	No image maps
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not applicable	There are no image maps.
(g) Row and column headers shall be identified for data tables.	Does Not Support	Schedule planner currently does not have the headers in tables.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Does Not Support	Schedule planner currently does not have the headers in tables.

(i) Frames shall be titled with text that facilitates frame identification and navigation	Supports	Does not use frames.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2Hz and lower than 55Hz.	Supports	The page will only re-load when a button element is clicked, it will not flicker on a regular basis.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a website comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Supports	The schedule planner contains an alternate version that is plain and compliant with all section 508 standards. All changes are kept in sync with the non-accessible version.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Does Not Support	Screen readers are not aware of AJAX updates on the page.
(m) When a web page requires that an applet, plug-in, or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).	Supports	Flash is the only plug in required and only comes into play when training videos are viewed. Training videos have closed captioning.
(n) When electronic forms are designed to be completed online, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports With Exceptions	Not all form elements have the associated label element.

(o) A method shall be provided that permits users to skip repetitive navigation links.	Not applicable	There is not a navigation menu in the schedule planner.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	We do not have a timed response requirement in the software.

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

<b>Section 1194.24 Video and Multimedia Products — Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and standalone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives,	Not applicable	The software is only operated within a web browser.

decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.		
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not applicable	The software is only operated within a web browser.
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	Supports	All training videos are available in text-only format.
(d) All training and informational video and multimedia productions that support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	Supports	All training videos are available in text-only format.
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	Supports	There is a text-only link for each training video.

### Section 1194.31 Functional Performance Criteria — Detail

Criteria	Supporting Features	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive	Supports With Exceptions	Only some elements of schedule planner standard are readable by screen readers, we have a text-

Technology used by people who are blind or visually impaired shall be provided.		only version to address this.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports	Software will zoom with browser zoom functionality.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provide	Supports With Exceptions	Speakers can be turned up on the computer to assist hard of hearing. Screen reader will not, however, be able to be heard by a deaf person.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supports With Exceptions	All videos come with a text-only equivalent so training is not dependent on audio. Screen reader will not, however, be able to be heard by a deaf person.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Supports	No user speech is required.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that	Supports With Exceptions	Keyboard access to most functions are available but exceptions are info hovers, schedule preview

is operable with limited reach and strength shall be provided.		icons and edit options link.
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<b>Section 1194.41 Information, Documentation, and Support – Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) Product support documentation provided to end users shall be made available in alternate formats upon request, at no additional charge.	Supports	Documentation is provided in text-only format.
(b) End users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	A description of the features in the accessible version of the software is identical to the non-accessible version.
(c) Support services for products shall accommodate the communication needs of end users with disabilities.	Supports	Support is provided in the help video area which has a text-only equivalent for each video.

# Student Schedule Planner 2.0.1 – Text Only Version

## Section 508 Voluntary Product Accessibility Template

The purpose of the Voluntary Product Accessibility Template is to assist federal contracting officials in making preliminary assessments regarding the availability of commercial electronic and information technology products and services with features that support accessibility. It is assumed that offerers will provide additional contact information to facilitate more detailed inquiries.

The first table of the template provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Summary Table describes the subsections of subparts B and C of the Standards. The second column describes the supporting features of the product or refers you to the corresponding detailed table, "e.g., equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

### Summary Table Voluntary Product Accessibility Template

Guideline	Applicable	Compliance
Section 1194.21 <a href="#">Software Applications and Operating Systems</a>	Applicable	Supports
Section 1194.22 <a href="#">Web-Based Intranet and Internet Information and Applications</a>	Applicable	Supports
Section 1194.23 Telecommunications Products	Not applicable	-
Section 1194.24 <a href="#">Video and Multimedia Products</a>	Applicable	Supports
Section 1194.25 Self-Contained, Closed Products	Not applicable	-



Section 1194.26 Desktop and Portable Computers	Not applicable	-
Section 1194.31 <a href="#">Functional Performance Criteria</a>	Applicable	Supports
Section 1194.41 <a href="#">Information, Documentation, and Support</a>	Applicable	Supports

### Section 1194.21 Software Applications and Operating Systems – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supports	All user interface controls in the Schedule Planner can be controlled via the keyboard.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is	Supports	Schedule Planner does not disrupt or disable Windows operating system accessibility features such as filter keys, toggle keys, sticky keys, and the on-screen keyboard.

available to the product developer.		
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supports	Focus in the schedule planner is displayed by the web browser.
(d) Sufficient information about a user interface element including the identity, operation, and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supports	The schedule planner uses ALT tags on all images and clearly labels all user interface elements.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supports	There are no bitmap images in the schedule planner.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supports	All text on the pages is just raw text. The page can be viewed without any CSS stylesheets.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports	Text is plain and does not have any colors or CSS whatsoever.
(h) When animation is displayed, the information	Supports	Schedule Planner does not use

shall be displayable in at least one nonanimated presentation mode at the option of the user.		animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supports	There is no color coding in the schedule planner and no color anywhere in the text.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supports	The product is a web application so any color and contrast modifications would be done in the operating system, browser, or actual monitor the students are using.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2Hz and lower than 55Hz.	Supports	No elements that flash or blink are in the software.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports	There is always a label associated with each input form element. (The "label for="[input element name]")

## **Section 1194.22 Web-Based Intranet and Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and Explanations
(a) A text equivalent for every nontext element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supports	The schedule planner uses ALT tags for all images.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Supports	All training videos have a text-only equivalent.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supports	All pages do not use any CSS or coloring.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not applicable	CSS can be disabled and the application is still readable.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	No image maps
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not applicable	There are no image maps.
(g) Row and column headers shall be identified for data tables.	Supports	The schedule planner clearly labels all column headers.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supports	There are no data tables.

(i) Frames shall be titled with text that facilitates frame identification and navigation	Not applicable	There are no frames.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2Hz and lower than 55Hz.	Supports	The page will only re-load when a button element is clicked, it will not flicker on a regular basis.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a website comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Supports	The schedule planner contains an alternate version that is plain and compliant with all section 508 standards. All changes are kept in sync with the non-accessible version.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supports	All content is displayed text-only.
(m) When a web page requires that an applet, plug-in, or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).	Supports	Flash is the only plug in required and only comes into play when training videos are viewed. Training videos have a text only equivalent.
(n) When electronic forms are designed to be completed online, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports	There is always a label associated with each input form element. (The "label for="[input element name]")

(o) A method shall be provided that permits users to skip repetitive navigation links.	Supports	There is an anchor link on the page that allows the user to skip over navigation.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	We do not have a timed response requirement in the software.

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

<b>Section 1194.24 Video and Multimedia Products – Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and standalone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped	Not applicable	The software is only operated within a web browser.

with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.		
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not applicable	The software is only operated within a web browser.
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	Supports	All training videos are available in text-only format.
(d) All training and informational video and multimedia productions that support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	Supports	All training videos are available in text-only format.
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	Supports	There is a text-only link for each training video.

### Section 1194.31 Functional Performance Criteria — Detail

Criteria	Supporting Features	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user	Supports	Software has been tested with JAWS. The accessible version is

vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.		completely text-only and the screen readers read the verbiage on screen.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports	All text can be sized by browser settings and is not hard-coded in CSS.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provide	Supports With Exceptions	Speakers can be turned up on the computer to assist hard of hearing. Screen reader will not, however, be able to be heard by a deaf person.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supports With Exceptions	All videos come with a text-only equivalent so training is not dependent on audio. Screen reader will not, however, be able to be heard by a deaf person.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Supports	No user speech is required.
(f) At least one mode of operation and information retrieval that does not require fine	Supports	Keyboard access to all functionality in the Schedule Planner is



motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.		available.
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<b>Section 1194.41 Information, Documentation, and Support – Detail</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) Product support documentation provided to end users shall be made available in alternate formats upon request, at no additional charge.	Supports	Documentation is provided in text-only format.
(b) End users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	A description of the features in the accessible version of the software is identical to the non-accessible version.
(c) Support services for products shall accommodate the communication needs of end users with disabilities.	Supports	Support is provided in the help video area which has a text-only equivalent for each video.

## Attachment F - Sentinel List of Tests

## WhiteHat Sentinel Vulnerability Chart – WASC & OWASP Top 10

### WhiteHat Sentinel Premium Edition (PE)

PE includes testing for both technical and business logic vulnerabilities. WhiteHat's [Threat Research Center](#) performs custom testing to identify business logic flaws. The WhiteHat Security experts who uncover these types of vulnerabilities are capable of understanding account structures, contextual logic, and similar characteristics of Web applications.

Technical Vulnerabilities — WASC		
Application Misconfiguration	Buffer Overflow	Content Spoofing
Cross Site Scripting	Directory Indexing	Path Traversal
Fingerprinting	Format String Attack	HTTP Request Smuggling
HTTP Request Splitting	HTTP Response Smuggling	HTTP Response Splitting
Improper Filesystem Permissions	Improper Input Handling	Improper Output Handling
Information Leakage	Insufficient Transport Layer Protection	Integer Overflows
LDAP Injection	Mail Command Injection	Null Byte Injection
Predictable Resource Location	Remote File Inclusion	Routing Detour
OS Commanding	Path Traversal	SOAP Array Abuse
SQL Injection	SSI Injection	Server Misconfiguration
URL Redirector Abuse	XML Attribute Blowup	XML Entity Expansion
XML External Entities	XML Injection	XPath Injection
XQuery Injection		
Technical Vulnerabilities – OWASP 10		
A1 - Injection	A2 - Cross Site Scripting	A4 - Insecure Direct Object References
A6 - Security Misconfiguration	A7 - Insecure Cryptographic Storage	A8 - Failure to Restrict URL Access
A9 - Insufficient Transport Layer Protection	A10 – Unvalidated Redirects and Forwards	
Business Logic Flaws		
Abuse of Functionality	Brute Force	Credential/Session Prediction
Cross Site Request Forgery	Insecure Indexing	Insufficient Anti-automation
Insufficient Authentication	Insufficient Authorization	Insufficient Process Validation
Insufficient Password Recovery	Insufficient Session Expiration	Session Fixation
Best Practice		
Autocomplete Attribute	Insufficient Cookie Access Control	<i>Insufficient Crossdomain Configuration</i>
Insufficient Password Aging	Insufficient Password Strength	<i>Invalid HTTP Method Usage</i>
Non-HttpOnly Session Cookie	Persistent Session Cookie	<i>Personally Identifiable Information</i>
Secured Cachable HTTP Messages	Unsecured Session Cookie	
Technical Vulnerabilities – OWASP 10		
A3 – Broken Authentication and Session	A4 – Insecure Direct Object References	A5 – Cross-Site Request Forgery
A8 – Failure to Restrict URL Access		

## WhiteHat Sentinel Standard Edition (SE)

WhiteHat Sentinel tests for the following technical vulnerabilities, it does not test for business logic flaws.

Technical Vulnerabilities – WASC		
<i>Application Misconfiguration</i>	Buffer Overflow	Content Spoofing
Cross Site Scripting	Directory Indexing	Path Traversal
<i>Fingerprinting</i>	Format String Attack	HTTP Response Splitting
<i>Improper Input Handling</i>	<i>Improper Output Handling</i>	Information Leakage
<i>Insufficient Transport Layer Protection</i>	<i>Integer Overflows</i>	LDAP Injection
<i>Null Byte Injection</i>	Predictable Resource Location	Remote File Inclusion
OS Commanding	Path Traversal	SQL Injection
SSI Injection	<i>Server Misconfiguration</i>	URL Redirector Abuse
XPath Injection	<i>XQuery Injection</i>	
Technical Vulnerabilities – OWASP 10		
A1 - Injection	A2 - Cross Site Scripting	A4 - Insecure Direct Object References
A6 - Security Misconfiguration	A7 - Insecure Cryptographic Storage	A8 - Failure to Restrict URL Access
A9 - Insufficient Transport Layer Protection	A10 - Unvalidated Redirects and Forwards	
Business Logic Flaws (covered only in PE)		
Best Practice		
<i>Autocomplete Attribute</i>	<i>Insufficient Cookie Access Control</i>	<i>Insufficient Crossdomain Configuration</i>
<i>Non-HttpOnly Session Cookie</i>	<i>Persistent Session Cookie</i>	<i>Personally Identifiable Information</i>
<i>Secured Cachable HTTP Messages</i>	<i>Unsecured Session Cookie</i>	

## BASELINE EDITION (BE)

WhiteHat Sentinel BE tests for the following technical vulnerabilities, it does not test for business logic flaws.

Technical Vulnerabilities – WASC		
Application Misconfiguration	Buffer Overflow	Content Spoofing
Cross Site Scripting	Directory Indexing	Path Traversal
Fingerprinting	Format String Attack	HTTP Response Splitting
Improper Input Handling	Improper Output Handling	Information Leakage
Insufficient Transport Layer Protection	Integer Overflows	LDAP Injection
Mail Command Injection	Null Byte Injection	Predictable Resource Location
Remote File Inclusion	Routing Detour	OS Commanding
Path Traversal	SOAP Array Abuse	SQL Injection
SSI Injection	Server Misconfiguration	URL Redirector Abuse
XML Attribute Blowup	XML Entity Expansion	XML Injection
XPath Injection	XQuery Injection	
Technical Vulnerabilities – OWASP 10		
A1 - Injection	A2 - Cross Site Scripting	A4 - Insecure Direct Object References
A6 - Security Misconfiguration	A7 - Insecure Cryptographic Storage	A8 - Failure to Restrict URL Access
A9 - Insufficient Transport Layer Protection	A10 - Unvalidated Redirects and Forwards	
Business Logic Flaws (covered only in PE)		
Best Practice		
Autocomplete Attribute	Insufficient Cookie Access Control	<i>Insufficient Crossdomain Configuration</i>
Non-HttpOnly Session Cookie	Persistent Session Cookie	<i>Personally Identifiable Information</i>
Secured Cachable HTTP Messages	Unsecured Session Cookie	

## PreLaunch (PL)

WhiteHat Sentinel PL tests for the following technical vulnerabilities, it does not test for business logic flaws.

Technical Vulnerabilities – WASC		
Application Misconfiguration	Buffer Overflow	Content Spoofing
Cross Site Scripting	Directory Indexing	Path Traversal
Fingerprinting	Format String Attack	HTTP Response Splitting
Improper Input Handling	Improper Output Handling	Information Leakage
Insufficient Transport Layer Protection	Integer Overflows	LDAP Injection
Mail Command Injection	Null Byte Injection	Predictable Resource Location
Remote File Inclusion	Routing Detour	OS Commanding
Path Traversal	SOAP Array Abuse	SQL Injection
SSI Injection	Server Misconfiguration	URL Redirector Abuse
XML Attribute Blowup	XML Entity Expansion	XML Injection
XPath Injection	XQuery Injection	
Technical Vulnerabilities – OWASP 10		
A1 - Injection	A2 - Cross Site Scripting	A4 - Insecure Direct Object References
A6 - Security Misconfiguration	A7 - Insecure Cryptographic Storage	A8 - Failure to Restrict URL Access
A9 - Insufficient Transport Layer Protection	A10 - Unvalidated Redirects and Forwards	
Business Logic Flaws (covered only in PE)		
Best Practice		
Autocomplete Attribute	Insufficient Cookie Access Control	<i>Insufficient Crossdomain Configuration</i>
Non-HttpOnly Session Cookie	Persistent Session Cookie	<i>Personally Identifiable Information</i>
Secured Cachable HTTP Messages	Unsecured Session Cookie	

## Attachment G - SOC2 & Rackspace



## Service Organization Controls 2 Report

### Description of Rackspace US, Inc.'s Data center Services System relevant to Security and Availability

For the period February 1, 2012 through July 31, 2012

with the Independent Service Auditor's Report  
including tests performed and results thereof



Rackspace US, Inc.  
Data center Services System

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Section I - Assertion of Rackspace US, Inc.; Assertion of  
DuPont Fabros Technology, Inc.; Assertion of Equinix (UK)  
Limited, Assertion of Digital Realty

## Section Ia – Assertion of Rackspace US, Inc.

January 11, 2013

Rackspace US, Inc. (Rackspace) has prepared the accompanying *Description of Rackspace's Data center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012* (Description) based on the criteria in items (1)(a)-(b) below, which are the criteria for a description of a service organization's system in paragraphs 1.33-.34 of the AICPA Guide *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy* (the description criteria). The Description is intended to provide users with information about Rackspace's Data center Services System, particularly system controls intended to meet the criteria for the security and availability principles set forth in AICPA's TSP section 100, *Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (applicable trust services criteria).

Rackspace uses service organizations, DuPont Fabros Technology, Inc. (DFT), Equinix (UK) Limited (Equinix) and Digital Realty (DRT), to perform aspects of its physical security and environmental safeguards services. The Description presents Rackspace's controls. The portion of the Description entitled *Control Objectives and Controls for IT* presents Rackspace's, DFT's, Equinix's and DRT's controls. The Assertion of DuPont Fabros Technology, Inc. (DFT Assertion), Assertion of Equinix (UK) Limited (Equinix Assertion) and Assertion of Digital Realty (DRT Assertion) are presented on pages X below.

We confirm, to the best of our knowledge and belief, that:

- 1) the Description fairly presents the Rackspace Data center Services System (System) throughout the period February 1, 2012 through July 31, 2012 based on the following description criteria:
  - a) The Description contains the following information:
    - i) The types of services provided
    - ii) The components of the system used to provide the services, which are the following:
      - (1) *Infrastructure*. The physical and hardware components of a system (facilities, equipment, and networks).
      - (2) *Software*. The programs and operating software of a system

ALL BACKED BY  
**FANATICAL SUPPORT.**

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RACKSPACE® HOSTING | 5000 WALZEM ROAD | SAN ANTONIO, TX 78218 U.S.A.



(systems, applications, and utilities).

(3) *People*. The personnel involved in the operation and use of a system (developers, operators, users, and managers).

(4) *Procedures*. The automated and manual procedures involved in the operation of a system.

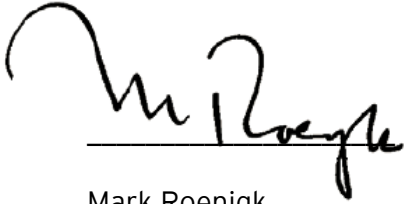
(5) *Data*. The information used and supported by a system (transaction streams, files, databases, and tables).

- iii) The boundaries or aspects of the system covered by the Description
  - iv) How the system captures and addresses significant events and conditions
  - v) The process used to prepare and deliver reports and other information to user entities and other parties
  - vi) If information is provided to, or received from, subservice organizations or other parties, how such information is provided or received; the role of the subservice organization and other parties; and the procedures performed to determine that such information and its processing, maintenance, and storage are subject to appropriate controls
  - vii) For each principle being reported on, the applicable trust services criteria and the related controls designed to meet those criteria, including, as applicable, complementary user-entity controls contemplated in the design of the service organization's system
  - viii) For subservice organizations presented using the carve-out method, the nature of the services provided by the subservice organization; each of the applicable trust services criteria that are intended to be met by controls at the subservice organization, alone or in combination with controls at the service organization, and the types of controls expected to be implemented at carved-out subservice organizations to meet those criteria; and for privacy, the types of activities that the subservice organization would need to perform to comply with our privacy commitments<sup>1</sup>
  - ix) Any applicable trust services criteria that are not addressed by a control at the service organization or a subservice organization and the reasons therefore
  - x) Other aspects of the service organization's control environment, risk assessment process, information and communication systems, and monitoring of controls that are relevant to the services provided and the applicable trust services criteria
  - xi) Relevant details of changes to the service organization's system during the period covered by the Description
  - b) The Description does not omit or distort information relevant to the service organization's system while acknowledging that the description is prepared to meet the common needs of a broad range of users and may not, therefore, include every aspect of the system that each individual user may consider important to his or her own particular needs.
- 2) the controls stated in the Description were suitably designed throughout the specified period to meet the applicable trust services criteria.

---

<sup>1</sup> Rackspace does not present its description under the carve-out method of reporting. Accordingly, the items in criterion (1)(a)(viii) are not applicable to the Services.

- 3) the controls stated in the Description operated effectively throughout the specified period to meet the applicable trust services criteria.

A handwritten signature in black ink, appearing to read 'Mark Roenigk', written over a horizontal line.

Mark Roenigk  
Chief Operating Officer  
Rackspace US, Inc.

## Section Ib – Assertion of DuPont Fabros Technology, Inc. (DFT)



DuPont Fabros Technology

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January 11, 2013

DuPont Fabros Technology, Inc. (DFT) has prepared the portions of the accompanying *Description of Rackspace's Data Center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012* entitled *Control Objectives and Controls for IT* (Description) that describes the managed services provided by DFT to Rackspace and its user entities related to physical security and environmental safeguards services (Services) throughout the period February 1, 2012 through July 31, 2012, based on the criteria in items (1)(a)-(b) below, which are the criteria for a description of a service organization's system in paragraphs 1.34 of the AICPA Guide *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy* (the description criteria). The Description is intended to provide users with information about the Rackspace Data center Services System (System), specifically controls that DFT is responsible for, and particularly system controls intended to meet the criteria for the security and availability principles set forth in the AICPA's TSP section 100, *Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (applicable trust services criteria). DFT confirms, to the best of our knowledge and belief, that with regard to the Services:

- 1) the Description fairly presents the Services made available to Rackspace and user entities throughout the period February 1, 2012 through July 31, 2012 for hosting their servers, based on the following description criteria:
  - a) The Description contains the following information:
    - i) The types of services provided
    - ii) The components of the Services used to provide the services, which are the following:
      - (1) *Infrastructure*. The physical and hardware components of a system (facilities, equipment, and networks).
      - (2) *Software*. The programs and operating software of a system (systems, applications, and utilities).
      - (3) *People*. The personnel involved in the operation and use of a system (developers, operators, users, and managers).
      - (4) *Procedures*. The automated and manual procedures involved in the operation of a system.
      - (5) *Data*. The information used and supported by a system (transaction streams, files, databases, and tables).
    - iii) The boundaries or aspects of the system covered by the Description
    - iv) How the Services captures and addresses significant events and conditions

- v) The process used to prepare and deliver reports and other information to user entities and other parties
  - vi) If information is provided to, or received from, subservice organizations or other parties, how such information is provided or received; the role of the subservice organization and other parties; and the procedures performed to determine that such information and its processing, maintenance, and storage are subject to appropriate controls
  - vii) For each principle being reported on, the applicable trust services criteria and the related controls designed to meet those criteria, including, as applicable, complementary user-entity controls contemplated in the design of the subservice organization's Services
  - viii) For subservice organizations presented using the carve-out method, the nature of the services provided by the subservice organization; each of the applicable trust services criteria that are intended to be met by controls at the subservice organization, alone or in combination with controls at the service organization, and the types of controls expected to be implemented at carved-out subservice organizations to meet those criteria.<sup>2</sup>
  - ix) Any applicable trust services criteria that are not addressed by a control at the service organization or a subservice organization and the reasons therefore
  - x) Other aspects of DFT's control environment, risk assessment process, information and communication systems, and monitoring of controls that are relevant to the services provided and the applicable trust services criteria
  - xi) Relevant details of changes to DFT's Services during the period covered by the Description
- b) The Description does not omit or distort information relevant to DFT's Services while acknowledging that the Description is prepared to meet the common needs of a broad range of users and may not, therefore, include every aspect of the system that each individual user may consider important to his or her own particular needs.
- 2) the controls stated in the Description were suitably designed throughout the specified period to meet the applicable trust services criteria.
- 3) the controls stated in the Description operated effectively throughout the specified period to meet the applicable trust services criteria.



Carlos A. Colmonero  
Senior Property Manager, ACC4 Data Center

---

<sup>2</sup> DFT does not use subservice organizations to provide the Services to Rackspace. Accordingly, the items in criteria (a)(i)(8) relating to subservice organizations are not applicable to the Services.

## Section Ic – Assertion of Equinix (UK) Limited (Equinix)

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January 11, 2013

Equinix (UK) Limited has prepared the portions of the accompanying *Description of Rackspace's Data center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012* entitled *Control Objectives and Controls for IT* (Description) that describes the managed services provided by Equinix to Rackspace and its user entities related to physical security and environmental safeguards (Services) throughout the period February 1, 2012 through July 31, 2012, based on the criteria in items (1)(a)-(b) below, which are the criteria for a description of a service organization's system in paragraphs 1.34 of the AICPA Guide *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy* (the description criteria). The Description is intended to provide users with information about the Rackspace Data center Services System (System), specifically controls that Equinix is responsible for, and particularly system controls intended to meet the criteria for the security and availability principles set forth in the AICPA's TSP section 100, *Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (applicable trust services criteria). Equinix confirms, to the best of our knowledge and belief, that with regard to the Services:

- 1) the Description fairly presents Services made available to Rackspace and user entities throughout the period February 1, 2012 through July 31, 2012, based on the following description criteria:
  - a) The Description contains the following information:
    - i) The types of services provided
    - ii) The components of the Services used to provide the services, which are the following:
      - (1) *Infrastructure*. The physical and hardware components of a system (facilities, equipment, and networks).
      - (2) *Software*. The programs and operating software of a system (systems, applications, and utilities).
      - (3) *People*. The personnel involved in the operation and use of a system (developers, operators, users, and managers).
      - (4) *Procedures*. The automated and manual procedures involved in the operation of a system.
      - (5) *Data*. The information used and supported by a system (transaction streams, files, databases, and tables).

- iii) The boundaries or aspects of the system covered by the Description
- iv) How the Services captures and addresses significant events and conditions
- v) The process used to prepare and deliver reports and other information to user entities and other parties
- vi) If information is provided to, or received from, subservice organizations or other parties, how such information is provided or received; the role of the subservice organization and other parties; and the procedures performed to determine that such information and its processing, maintenance, and storage are subject to appropriate controls
- vii) For each principle being reported on, the applicable trust services criteria and the related controls designed to meet those criteria, including, as applicable, complementary user-entity controls contemplated in the design of the service organization's Services
- viii) For subservice organizations presented using the carve-out method, the nature of the services provided by the subservice organization; each of the applicable trust services criteria that are intended to be met by controls at the subservice organization, alone or in combination with controls at the service organization, and the types of controls expected to be implemented at carved-out subservice organizations to meet those criteria.<sup>3</sup>
- ix) Any applicable trust services criteria that are not addressed by a control at the service organization or a subservice organization and the reasons therefore
- x) Other aspects of Equinix's control environment, risk assessment process, information and communication systems, and monitoring of controls that are relevant to the services provided and the applicable trust services criteria
- xi) Relevant details of changes to Equinix's Services during the period covered by the description
- b) The Description does not omit or distort information relevant to Equinix's Services while acknowledging that the description is prepared to meet the common needs of a broad range of users and may not, therefore, include every aspect of the system that each individual user may consider important to his or her own particular needs.
- 2) the controls stated in the Description were suitably designed throughout the specified period to meet the applicable trust services criteria.
- 3) the controls stated in the Description operated effectively throughout the specified period to meet the applicable trust services criteria.



Eric Schwartz  
Director, Equinix (UK) Limited

<sup>3</sup> Equinix does not use subservice organizations to provide the Services to Rackspace. Accordingly, the items in criteria (a)(i)(8) relating to subservice organizations are not applicable to the Services.



## Section Id – Assertion of Digital Reality (DRT)



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January 11, 2013

Digital Realty (DRT) has prepared the portions of the accompanying *Description of Rackspace's Data center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012* entitled *Control Objectives and Controls for IT* (Description) that describes the managed services provided by DRT to Rackspace and its user entities related to physical security and environmental safeguards (Services) throughout the period February 1, 2012 through July 31, 2012, based on the criteria in items (1)(a)-(b) below, which are the criteria for a description of a service organization's system in paragraphs 1.34 of the AICPA Guide *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy* (the description criteria). The Description is intended to provide users with information about the Rackspace Data center Services System (System), specifically controls that DRT is responsible for, and particularly system controls intended to meet the criteria for the security and availability principles set forth in the AICPA's TSP section 100, *Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (applicable trust services criteria). DRT confirms, to the best of our knowledge and belief, that with regard to the Services:

- 1) the Description fairly presents Services made available to Rackspace and user entities throughout the period February 1, 2012 through July 31, 2012, based on the following description criteria:
  - a) The Description contains the following information:
    - i) The types of services provided
    - ii) The components of the Services used to provide the services, which are the following:
      - (1) *Infrastructure*. The physical and hardware components of a system (facilities, equipment, and networks).
      - (2) *Software*. The programs and operating software of a system (systems, applications, and utilities).
      - (3) *People*. The personnel involved in the operation and use of a system (developers, operators, users, and managers).
      - (4) *Procedures*. The automated and manual procedures involved in the operation of a system.
      - (5) *Data*. The information used and supported by a system (transaction streams, files, databases, and tables).
    - iii) The boundaries or aspects of the system covered by the Description
    - iv) How the Services captures and addresses significant events and conditions
    - v) The process used to prepare and deliver reports and other information to user entities and other parties

- vi) If information is provided to, or received from, subservice organizations or other parties, how such information is provided or received; the role of the subservice organization and other parties; and the procedures performed to determine that such information and its processing, maintenance, and storage are subject to appropriate controls
  - vii) For each principle being reported on, the applicable trust services criteria and the related controls designed to meet those criteria, including, as applicable, complementary user-entity controls contemplated in the design of the service organization's Services
  - viii) For subservice organizations presented using the carve-out method, the nature of the services provided by the subservice organization; each of the applicable trust services criteria that are intended to be met by controls at the subservice organization, alone or in combination with controls at the service organization, and the types of controls expected to be implemented at carved-out subservice organizations to meet those criteria. <sup>4</sup>
  - ix) Any applicable trust services criteria that are not addressed by a control at the service organization or a subservice organization and the reasons therefore
  - x) Other aspects of DRT's control environment, risk assessment process, information and communication systems, and monitoring of controls that are relevant to the services provided and the applicable trust services criteria
  - xi) Relevant details of changes to DRT's Services during the period covered by the description
- b) The Description does not omit or distort information relevant to DRT's Services while acknowledging that the description is prepared to meet the common needs of a broad range of users and may not, therefore, include every aspect of the system that each individual user may consider important to his or her own particular needs.
- 2) the controls stated in the Description were suitably designed throughout the specified period to meet the applicable trust services criteria.
  - 3) the controls stated in the Description operated effectively throughout the specified period to meet the applicable trust services criteria.



Bryan Marsh  
Senior Asset Manager

---

<sup>4</sup> DRT does not use subservice organizations to provide the Services to Rackspace. Accordingly, the items in criteria (a)(i)(8) relating to subservice organizations are not applicable to the Services.

## Section II – Independent service auditor’s report

## Section II – Independent service auditor's report

The Board of Directors  
Rackspace US, Inc.

### Scope

We have examined Rackspace US, Inc.'s (Rackspace)'s accompanying *Description of Rackspace's Data center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012* (Description) of its hosted services and DuPont Fabros Technology, Inc.'s (DFT), Equinix (UK) Limited's (Equinix) and Digital Realty Trust's (DRT) descriptions of relevant aspects of its physical security and data center environmental safeguards services throughout the period February 1, 2012 through July 31, 2012 based on the criteria set forth in paragraph 1.34 of the AICPA Guide *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality or Privacy* (the description criteria), and the suitability of the design and operating effectiveness of Rackspace's, DFT's, Equinix's, and DRT's controls described therein to meet the criteria for the security and availability principles set forth in the AICPA's TSP section 100, *Trust Services Principles, Criteria, and Illustrations for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (applicable trust services criteria). DFT, Equinix and DRT are independent service organizations that provide physical security and data center environmental safeguards services to Rackspace. Rackspace's Description includes a description of DFT's, Equinix's and DRT's services used by Rackspace, as well as relevant controls of DFT, Equinix and DRT.

The Description indicates that certain applicable trust services criteria specified in the Description can be achieved only if complementary user entity controls contemplated in the design of Rackspace's, DFT's, Equinix's and DRT's controls are suitably designed and operating effectively, along with related controls at Rackspace, DFT, Equinix and DRT. We have not evaluated the suitability of the design or operating effectiveness of such complementary user entity controls.

The information in the accompanying Section V - *Other information provided by Rackspace US, Inc.* is presented by Rackspace to provide additional information and is not part of Rackspace US, Inc.'s Description. Such information has not been subjected to the procedures applied in our examination and, accordingly we express no opinion on it.

### Rackspace's responsibilities

Rackspace has provided the attached assertion titled; Section Ia - Assertion of Rackspace US, Inc., (Assertion) about the fairness of the presentation of the Description based on the description criteria and suitability of the design and operating effectiveness of the controls described therein to meet the applicable trust services criteria. Rackspace is responsible for (1) preparing the Description and the Assertion, (2) the completeness, accuracy and method

of presentation of the Description and the Assertion, (3) providing the services covered by the Description; (4) specifying the controls that meet the applicable trust services criteria and stating them in the Description; and (5) designing, implementing and documenting controls to meet the applicable trust services criteria.

#### DFT's responsibilities

DFT has provided its accompanying assertion titled; Section Ib - Assertion of DuPont Fabros Technology, Inc. (DFT Assertion), about the fairness of the presentation of certain controls in the Description (DFT controls) and suitability of the design and operating effectiveness of the DFT controls to meet the related applicable trust services criteria. DFT is responsible for preparing the DFT Assertion, including the completeness, accuracy and method of presentation of the DFT Assertion.

DFT is also responsible for providing certain services covered by the Description, specifying the DFT controls that meet the applicable trust services criteria and stating them in the Description; and designing, implementing and documenting controls to meet the applicable trust services criteria.

#### Equinix's responsibilities

Equinix has provided its accompanying assertion titled; Section Ic - Assertion of Equinix (UK) Limited (Equinix Assertion), about the fairness of the presentation of certain controls in the Description (Equinix controls) and suitability of the design and operating effectiveness of the Equinix controls to meet the related applicable trust services criteria. Equinix is responsible for preparing the Equinix Assertion, including the completeness, accuracy and method of presentation of the Equinix Assertion.

Equinix is also responsible for providing certain services covered by the Description, specifying the Equinix controls that meet the applicable trust services criteria and stating them in the Description; and designing, implementing and documenting controls to meet the applicable trust services criteria.

#### DRT's responsibilities

DRT has provided its accompanying assertion titled; Section Id - Assertion of Digital Reality (DRT) (DRT Assertion), about the fairness of the presentation of certain controls in the Description (DRT controls) and suitability of the design and operating effectiveness of the Equinix controls to meet the related applicable trust services criteria. Equinix is responsible for preparing the DRT Assertion, including the completeness, accuracy and method of presentation of the DRT Assertion.

Equinix is also responsible for providing certain services covered by the Description, specifying the DRT controls that meet the applicable trust services criteria and stating them in the Description; and designing, implementing and documenting controls to meet the applicable trust services criteria.

#### Service auditor's responsibilities

Our responsibility is to express an opinion on the fairness of the presentation of the Description based on the description criteria and on the suitability of the design and operating effectiveness of the controls described therein to meet the applicable trust services criteria, based on our examination. We conducted our examination in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform our examination to obtain reasonable assurance about whether, in all material respects, (1) the Description is fairly presented based on the description criteria, and (2) the controls described therein were suitably designed and operating effectively to meet the applicable trust services criteria throughout the period February 1, 2012 through July 31, 2012.

An examination of a description of a service organization's system and the suitability of the design and operating effectiveness of the service organization's controls, involves performing procedures to obtain evidence about the fairness of the presentation of the Description based on the description criteria and the suitability of the design and operating effectiveness of those controls to meet the applicable trust services criteria. Our procedures included assessing the risks that the Description is not fairly presented and that the controls were not suitably designed or operating effectively. Our procedures also included testing the operating effectiveness of those controls that we consider necessary to provide reasonable assurance that the applicable trust services criteria were met. Our examination also included evaluating the overall presentation of the Description. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

#### Inherent limitations

The Description is prepared to meet the common needs of a broad range of user entities and their auditors, and may not, therefore, include every aspect of the system that each individual customer may consider important in its own particular needs. Because of their nature and inherent limitations, controls at a service organization may not always operate effectively to meet the applicable trust services criteria. Also, the projection to the future of any evaluation of the fairness of the presentation of the Description, or conclusions about the suitability of the design or operating effectiveness of the controls to meet the applicable trust services criteria, is subject to the risks that the system may change or that controls at a service organization may become ineffective or fail.

#### Opinion

In our opinion, in all material respects, based on the description criteria and the applicable trust services criteria:

- a. The Description fairly presents Rackspace's Data centers Services System and DFT's, Equinix's and DRT's physical security and data center environmental safeguards services used by Rackspace to host customer servers for security and availability that was designed and implemented throughout the period February 1, 2012 through July 31, 2012.

- b. The controls of Rackspace, DFT, Equinix and DRT stated in the Description were suitably designed to provide reasonable assurance that the applicable trust services criteria would be met if the controls operated effectively throughout the period February 1, 2012 through July 31, 2012, and if user entities applied the complementary user entity controls contemplated in the design of Rackspace's, DFT's, Equinix's and DRT's controls throughout the period from February 1, 2012 through July 31, 2012.
- c. The controls tested, which, together with the complementary user entity controls referred to in the scope paragraph of this report, if operating effectively, were those necessary to provide reasonable assurance that the applicable trust services criteria were met, operated effectively throughout the period February 1, 2012 through July 31, 2012.

Description of tests of controls

The specific controls tested, and the nature, timing and results of those tests, are listed in the accompanying *Section IV - Description of controls, tests and results of tests* (Description of Tests and Results).

Intended use

This report, including the Description of Tests and Results thereof in *Section IV - Description of controls, tests and results of tests*, is intended solely for the information and use of Rackspace, user entities of Rackspace's Data centers Services System during some or all of the period February 1, 2012 through July 31, 2012; and prospective user entities, independent auditors and practitioners providing services to such user entities, and regulators who have sufficient knowledge and understanding of the following:

- ▶ The nature of the service provided by the service organization
- ▶ How the service organization's system interacts with user entities, subservice organizations, and other parties
- ▶ Internal control and its limitations
- ▶ Complementary user entity controls and how they interact with related controls at the service organization to meet the applicable trust services criteria
- ▶ The applicable trust services criteria
- ▶ The risks that may threaten the achievement of the applicable trust services criteria and how controls address those risks

This report is not intended to be, and should not be, used by anyone other than these specified parties.

*Ernst & Young LLP*

January 11, 2013

Section III – Description of Rackspace’s Data center Services  
System relevant to Security and Availability for the period  
February 1, 2012 through July 31, 2012



## **Section III – Description of Rackspace's Data center Services System relevant to Security and Availability for the period February 1, 2012 through July 31, 2012**

### **Company Overview**

Rackspace US, Inc. (Rackspace) began operations in December 1998 to provide managed web hosting services to small to medium sized businesses. Today, Rackspace services over 190,000 customers, including many Fortune 500 companies, in eight data centers worldwide. Currently, Rackspace employs over 4,500 people (Rackers) around the world. Rackspace integrates the industry's best technologies and practices for each customer's specific need and delivers it as a service via the company's commitment to Fanatical Support®.

### **Data center Services Overview**

Rackspace services a broad range of customers with diverse hosting needs and requirements. Rackspace has Traditional and Cloud hosting segments to support their client's needs. Rackspace has a third segment, called Managed Co-location, which serves clients that have significant in-house expertise and only require support around the physical infrastructure. Cloud Hosting is the newest division of Rackspace. Cloud serves clients scalable IT-enabled capabilities using Internet technologies. Rackspace also offers a combination of hosting services that enables customers to utilize managed hosting and cloud services under one account. This report, however, is limited to the Data Center Services.

#### **Data Centers**

Rackspace Hosting operates eight data center facilities throughout the world; with locations in Texas, Virginia, Illinois as well as London, England, and Hong Kong. Rackspace has a truly global footprint. Each data center is engineered to the highest industry standards, with systems to address security and network redundancy. This enables Rackspace to offer our 100% infrastructure availability guarantee. Rackspace data centers are staffed 24/7/365 by trained Rackspace personnel and access is restricted to authorized personnel only.

#### **Monitoring - Data Center**

Rackspace monitors the status and efficiency of all HVAC, power generation, security, management, and support systems. We also track the health of servers, firewalls, load-balancers, and other platform components. Automated monitoring technologies provide alerts in the event of data center or device failures.

#### **Infrastructure - Security**

Security starts at the data center and includes traditional locks, proximity card readers, biometric access controls, and video surveillance. Robust fire suppression, HVAC, power feeds, hot-swappable servers and routers are available in the event of an outage.

## **Role of Subservice Organizations**

The role of subservice organizations used by Rackspace is to provide physical and environmental security at data centers not directly owned by Rackspace. Since these locations are not owned by Rackspace, reliance on subservice organizations controls' is needed to complete audits using security and environmental controls. Controls at Rackspace subservice organizations are more stringent or equal to the controls found in Rackspace owned data centers.

## **Relevant Aspects of the Control Environment, Risk Assessment Process, Information and Communication Systems, and Monitoring of Controls**

This section provides information about the overall control environment at Rackspace:

### **Control Environment**

A company's internal control environment reflects the overall attitude, awareness, and actions of management, the board of directors, and others concerning the importance of controls and the emphasis given to controls in the company's policies, procedures, methods, and organizational structure. The following is a description of the control environment as it pertains to Rackspace's delivery of IT hosting services.

### **Business Segmentation**

Rackspace is internally organized into business units or "segments." They include: Managed, Managed Co-location, Cloud (Cloud Sites™, Cloud Files™, & Cloud Servers™), E-mail and Apps, RES and Intensive. Eight global functions support these segments:

- ▶ Engineering
- ▶ Accounting & Finance
- ▶ Legal
- ▶ Employee Services
- ▶ Sales & Marketing
- ▶ Information Technology
- ▶ Corporate Development/Strategy
- ▶ Security

These global functions have been established to provide capabilities to complement the segments, and to realize economies of scale and quality control. Each segment is led by a segment leader. The leaders of the various global functions, the segment leaders, and officers make up the Rackspace Senior Leadership Team (SLT).

### **Internal Controls**

Rackspace management is responsible for directing and controlling operations and for establishing, communicating and monitoring policies and procedures. Rackspace determines operational and strategic compliance to the company's overall objectives through proper preparation and planning. Management directs and controls operations and establishes, communicates and monitors policies and procedures related to Human Resources. Importance is placed on maintaining sound internal controls and the integrity and ethical

values of all Rackspace personnel. Rackspace takes actions to address risks to the achievement of objectives by making available the organizational values and behavioral standards on Rackspace's Intranet and in the Rackspace employee handbook. Rackspace technicians are staffed on a 24/7 basis to offer assistance with the installation and maintenance of various applications and to handle any critical system failures that may arise. Rackspace staffs support teams and data center operations teams with technicians certified in various areas of expertise. Certifications held by Rackspace technicians include:

- ▶ Microsoft Certified Systems Engineer
- ▶ Microsoft Certified Professional
- ▶ Microsoft Certified Trainer
- ▶ Red Hat Certified Engineer
- ▶ Certified Information Systems Security Professional
- ▶ Certified Information Systems Auditor
- ▶ Cisco Certified Internetwork Expert
- ▶ Brocade Certified Fabric Professional
- ▶ Dell Certified Systems Expert
- ▶ Legato Certified Networker Administrator
- ▶ VMware Certified Engineers

### **Commitment to Employee Development**

The competence of employees is a key element of the control environment. Rackspace employs staff with high levels of technical and legal knowledge in order to ensure proper handling of critical issues. Rackspace is committed to the development of its employees. This commitment to competence is expressed in the Company's personnel policies and related human resource programs. Specific indicators of the commitment to personnel development include recruiting and hiring policies, investment in training and development, and performance monitoring.

Rackspace's commitment to competence begins with recruiting, which is the joint responsibility of the Employee Services Department and business unit or department managers. Hiring decisions are based on various factors, including educational background, prior relevant experience, past accomplishments, and evidence of integrity and ethical behavior. Rackspace's commitment to the training and development of its employees is demonstrated by the creation of a dedicated training organization called Rackspace University. The training and development path is co-managed by each employee and his or her manager. All training is coordinated through Rackspace University. The process entails the development of specific, quantifiable objectives for the coming performance year, periodic discussions of progress in meeting those objectives, and a semi-annual formal review of the employee's overall performance in the current position. It also fosters career development discussions to help prepare the individual for advancement.

Rackspace segregates employee duties with regards to physical and logical access in order to control access to customer data and assets. Rackspace management has implemented a division of roles and responsibilities, which provides adequate segregation of duties. The primary mechanisms used to enforce segregation of duties are the physical and logical access controls in place at Rackspace to control access to customer data and assets. Physical access restrictions for personnel are enforced with the use of a color-coded ID badge system,

proximity access cards, and biometric access devices. Logical access to core networking equipment and customer resources requires password access and is granted only to those personnel in roles that require such access.

## **Risk Assessment Process**

An entity's risk assessment process is its identification, analysis, and management of risks relevant to the preparation of its financial statements and its service delivery to user organizations. Rackspace recognizes that risk management is a critical component of its operations that helps to verify that customer assets are properly maintained. Rackspace incorporates risk management throughout its processes at both the corporate and segment levels.

Rackspace utilizes risk assessments performed by different segments to mitigate risk to an acceptable level. Information Security risk assessments are completed by the Global Security Services team (GSS) which require sign-off from leadership around the company. Rackspace also utilizes an Enterprise Risk Management group which ranks risks from around the company and presents a comprehensive risk list to the Rackspace Leadership Team. Leadership then makes decisions based on evolving risk at the company which can be seen through the implementation of global strategies and process changes and implementation.

In addition to the formal risk assessment process, managers discuss and resolve issues as they arise within their areas, and monitor and adjust the control processes for which they are responsible on an as-needed basis. This process is performed both informally and formally through regularly scheduled meetings. Rackspace has an overall strategic plan that is presented to the Board of Directors. This strategic plan is then separated into specific segment plans that are designed to operationalize what is expected of the segments in order to support Rackspace's overall objectives. Rackspace uses a number of different procedures to manage its business risks. Contracts and amendments with vendors and customers are reviewed by Rackspace in-house legal counsel. Finally, monitoring of performance against existing contracts with vendors and customers is a critical function performed by all of Rackspace's segments.

## **Information and Communication Systems**

To help align Rackspace business strategies and goals with operating performance, management is committed to maintaining effective communication with personnel. Organizational values and behavioral standards are communicated to personnel, via Rackspace's Intranet and the Rackspace employee handbook. A code of conduct agreement is also distributed to employees upon hiring. Rackspace supports customer satisfaction by monitoring customer communication and issue resolution. Members of management teams across functional areas participate in weekly meetings to discuss the status of service delivery or other matters of interest and concern. Issues or suggestions identified by personnel are readily brought to the attention of management to be addressed and resolved. On a real-time basis, Rackspace personnel can access key performance metrics using the Rackspace Data Warehouse Corporate Reporting Portal. In addition, a monthly Directors' and Officers' report is provided to Rackspace management summarizing the performance statistics of the various segments within the Company, including but not limited to, key financial data, employee headcount information, inventory and recycling rates, and goal attainment reports.

Management presents key corporate and department goals, summarized financial results, and critical operational performance to Rackspace employees during quarterly, company-wide Open Book meetings.

Rackspace has implemented a security awareness notification email list through which employees are provided ongoing guidance and leading practice information on securing data, assets, and other sensitive information. Changes and updates to the security policy are communicated to employees through company-wide email and through the Rackspace Global Security Services Department. New employees are briefed on the Rackspace security policy during the employee new hire process and each employee signs a security acknowledgement form and confidentiality agreement.

## **Monitoring**

Monitoring is a critical aspect of internal control in evaluating whether controls are operating as intended and whether they are modified as appropriate for changes in conditions. Management and supervisory personnel are responsible for monitoring the quality of internal control performance as a routine part of their activities. To complement these measures, exceptions to normal or scheduled processing related to hardware, software, or procedural problems are logged, reported, and tracked until resolved. Key reports are reviewed by management to help verify that appropriate action is taken.

Rackspace has implemented a series of management reports that measure the results of providing a robust, scalable, and secure infrastructure for client organizations. Performance metric reports include data on actual system availability compared with established service level goals and standards. Performance metric reports are reviewed by appropriate levels of management, and action is taken when necessary.

## **Control Objectives and Controls for IT**

### **Policies**

Rackspace centralizes policies on an internal site that is open globally to all employees. Global Security Services (GSS) manages the administration of storing policies, and each internal department is responsible for updating relevant policies pertaining to their realm. As part of the policy renewal process, GSS alerts each department when a policy is approaching the expiration date (generally one year after the last update) for an updated copy and new signature. In accordance with the Control of Documents policy, each policy must have a signature from management and be dated matching the timeframe found in the version history of the document. The governing security document is the Information Security Policy which is updated annually based on feedback from the company in accordance to the Information Security Management System (ISMS) Review Policy (ISO5.1.1 & ISO5.1.2). Other policies on the Policy site affect Security and Availability, including documents pertaining to the ISO27001 program and Availability Policy (A). The Information Security Policy contains eleven sections, matching the Annex A controls from the ISO27001 standard. These chapters cover in detail important security controls at Rackspace, including the security requirements of authorized users, new users, and terminated users.

## **Employee Commitment to Security & Availability**

Within the Rackspace organization, security is an enterprise wide effort rather than the sole responsibility of the security department. Rackspace uses feedback from across the entire company in setting security and availability policies as evidenced from the Rackspace Policy Site. Policies are owned by individual departments and signed-off by department leaders. In addition, job descriptions reflect duties related to information security and availability as evidenced by the Job Description Policy and Availability Policy (ISO6.1.2), and security and availability roles are clearly defined (ISO6.1.3). New leaders into these roles are specially trained to create a management tone throughout the organization for all employees to learn and understand the importance of information security and availability. Management actively supports security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities (ISO6.1.1) (B) (C).

## **Security Risk Management**

Rackspace utilizes a risk-based approach to define risks in the organization that can affect the security or availability of services in the scoped area of the company. Global Security Services conducts risk assessments based on a risk program developed to take into account threat and vulnerability ratings of assets called out for the in-scope areas. The risk program calls out an assessment methodology to rank these assets into five categories (low, medium-low, medium, medium-high, high) suited to the ISMS taking into account business information security, legal and regulatory requirements. These risk programs are designed to produce comparable and reproducible results (ISO4.2.1.c). The assets are called out on an asset register which lists the assets, owners, risk classification, data center and asset type. In addition, the threats against these assets are found on the Statement of Applicability that contains the controls used to mitigate the risks in the business. These threats can impact losses to confidentiality, integrity and availability on the assets in-scope (ISO4.2.1.d). The business takes these risk assessments and determines the level of risk to the company and whether the risks are acceptable or require treatment (ISO4.2.1.e). If risks do require treatment, controls are used to mitigate the risk, the company avoids the risk completely, the risk is transferred to other parties, or the company can choose to accept the risk in-line with the risk program's definition of risk acceptance (ISO4.2.1.f). Risk can only be accepted by management who oversee the department responsible for the asset (D). There are measures in place to mitigate and review threats in a consistent manner where practical. Rackspace data centers are vital to the running of the business, and the Statement of Applicability lists controls used to mitigate risks in data centers and lists the justifications as to why the controls were included or excluded from the document.

## **Physical Security and Environmental Control at Data Centers**

Rackspace Data centers feature redundant Heating Ventilation Air Conditioning (HVAC) units which maintain consistent temperature and humidity (SOC2.01). HVAC systems are inspected regularly and air filters are changed as needed. Redundant lines of communication exist to telecommunication providers providing Rackspace customers with failover communication paths in the event of data communications interruption (SOC 2.02).

Data centers are equipped with fire detection and suppression systems (dry-pipe, pre-action water-based in DFW1, DFW2, IAD1, IAD2 and LON3; Hi Fog Nitrogen in LON1; FM200 gas system in Hong Kong), and fire extinguishers (SOC 2.05). Fire detection systems, sprinkler

systems and chemical fire extinguishers are inspected at least annually (SOC 2.06). Data center and office facilities are equipped with uninterruptible power supplies (UPS) to mitigate the risk of short-term utility power failures and fluctuations (SOC 2.07). The UPS power subsystem is at least n+1 redundant with instantaneous failover in the event of a primary UPS failure. The UPS systems are inspected and/or serviced at least annually by a third party contractor (SOC 2.08). Data center and office facilities are equipped with diesel generators to mitigate the risk of long-term utility power failures and fluctuations (SOC 2.09). Generators are run at least every 120 days and maintained at least annually by a third party contractor to maintain appropriate operability in the event of an emergency (SOC 2.10) **(E)**.

Physical access to Rackspace locations is secure to prevent unauthorized access to system resources. Rackspace has data in eight data centers and numerous offices globally, and all offer a secure environment. Proximity cards are used at Rackspace facilities to appropriately secure access to specific areas and building access (SOC1.1). Only authorized Rackspace personnel have access to data center facilities (SOC2.14), but not all employees have access to sensitive parts of the data center. The data center floor is sectioned off from the rest of the facility, and two factor authentication is used to gain access to sensitive areas of the data center facilities (SOC2.13). This access is role-based and limited to critical personnel only. To further protect from unauthorized access, close circuit video surveillance has been installed at all entrance points on the interior and exterior of the buildings housing data centers and is monitored by authorized Rackspace personnel (SOC2.15). These videos are saved for up to 90 days for review of any incidents **(F)**.

## Communications

Another important distinction of a mature organization is how security and availability policies define the system and boundaries for the SOC2 examination and how these are communicated to employees. As stated earlier, the Information Security Policy and Availability Policy are reviewed annually (ISO5.1.1) and are constructed from feedback from different areas of the company, especially if an emergency change is needed (ISO5.1.2). Employees are required to abide by these policies via sign-off of the Employee Handbook - a document that informs employees on what is required of management and employees. Further the organization had prepared a detailed description of the scope and boundaries of the Data center services system. Rackspace has defined the scope and boundaries of the ISMS in terms of the characteristics of the business, the organization, its location, assets and technology, and including details of and justification for any exclusions from the scope (ISO4.2.1a) **(G)**. Training also plays a key role in awareness of security at Rackspace, and management has committed to keeping employees abreast of current events that could affect security or availability of services offered. Rackspace owns a Security Awareness Policy that is updated annually on the intranet site, and the workforce is trained at least annually on current trends, asset protection and general security leading practices (SOC1.5). Understanding that annual training is not always enough, Rackspace utilizes quarterly informational bulletins from the security team and immediate e-mail messages from the Information Security Operations Center (ISOC) to employees on threats received to the company (SOC1.6). Employees that are familiar with the company understand where to look for security information (e-mails, bulletins, videos, intranet sites), but new employees hired are not forgotten. New employees are required to attend initial Security Training their first day at Rackspace to ensure the importance of security and availability are known (SOC1.7)

Rackspace further facilitates a number of interactions and communications with its customers. Customers are informed of scheduled downtime and emergency changes (SOC3.10). CORE is utilized to track communication between the customer and Rackspace via a CORE ticket. These tickets are viewable by the customer through the MyRackspace customer portal (SOC3.11) (H).

## **Changes to System Security**

Environmental, regulatory, and technological changes are monitored and their effect on system security is assessed in a timely basis at Rackspace. Rackspace has a full slate of green initiatives that helps the environment (including upcoming certifications), obeys by local, state, and national laws (globally. Rackspace ensures strategic compliance to the company's overall objectives through future product offerings that differentiate Rackspace from competitors (SOC.ELC8). Beyond strategic compliance, management focuses on the potential risk that new product offerings and new employees have on the company, especially on information security and availability. The output from management reviews include decisions and actions related to modification of procedures and controls that affect information security, as necessary, to respond to internal or external events that may impact the Information Security Management System (ISMS), including changes to regulatory or legal requirements (SOC7.3.c). The reviews performed by management are communicated throughout the company, and legal records all relevant statutory, regulatory and contractual requirements and the organization's approach to meet these requirements are explicitly defined, documented, and kept up to date for each information system and the organization (ISO15.1.1) (I).

## **Procedures**

### **Commitment to competence**

Hiring practices are in place at Rackspace to ensure that competent employees are hired. Hiring decisions are based on various factors, including educational background, prior relevant experience, past accomplishments (SOC.ELC3). Human Resources is responsible for the initial recruiting and evaluation of job applicants through the H.I.R.E process. The Human Resources department trains supervisors and management of the operating and functional business units, as appropriate, to perform interviews and to make the final hiring decisions according to the H.I.R.E process. Background checks, conducted in accordance with applicable local laws and regulations, are required as part of the hiring process. Annual performance reviews are required for all employees. Semiannual performance reviews are also conducted as a checkpoint for the employee. Rackspace offers a wide array of training courses to its employees that cover security awareness and other job-related information via formal classroom instruction, online instruction, and on-the-job training programs. Formal job descriptions exist for all active and approved positions and are effectively utilized (and are updated as needed). Roles, responsibilities, and the significance of meeting them are communicated to employees (SOC.ELC7). Job descriptions offer an opportunity to review employees annually against the agreed upon job duties. All Human Resources and compliance training and awareness policies and manuals are available to all personnel via the company intranet and physical course description handbooks (J).



## **Information Security Management System (ISMS)**

The Information Security Management System (ISMS) as a whole is reviewed at least annually as well by the Chief Security Officer, Internal Audit and an external party to ensure the program is running according to the ISO27001 standard. These reviews make sure the ISMS conforms to relevant legislation or regulations, identified security requirements, effectively implemented and maintained, and are performing as expected (ISO6.0). Management reviews Rackspace's ISMS at planned intervals (at least once a year) to ensure its continuing suitability, adequacy and effectiveness. The review includes assessing opportunities for improvement and the need for changes to the ISMS, including the information security policy and information security objectives. The results of the reviews are clearly documented and records are maintained (ISO7.1). Rackspace undertakes regular reviews of the effectiveness of the ISMS (including meeting ISMS policy and objectives, and review of security controls) taking into account results of security audits, incidents, results from effectiveness measurements, suggestions and feedback from all interested parties (ISO4.2.3.b). Rackspace updates security plans to take into account the findings of monitoring and reviewing activities (ISO4.2.3.g) (K).

## **Change Management**

Rackspace employs a Technical Change Management Program which represents the entire business through individuals representing various segments of the company. These individuals are chosen based on performance, knowledge and trustworthiness to make proper decisions and follow the Change Management program effectively. The role of these individuals (called Change Sponsors) is to sponsor potential changes to Rackspace infrastructure that can affect security or availability of services. In addition, Technical Change Sponsors or the Technical Change Board (the governing board for Change Management) review and approve/reject all medium and high priority changes prior to implementation (SOC4.2). All design, acquisition, implementation, configuration, modification, and management of infrastructure and software are consistent with the program and Change Sponsors are responsible for knowing the program. Only authorized, tested, and documented changes are made to the system. Infrastructure changes undergo testing when feasible (SOC4.3). Changes are approved by the Change Sponsor directly if the risk score is low, and approved by the board for medium and high risk changes. External customers are given at least 72 hours notice of scheduled non-emergency changes that could be disruptive to service (SOC4.4). Infrastructure maintenance is scheduled in the calendar tool (SOC4.5). Results are stored in meeting minutes and the Technical Change Management tool for future review if necessary (L) (M) (N) (O) (P).

## **Logical Access**

Logical access is extremely important at Rackspace, and is limited only to employees or approved third-parties who need the function in order to complete contracted work. Logical access is restricted to users in a Rackspace location or to approved parties via a secure VPN connection. The VPN connection encrypts data to protect user authentication information over a public network as stated in the Information Security Policy which is reviewed annually and found on the internal policy site. Rackspace encrypts all non-console administrative access using strong cryptography and uses technologies such as SSH, VPN, or SSL/TLS for web-based management and other non-console administrative access (PCI2.3) (Q). To best secure logical access, Rackspace uses Active Directory and e-Directory to manage user accounts, including provisioning and termination of access. Active Directory Organization

Units (OU) are used to logically segment the Rackspace Active Directory (at the operating system level) into different logical partitions for customer segregation (SOC6.18). Further, Rackspace utilizes inherent access control functionality within Active Directory and CORE to secure access to customer servers by Rackspace technicians (SOC6.19).

The accounts are username/password protected, and Intensive Active Directory (intensive.rackspace.com) passwords used by Rackspace employees are changed on a regular basis (SOC6.3) according to the Rackspace Password Policy. E-Directory passwords used by Rackspace employees are changed at least every 90 days (SOC6.4). In addition to the changing of passwords, there is also a process in place to review the Intensive Active Directory access control settings and user access list on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected (SOC6.20). As an added protection method, after six unsuccessful access attempts, Active Directory locks a user out (SOC6.21). Per the HR Termination Policy, termination tickets are generated by the appropriate level of management and/or HR representative (SOC6.22). Finally, Network level access is disabled in a timely manner upon termination (SOC6.22).

Access for employees to work on network devices adds an extra layer of security to prevent employees in non-networking roles from having access to network equipment. Rackspace secures access to core networking infrastructure utilizing inherent access control functionality in TACACS+ software (SOC6.9). Much like Active Directory, TACACS+ access lists are reviewed on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected (SOC6.2). Procedures to protect against unauthorized access to system resources is not just limited to internal systems. Rackspace considers the security of customers' servers as well, as non-admin ports are closed by default unless specifically requested by the customer, and administrative activity on customer servers is limited to customer specified IP ranges (SOC6.7) **(R) (S)**.

## **Corrective & Preventive Actions**

Non-compliance with security and availability policies is addressed promptly and corrective actions are begun in a timely manner. As a part of the ISO27001 program, a process is in place to identify non-conformities from security and availability policies across the company by employees and management, and to determine the cause of the issue. Most importantly, Rackspace evaluates the need for actions to ensure the non-conformity does not repeat itself. Usually this action is a newly implemented control that is testable in other security or compliance efforts, but can be a new policy or process. After Rackspace implements the corrective action, the result is listed in the corrective actions log for review later. This review is performed after a set period of time to ensure the corrective action was appropriate and the non-conformity is solved (ISO8.2). Rackspace also uses a similar process to identify potential non-conformities to the company. At least annually, the Chief Security Officer takes inputs from around the company to identify potential non-conformities to security and availability policies. Once the potential non-conformities are identified, a plan of action is taken if necessary to immediately resolve the non-conformity. Once the potential non-conformity is logged into the preventive actions log, it is reviewed after a set period of time to ensure the preventive action was appropriate and the non-conformity is solved (ISO8.3) **(T)**.

## **Monitoring**

### **Incident Management**

In the case of an incident or emergency, a contact list is maintained by GSS of relevant authorities, special interest groups and professional groups for effective speed in handling various potential events (ISO6.1.6 & ISO6.1.7). To best handle incidents dealing with data (whether customer or internal), data is classified according to the Data Classification Guidelines document found on the Policy Site (ISO7.2.1). This document follows the Policy Revision process which brings together Compliance departments from the U.S. and U.K. annually (or as needed to periodically monitor) to discuss how data is handled and labeled (ISO7.2.2). In addition, a Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually (SOC1.5). The incident process at Rackspace has matured over the last several years to react quickly to security events and to help protect customer data and uptime on the network. The Rackspace ISOC (Information Security Operations Center) is staffed 24/7/365 and trained on various tools and incident processes to investigate, detect and correct events quickly and effectively. An incident response process has been established to respond to and document security events (SOC1.10). Information security events are reported through appropriate management channels in a timely manner (ISO13.1.1). Any observed or suspected security weaknesses in systems or services are required to be noted by employees, contractors, or third party users (ISO13.1.2). Once the incident or security event is noted by an employee, management follows designed responsibilities and processes to ensure a quick, effective, and orderly response (ISO13.2.1). A part of the incident response process is a post-mortem phase where the event is reviewed and a report is issued on lessons learned. From these reports management is able to ensure a quick, effective and orderly response to security events (ISO13.2.2) and appoint budgets as necessary to remediate risks to the company. If a change is needed to internal systems, the change follows the Rackspace Technical Change Management program (SOC4.1) which involves feedback from various parts of the company and a rigorous review process. If part of the response plan involves taking action against a person or organization, evidence is collected, retained, and presented to conform to the rules for evidence laid down in relevant jurisdictions (ISO13.2.3) (U) (V) (W).

### **Management Commitment to Security & Availability**

Management actively supports security in the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities (ISO6.1.1). The example management displays enables the workforce to be honest when reporting irregularities around the company. Rackspace employees are required to report any security incidents or irregularities they see and are given information regularly on the reporting procedure and its importance. Depending on the type of incident reported, the Incident Response team acts swiftly according to the Incident Response playbook. If this incident is a physical security concern, the incident is directed to the Security Operations Center (SOC), an information security concern is directed to the ISOC, an enterprise-level concern is directed to the global Incident Management Team, and an availability issue is directed to Data Center Operations (DCOPs). Each team documents the particular event according to business processes and the handbook governing the team (SOC1.10). After each event (no matter which incident response department worked on the incident), Rackspace routinely monitors the quality of internal control performance by logging, reporting on, and

tracking issues until resolved (SOC.ELC11). Rackspace tracks performance to eliminate the cause of issues and to ensure non-conformities do not reoccur (ISO8.2) (X) (Y).

## **Backup of Systems**

Rackspace uses backup procedures, offsite storage, restoration and disaster recovery to ensure security and availability of services in the case of emergency or as needed. Backup utility software is used to schedule and perform these backups (SOC7.1) in accordance with the requirements of each system. Rackspace backs up internal systems in the same way as a customer to ensure the process is working correctly and problems are found early before it can impact customers negatively. An important aspect of backups is to make sure the backup will work before it is performed. Prior to finalizing backup configuration, an initial test backup is run in order to ensure that backups will run properly (SOC7.2). This step allows Rackspace to provide proof of integrity for the backup data. Since space in the data centers is limited, it is necessary to store backup information outside the company premises. Rackspace understands the importance of data security and availability in transit, and customers (including internal systems) subscribed to retention with offsite will have media sent out to a third-party secure offsite storage facility in a locked container (SOC7.6). The third-party facility is visited at least annually and a risk assessment completed by GSS in the case of business changes unforeseen at the vendor (Z) (AA).

## **Anti-Virus**

Rackspace protects its network and customers from infection by computer viruses, malicious code and unauthorized software through the use of anti-virus and ISOC tools. The ISOC monitors traffic coming into Rackspace in real-time and is staffed 24/7/365. This traffic is analyzed by tools to help reduce the chance that viruses and attack e-mails infect the network. If Rackspace is attacked and bypasses the ISOC preventive controls, other tools are in place to detect the breach and the incident response procedure kicks into action. To help protect the business and customers from this type of breach, anti-virus protection is used to scan servers for viruses; and, if infected files are found, then the server configures alerts at the console for customers that have selected the AV option (SOC3.5). Rackspace considers internal systems as a customer of the anti-virus team to ensure the process is working correctly and problems are found early before it can impact external customers negatively. To help ensure anti-virus is working properly, Rackspace maintains current virus signature updates (SOC3.6) (AB).

Table 1 – Rackspace controls to Security and Availability criteria mapping

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
A	ISO5.1.1	An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties.	S.1.1	A1.1
	ISO5.1.2	The information security policy shall be reviewed at planned intervals or if significant changes occur to ensure its continuing suitability, adequacy, and effectiveness.		
B	ISO6.1.2	Information security activities shall be coordinated by representatives from different parts of the organization with relevant roles and job functions.	S1.3	A1.3
C	ISO6.1.1	Management shall actively support security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities	S2.3	A2.3
	ISO6.1.2	Information security activities shall be coordinated by representatives from different parts of the organization with relevant roles and job functions.		
	ISO6.1.3	All information security responsibilities shall be clearly defined.		
D	ISO4.2.1.c	The organization shall define the risk assessment approach of the organization.	S3.1	A3.1
	ISO4.2.1.d	The organization shall identify the risks.		
	ISO4.2.1.e	The organization shall analyze and evaluate the risks.		
	ISO4.2.1.f	The organization shall identify and evaluate options for the treatment of risks.		
E	SOC 2.1	The Data center facilities are equipped redundant HVAC units to maintain consistent temperature and humidity levels.	N/A	A3.2
	SOC2.2	Redundant lines of communication exist to telecommunication providers.		
	SOC2.5	Data centers are equipped with fire detection and suppression systems (dry-pipe, pre-action water based in DFW1, DFW2, IAD1, IAD2 and LON3; Hi Fog Nitrogen in LON1; FM200 gas system in Hong Kong), and fire extinguishers.		
	SOC2.6	Fire detection systems, sprinkler systems, and chemical fire extinguishers are inspected at least annually.		
	SOC2.7	Data center facilities are equipped with uninterruptible power supplies (UPS) to mitigate the risk of short term utility power failures and fluctuations.		
	SOC2.8	The UPS systems are inspected and /or serviced at least annually.		
	SOC2.9	Data center facilities are equipped with diesel generators to mitigate the risk of long-term utility power failures and fluctuations.		
	SOC2.10	Generators are run at least every 120 days and serviced at least annually by a third-party contractor.		

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
F	SOC1.1	Proximity cards are used at Rackspace facilities to appropriately secure access to specific areas and building access.	S3.3	A3.6
	SOC2.13	Two factor authentication is used to gain access to sensitive areas of the Data center facilities.		
	SOC2.14	Only authorized Rackspace personnel have access to Data center facilities.		
	SOC2.15	Closed circuit video surveillance has been installed at all entrance points on the interior and exterior of the buildings housing Data centers and is monitored by authorized Rackspace personnel.		
G	ISO5.1.1	An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties.	S2.1	A2.1
	ISO5.1.2	The information security policy shall be reviewed at planned intervals or if significant changes occur to ensure its continuing suitability, adequacy, and effectiveness.		
	ISO4.2.1a	The organization shall do the following. a) Define the scope and boundaries of the ISMS in terms of the characteristics of the business, the organization, its location, assets and technology, and including details of and justification for any exclusions from the scope		
H	SOC1.5	A Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually.	S2.2	A2.2
	SOC1.6	(Oct-June) Corporate Security releases Quarterly Security Awareness bulletins focusing on current security issues and concerns (July-Sept) Corporate Security releases notification e-mails focusing on immediate security issues and concerns.		
	SOC1.7	New Employees go through initial Security training during the New Hire Process.		
	SOC3.10	Customers are informed of scheduled downtime and emergency changes.		
	SOC3.11	CORE is utilized to track communication between the customer and Rackspace via a CORE ticket. These tickets are viewable by the customer through the MyRackspace customer portal.		
I	SOC.ELC8	Rackspace ensures strategic compliance to the company's overall objectives through future product offerings that differentiate Rackspace from competitors.	S4.3	A4.3
	ISO7.3.c	The output from the management review shall include any decisions and actions related to modification of procedures and controls that effect information security, as necessary, to respond to internal or external events that may impact on the ISMS, including changes to regulatory or legal requirements.		
	ISO15.1.1	All relevant statutory, regulatory and contractual requirements and the organization's approach to meet these requirements shall be explicitly defined, documented, and kept up to date for each information system and the organization.		

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
J	SOC.ELC3	Hiring practices are in place at Rackspace to ensure that competent employees are hired. Hiring decisions are based on various factors, including educational background, prior relevant experience, past accomplishments.	S3.11	A3.14
	SOC.ELC7	Formal job descriptions exist for all active and approved positions and are effectively utilized (and are updated as needed). Roles, responsibilities, and the significance of meeting them are communicated to employees.		
K	ISO6.0	The organization shall conduct internal ISMS audits at planned intervals to determine whether the control objectives, controls, processes and procedures of its ISMS	S4.1	A4.1
	ISO7.1	Management shall review the organization's ISMS at planned intervals (at least once a year) to ensure its continuing suitability, adequacy and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the ISMS, including the information security policy and information security objectives. The results of the reviews shall be clearly documented and records shall be maintained.		
	ISO4.2.3.b	The organization shall undertake regular reviews of the effectiveness of the ISMS (including meeting ISMS policy and objectives, and review of security controls) taking into account results of security audits, incidents, results from effectiveness measurements, suggestions and feedback from all interested parties.		
	ISO4.2.3.g	The organization shall update security plans to take into account the findings of monitoring and reviewing activities.		
L	SOC4.2	Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.	S2.5	A2.5
	SOC4.4	External customers are given at least 72 hours notice of scheduled non-emergency changes that could be disruptive to service.		
	SOC4.5	Infrastructure maintenance is scheduled in the calendar tool.		
M	SOC4.1	Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.	S3.10	A3.13
	SOC4.2	Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.		
N	SOC4.1	Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.	S3.12	A3.15
	SOC4.2	Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.		

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
O	SOC4.1	Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.	S3.13	A3.16
	SOC4.2	Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.		
	SOC4.3	Infrastructure changes undergo testing when feasible.		
P	SOC4.1	Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.	S3.14	A3.17
	SOC4.2	Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.		
Q	PCI2.3	Encrypt all non-console administrative access using strong cryptography. Use technologies such as SSH, VPN, or SSL/TLS for web-based management and other non-console administrative access.	S3.6	A3.9
R	SOC6.3	Intensive Active Directory passwords used by Rackspace employees are changed on a regular basis.	S3.2	A3.5
	SOC6.4	Active Directory and eDirectory passwords used by Rackspace employees are changed at least every 90 days.		
	SOC6.9	Rackspace secures access to core networking infrastructure utilizing inherent access control functionality in TACACS+ software.		
	SOC6.18	Active Directory Organization Units (OU) are used to logically segment the Rackspace Active Directory (at the operating system level) into different logical partitions for customer segregation.		
	SOC6.19	Rackspace utilizes inherent access control functionality within Active Directory and CORE to secure access to customer servers by Rackspace technicians.		
	SOC6.20	Processes are in place to review the Intensive Active Directory access control settings and user access list on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.		
	SOC6.21	After six unsuccessful access attempts, Active Directory locks a user out.		
	SOC6.22	Per the HR Termination Policy, termination tickets are generated by the appropriate level of management and/or HR representative.		
	SOC6.24	Network level access is disabled in a timely manner upon termination.		



Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
S	SOC6.3	Intensive Active Directory passwords used by Rackspace employees are changed on a regular basis.	S3.4	A3.7
	SOC6.4	Active Directory and eDirectory passwords used by Rackspace employees are changed at least every 90 days.		
	SOC6.9	Rackspace secures access to core networking infrastructure utilizing inherent access control functionality in TACACS+ software.		
	SOC6.20	Processes are in place to review the Intensive Active Directory access control settings and user access list on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.		
	SOC6.21	After six unsuccessful access attempts, Active Directory locks a user out.		
	SOC6.2	TACACS+ access lists are reviewed on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.		
	SOC6.7	Non-admin ports are closed by default unless specifically requested by the customer, and administrative activity on customer servers is limited to customer specified IP ranges. SMB customers are open by default.		
T	ISO8.2	The organization shall take action to eliminate the cause of nonconformities with the ISMS requirements in order to prevent recurrence. The documented procedure for corrective action shall define requirements for: <ul style="list-style-type: none"> <li>a) identifying nonconformities;</li> <li>b) determining the causes of nonconformities;</li> <li>c) evaluating the need for actions to ensure that nonconformities do not recur;</li> <li>d) determining and implementing the corrective action needed;</li> <li>e) recording results of action taken (see 4.3.3); and</li> <li>f) reviewing of corrective action taken.</li> </ul>	S3.9	A3.12
	ISO8.3	The organization shall determine action to eliminate the cause of potential nonconformities with the ISMS requirements in order to prevent their occurrence. Preventive actions taken shall be appropriate to the impact of the potential problems. The documented procedure for preventive action shall define requirements for: <ul style="list-style-type: none"> <li>a) identifying potential nonconformities and their causes;</li> <li>b) evaluating the need for action to prevent occurrence of nonconformities;</li> <li>c) determining and implementing preventive action needed;</li> <li>d) recording results of action taken (see 4.3.3); and</li> <li>e) reviewing of preventive action taken.</li> </ul>		

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
U	ISO5.1.1	An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties.	S1.2	A1.2
	ISO6.1.6	Appropriate contacts with relevant authorities shall be maintained.		
	ISO6.1.7	Appropriate contacts with special interest groups or other specialist security forums and professional associations shall be maintained.		
	ISO7.2.1	Information shall be classified in terms of its value, legal requirements, sensitivity and criticality to the organization.		
	ISO7.2.2	An appropriate set of procedures for information labeling and handling shall be developed and implemented in accordance with the classification scheme adopted by the organization.		
	ISO10.1.2	Changes to information processing facilities and systems shall be controlled.		
	ISO12.6.1	Timely information about technical vulnerabilities of information systems being used shall be obtained, the organization's exposure to such vulnerabilities evaluated, and appropriate measures taken to address the associated risk.		
	ISO13.1.1	Information security events shall be reported through appropriate management channels as quickly as possible.		
	ISO13.1.2	All employees, contractors and third party users of information systems and services shall be required to note and report any observed or suspected security weaknesses in systems or services.		
	ISO13.2.1	Management responsibilities and procedures shall be established to ensure a quick, effective, and orderly response to information security incidents.		
	ISO13.2.2	There shall be mechanisms in place to enable the types, volumes, and costs of information security incidents to be quantified and monitored.		
	ISO13.2.3	Where a follow-up action against a person or organization after an information security incident involves legal action (either civil or criminal), evidence shall be collected, retained, and presented to conform to the rules for evidence laid down in the relevant jurisdiction(s).		
	SOC4.1	Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.		

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
V	SOC1.5	A Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually.	S3.7	A3.10
	SOC1.10	An Incident Response process has been established to respond to and document security incidents.		
	ISO13.1.1	Information security events shall be reported through appropriate management channels as quickly as possible.		
	ISO13.1.2	All employees, contractors and third party users of information systems and services shall be required to note and report any observed or suspected security weaknesses in systems or services.		
W	ISO7.2.1	Information shall be classified in terms of its value, legal requirements, sensitivity and criticality to the organization.	S3.8	A3.11
	ISO7.2.2	An appropriate set of procedures for information labeling and handling shall be developed and implemented in accordance with the classification scheme adopted by the organization.		
X	SOC.ELC11	(Oct-June) Corporate Security releases Quarterly Security Awareness bulletins focusing on current security issues and concerns (July-Sept) Corporate Security releases notification e-mails focusing on immediate security issues and concerns.	S2.4	A2.4
	SOC1.10	An Incident Response process has been established to respond to and document security incidents.		
Y	ISO6.1.1	Management shall actively support security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities.	S4.2	A4.2
	ISO8.2	The organization shall take action to eliminate the cause of nonconformities with the ISMS requirements in order to prevent recurrence.		
	SOC.ELC11	Rackspace routinely monitors the quality of internal control performance by logging, reporting on, and tracking issues until resolved.		
Z	SOC7.1	Backup utility software is used to schedule and perform backups.		A3.3
	SOC7.2	Prior to finalizing backup configuration, an initial test backup is run in order to ensure that backups will run properly.		
	SOC7.6	Customers subscribed to retention with offsite will have media sent out to a third-party secure offsite storage facility in a locked container.		
AA	SOC7.2	Prior to finalizing backup configuration, an initial test backup is run in order to ensure that backups will run properly.		A3.4

Alphabetical Reference	Rackspace Control	Control Description	Security	Availability
AB	SOC3.5	Anti-Virus Protection is used to scan servers for viruses and if infected files are found then the server configures alerts at the console (Windows Customers Only) for customers that have selected the AV option.	S3.5	A3.8
	SOC3.6	Rackspace maintains current virus signature updates.		

## Trust Services Criteria and Related Controls

Although the trust services criteria and related controls are presented in Section IV, "Trust Services Security and Availability Principles, Criteria, Related Controls, and Tests of Controls," they are an integral part of Example Service Organization's system description.

**Section IV – Trust Services Security and Availability**  
**Principles, Criteria, Related Controls, and Tests of Controls**

## **Section IV – Trust Services Security and Availability Principles, Criteria, Related Controls, and Tests of Controls**

### **Testing performed and results of tests of entity-level controls**

In planning the nature, timing and extent of our testing of the controls specified by Rackspace, we considered the aspects of Rackspace's control environment, risk assessment processes, information and communication and management monitoring procedures and performed such procedures as we considered necessary in the circumstances.

### **Control Objectives and Controls for IT**

On the pages that follow, the description of the applicable Trust Services Criteria and the controls to meet the criteria have been specified by, and are the responsibility of Rackspace. The testing performed by Ernst & Young and the results of tests are the responsibility of the service auditor.

## Security and Availability Principle and Criteria - The Rackspace Data center System

The system is protected against unauthorized access (both physical and logical).

The system is available for operation and use as committed or agreed.

**Policies:** The entity defines and documents its policies for the security of its system. The entity defines and documents its policies for the availability of its system.

### Security Policy Criteria 1.1 description

The entity's security policies are established and periodically reviewed and approved by a designated individual or group.

### Availability Policy Criteria 1.1 description

The entity's system availability and related security policies are established and periodically reviewed and approved by a designated individual or group.

Security Policy Criteria 1.1 Availability Policy Criteria 1.1	
Controls specified by Rackspace	Testing performed by Ernst & Young
(ISO) A.5.1.1 - An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties. (ISO) A.5.1.2 - The information security policy shall be reviewed at planned intervals or if significant changes occur to ensure its continuing suitability, adequacy, and effectiveness.	<ul style="list-style-type: none"><li>▶ Inspected the Information Security policy and supplemental security and availability policies and determined that it is reviewed and approved on an annual basis.</li><li>▶ Inquired with members of the Compliance and Security teams and determined that the Information Security Policy and supplemental security and availability policies are reviewed and approved on an annual basis by a committee consisting of individuals with senior titles and a mixture of responsibilities such as security, compliance, product and legal.</li><li>▶ Inspected the Information Security Policy and determined that it contained multiple stipulations addressing the organization's security and availability posture.</li></ul> <p><b>No deviations noted.</b></p>

### **Security Policy Criteria 1.2 description**

The entity's security policies include, but may not be limited to, the following matters:

- a. Identifying and documenting the security requirements of authorized users.
- b. Classifying data based on its criticality and sensitivity and that classification is used to define protection requirements, access rights and access restrictions, and retention and destruction requirements.
- c. Assessing risks on a periodic basis.
- d. Preventing unauthorized access.
- e. Adding new users, modifying the access levels of existing users, and removing users who no longer need access.
- f. Assigning responsibility and accountability for system security.
- g. Assigning responsibility and accountability for system changes and maintenance.
- h. Testing, evaluating, and authorizing system components before implementation.
- i. Addressing how complaints and requests relating to security issues are resolved.
- j. Identifying and mitigating security breaches and other incidents.
- k. Providing for training and other resources to support its system security policies.
- l. Providing for the handling of exceptions and situations not specifically addressed in its system security policies.
- m. Providing for the identification of and consistency with applicable laws and regulations, defined commitments, service-level agreements, and other contractual requirements.
- n. Providing for sharing information with third parties.

### **Availability Policy Criteria 1.2 description**

The entity's system availability and related security policies include, but may not be limited to, the following matters:

- a) Identifying and documenting the system availability and related security requirements of authorized users.
- b) Classifying data based on its criticality and sensitivity and that classification is used to define protection requirements, access rights and access restrictions, and retention and destruction requirements.
- c) Assessing risks on a periodic basis.
- d) Preventing unauthorized access.
- e) Adding new users, modifying the access levels of existing users, and removing users who no longer need access.
- f) Assigning responsibility and accountability for system availability and related security.
- g) Assigning responsibility and accountability for system changes and maintenance.
- h) Testing, evaluating, and authorizing system components before implementation.
- i) Addressing how complaints and requests relating to system availability and related security issues are resolved.
- j) Identifying and mitigating system availability and related security breaches and other incidents.
- k) Providing for training and other resources to support its system availability and related security policies.
- l) Providing for the handling of exceptions and situations not specifically addressed in its system availability and related security policies.
- m) Providing for the identification of and consistency with applicable laws and regulations, defined commitments, service-level agreements, and other contractual requirements.
- n) Recovering and continuing service in accordance with documented customer commitments or other agreements.
- o) Monitoring system capacity to achieve customer commitments or other agreements regarding availability.



Security Policy Criteria 1.2 Availability Policy Criteria 1.2	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) A.5.1.1 - An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties.</p> <p>(ISO) A.6.1.6 - Appropriate contacts with relevant authorities shall be maintained.</p> <p>(ISO) A.6.1.7 - Appropriate contacts with special interest groups or other specialist security forums and professional associations shall be maintained.</p> <p>(ISO) A.7.2.1 - Information shall be classified in terms of its value, legal requirements, sensitivity and criticality to the organization.</p> <p>(ISO) A.7.2.2 - An appropriate set of procedures for information labeling and handling shall be developed and implemented in accordance with the classification scheme adopted by the organization.</p> <p>(ISO) A.10.1.2 - Changes to information processing facilities and systems shall be controlled.</p> <p>(ISO) A.12.6.1 - Timely information about technical vulnerabilities of information systems being used shall be obtained, the organization's exposure to such vulnerabilities evaluated, and appropriate measures taken to address the associated risk.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with members of management representing various teams and determined that the elements of the criterion are mapped and addressed within several key policies including: Information Security Policy, Data Center Availability Policy, Information Classification Guidelines, Effective Operation of the ISMS Through Documents and Records Policy, Technical Change Management Policy and multiple other documents related to the operational Information Security Management System (ISMS).</li> <li>▶ Inspected the above mentioned policy and procedure documentation and determined that they addressed the matters identified in the criteria set forth above.</li> </ul> <p><b>No deviations noted.</b></p>

Security Policy Criteria 1.2 (CONTINUED) Availability Policy Criteria 1.2 (CONTINUED)	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) A.13.1.1 - Information security events shall be reported through appropriate management channels as quickly as possible.</p> <p>(ISO) A.13.1.2 - All employees, contractors and third party users of information systems and services shall be required to note and report any observed or suspected security weaknesses in systems or services.</p> <p>(ISO) A.13.2.1 - Management responsibilities and procedures shall be established to ensure a quick, effective, and orderly response to information security incidents.</p> <p>(ISO) A.13.2.2 - There shall be mechanisms in place to enable the types, volumes, and costs of information security incidents to be quantified and monitored.</p> <p>(ISO) A.13.2.2 - There shall be mechanisms in place to enable the types, volumes, and costs of information security incidents to be quantified and monitored.</p> <p>(SOC1) 4.1 - Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with members of management representing various teams and determined that the elements of the criterion are mapped and addressed within several key policies including: Information Security Policy, Data Center Availability Policy, Information Classification Guidelines, Effective Operation of the ISMS Through Documents and Records Policy, Technical Change Management Policy and multiple other documents related to the operational Information Security Management System (ISMS).</li> <li>▶ Inspected the above mentioned policy and procedure documentation and determined that they addressed the matters identified in the criteria set forth above.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Policy Criteria 1.3 description**

Responsibility and accountability for developing and maintaining the entity's system security policies, and changes and updates to those policies, are assigned.

**Availability Policy Criteria 1.3 description**

Responsibility and accountability for developing and maintaining the entity's system availability and related security policies, and changes and updates to those policies, are assigned.

Security Policy Criteria 1.3 Availability Policy Criteria 1.3	
Controls specified by Rackspace	Testing performed by Ernst & Young
(ISO) A.6.1.2 - Information security activities shall be coordinated by representatives from different parts of the organization with relevant roles and job functions.	<ul style="list-style-type: none"><li>▶ Inquired with members of the Compliance team about the roles and responsibilities associated with the development and maintenance of system security policies and determined that those responsibilities are assigned to and shared amongst multiple teams.</li><li>▶ Inspected the Effective Operation of the ISMS Through Documents and Records Policy and determined that the responsibility and accountability for the development and maintenance of the Rackspace security and availability policies are assigned to and shared amongst the ISOC, NET SEC, COMPLIANCE and GSS teams with the ultimate signing authority of the Chief Security Officer.</li></ul> <p><b>No deviations noted.</b></p>

**Communications:** The entity communicates its defined system security policies to responsible parties and authorized users. The entity communicates the defined system availability policies to responsible parties and authorized users.

**Security Communication Criteria 2.1 description**

The entity has prepared an objective description of the system and its boundaries and communicated such description to authorized users.

**Availability Communication Criteria 2.1 description**

The entity has prepared an objective description of the system and its boundaries and communicated such description to authorized users.

Security Communication Criteria 2.1 Availability Communication Criteria 2.1	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) A.5.1.1 - An information security policy document shall be approved by management, and published and communicated to all employees and relevant external parties.</p> <p>(ISO) A.5.1.2 - The information security policy shall be reviewed at planned intervals or if significant changes occur to ensure its continuing suitability, adequacy, and effectiveness.</p> <p>(ISO) 4.2.1a - The organization shall do the following.</p> <p>a) Define the scope and boundaries of the ISMS in terms of the characteristics of the business, the organization, its location, assets and technology, and including details of and justification for any exclusions from the scope</p>	<ul style="list-style-type: none"> <li>▶ Inquired with management about the description of the Data center system and its boundaries and determined that Rackspace had a formally documented and regularly updated knowledge base where management shares such description which includes the policies, processes, teams and geographies which are components of the Data center system.</li> <li>▶ Inspected the Data center knowledge and community space (DC Wiki) and determined that it fully documents, captures and directs the scope and boundaries of the Rackspace Data center system including: Policies, Procedures, Leading practices, individuals and teams, responsibilities and accountability for sub-system components and locations.</li> <li>▶ Obtained and inspected the Scope and Boundaries document and determined that the organization has defined the scope and boundaries of the system and has communicated that document to the employee base via the processes surrounding the Information Security Management System.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Communication Criteria 2.2 description**

The security obligations of users and the entity's security commitments to users are communicated to authorized users.

**Availability Communication Criteria 2.2 description**

The availability and related security obligations of users and the entity's availability and related security commitments to users are communicated to authorized users.

<b>Security Communication Criteria 2.2</b> <b>Availability Communication Criteria 2.2</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p>(SOC1) 1.5 - A Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually.</p> <p>(SOC1) 1.6 - (Oct-June) Corporate Security releases Quarterly Security Awareness bulletins focusing on current security issues and concerns.</p> <p>(July-Sept) Corporate Security releases notification e-mails focusing on immediate security issues and concerns.</p> <p>(SOC1) 1.7 - New Employees go through initial Security training during the New Hire Process.</p> <p>(SOC1) 3.10 - Customers are informed of scheduled downtime and emergency changes.</p> <p>(SOC1) 3.11 - CORE is utilized to track communication between the customer and Rackspace via a CORE ticket. These tickets are viewable by the customer through the MyRackspace customer portal.</p>	<ul style="list-style-type: none"><li>▶ Inspected the internal policy site and determined that the Rackspace security and availability commitments are communicated to Rackspace employees (Rackers) via the Security Awareness Policy.</li><li>▶ Observed the presentation and inspected the presented materials of a security presentation delivered to data center personnel and determined that Rackspace has communicated to users their security and availability responsibilities and commitments.</li><li>▶ For a sample of quarters, examined the Quarterly Security Bulletins email communications released by the Corporate Security team and determined that Rackspace has communicated the users' security and related availability obligations and responsibilities.</li><li>▶ For a sample of new hires, inspected the security training sign-in sheets, training day itinerary and acknowledgement forms and determined that availability and related security obligations and the entity's security and availability commitment is communicated to new hires.</li><li>▶ Inquired with members of the Technical Change Management group and determined that automatic customer notifications were generated when a change was created and marked with certain flags.</li><li>▶ For an example change with the key flag turned on, examined the customer portal and determined that the notification about the change was visible in the customer portal.</li></ul>

**Security Communication Criteria 2.2 description (CONTINUED)**

The security obligations of users and the entity's security commitments to users are communicated to authorized users.

**Availability Communication Criteria 2.2 description (CONTINUED)**

The availability and related security obligations of users and the entity's availability and related security commitments to users are communicated to authorized users.

Security Communication Criteria 2.2 (CONTINUED) Availability Communication Criteria 2.2 (CONTINUED)	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC1) 1.5 - A Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually.</p> <p>(SOC1) 1.6 - (Oct-June) Corporate Security releases Quarterly Security Awareness bulletins focusing on current security issues and concerns.</p> <p>(July-Sept) Corporate Security releases notification e-mails focusing on immediate security issues and concerns.</p> <p>(SOC1) 1.7 - New Employees go through initial Security training during the New Hire Process.</p> <p>(SOC1) 3.10 - Customers are informed of scheduled downtime and emergency changes.</p> <p>(SOC1) 3.11 - CORE is utilized to track communication between the customer and Rackspace via a CORE ticket. These tickets are viewable by the customer through the MyRackspace customer portal.</p>	<ul style="list-style-type: none"> <li>▶ Re-performed the creation of a typical customer support ticket and determined that the request created on the customer's portal automatically created a CORE ticket on the Rackspace side.</li> <li>▶ Re-performed a modification of a typical customer support ticket and determined that the changes to the CORE ticket made by Rackspace personnel automatically propagated to the customer's portal.</li> </ul> <p><b>Result of Tests</b></p> <p>(a) For 1 of 25 new hires, evidence that the new hire took the security training did not exist. EY expanded the sample to 40 new hires and did not note any further deviations.</p> <p><b>No additional deviations noted.</b></p>
<ul style="list-style-type: none"> <li>▶ (a) Out of the sample of 40 accounts tested for proof of initial security training, one new hire was discovered to be without the proof of initial security training. We traced the error back to an inadvertent mistake made by a member of the implementation team due to the start up of the new Australia office. To remedy this, our international HR team has reviewed the process and sent an HR team member to AP/J to review and revise the existing process for on boarding and records retention and train team members ensure this mistake will not be made again going forward. The HR team member made the initial trip in October 2012.</li> </ul>	

**Security Communication Criteria 2.3 description**

Responsibility and accountability for the entity's system security policies and changes and updates to those policies are communicated to entity personnel responsible for implementing them.

**Availability Communication Criteria 2.3 description**

Responsibility and accountability for the entity's system availability and related security policies and changes and updates to those policies are communicated to entity personnel responsible for implementing them.

<b>Security Communication Criteria 2.3</b> <b>Availability Communication Criteria 2.3</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p>(ISO) A.6.1.1 - Management shall actively support security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities.</p> <p>(ISO) A.6.1.2 - Information security activities shall be coordinated by representatives from different parts of the organization with relevant roles and job functions.</p> <p>(ISO) A.6.1.3 - All information security responsibilities shall be clearly defined.</p>	<ul style="list-style-type: none"><li>▶ Inspected the internal policy site and determined that the Rackspace security and availability commitments are communicated to Rackspace employees (Rackers) via the Security Awareness Policy.</li><li>▶ Inquired with members of management and examined the Security Risk Management Plan, Continual Improvement of the ISMS Policy, Effective Operation of the ISMS Through Documents and Records Policy and the ISMS Job Description Policy and determined that responsibility and accountability for the Rackspace system availability and related system security policies and changes and updates to those policies are formalized and communicated to Rackers responsible for implementing them.</li></ul> <p><b>No deviations noted.</b></p>

**Security Communication Criteria 2.4 description**

The process for informing the entity about breaches of the system security and for submitting complaints is communicated to authorized users.

**Availability Communication Criteria 2.4 description**

The process for informing the entity about system availability issues and breaches of system security and for submitting complaints is communicated to authorized users.

<b>Security Communication Criteria 2.4 Availability Communication Criteria 2.4</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p><b>(ELC 11)</b> - Rackspace routinely monitors the quality of internal control performance by logging, reporting on, and tracking issues until resolved.</p> <p><b>(SOC 1) 1.10</b> - An Incident Response process has been established to respond to and document security incidents.</p>	<ul style="list-style-type: none"><li>▶ Inquired with members of management and determined that Rackspace has communicated to its employee and customer base, via email communication, dash board postings, management briefings and webcasts, a number of processes allowing for the reporting, documenting and tracking until resolution of breaches and complaints threatening the system's security and availability.</li><li>▶ For a sample of customer support teams, examined the monthly Ticket Cruncher reports and determined that Rackspace has established and routinely monitors the mechanism used for tracking the submission of complaints as related to the security and availability of customers' systems.</li><li>▶ For a sample of security incidents, inspected the security incident documentation forms and determined that security incidents are documented and tracked to resolution and that applicable parties are notified.</li></ul> <p><b>No deviations noted.</b></p>



**Security Communication Criteria 2.5 description**

Changes that may affect system security are communicated to management and users who will be affected.

**Availability Communication Criteria 2.5 description**

Changes that may affect system availability and system security are communicated to management and users who will be affected.

Security Communication Criteria 2.5 Availability Communication Criteria 2.5	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC1) 4.2 - Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation. (SOC1) 4.4 - External customers are given at least 72 hours notice of scheduled non-emergency changes that could be disruptive to service. (SOC1) 4.5 - Infrastructure maintenance is scheduled in the calendar tool.	<ul style="list-style-type: none"><li>▶ Inquired with management and determined that Rackspace has a formalized change management process involving the notification of a number of vested parties.</li><li>▶ Inspected the Technical Change Management policy and determined that depending on the rating a change receives, various key stakeholders are notified via a request for their approval.</li><li>▶ For a sample of weeks, examined the meeting notes from the Change Advisory Board (CAB) meeting and determined that changes affecting the system availability and security were communicated to affected users.</li><li>▶ For a sample of changes that could affect the system availability and security (disruptive changes), examined the myRackspace portal and determined that customer notifications were sent to customers at least 72 hours in advance.</li><li>▶ For a sample of months, inspected the monthly maintenance calendar and determined that customers and other affected parties were notified of upcoming changes via the placement of the changes in an available timeslot on the maintenance calendar.</li></ul> <p><b>No deviations noted.</b></p>

**Procedures:** The entity placed in operation procedures to achieve its documented system security objectives in accordance with its defined policies. The entity placed in operation procedures to achieve its documented system availability objectives in accordance with its defined policies.

**Security Procedure Criteria 3.1 description**

Procedures exist to (1) identify potential threats of disruption to systems operation that would impair system security commitments and (2) assess the risks associated with the identified threats.

**Availability Procedure Criteria 3.1 description**

Procedures exist to (1) identify potential threats of disruptions to systems operation that would impair system availability commitments and (2) assess the risks associated with the identified threats.

Security Procedure Criteria 3.1 Availability Procedure Criteria 3.1	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) 4.2.1.c - The organization shall define the risk assessment approach of the organization. 1) Identify a risk assessment methodology that is suited to the ISMS, and the identified business information security, legal and regulatory requirements. 2) Develop criteria for accepting risks and identify the acceptable levels of risk. (see 5.1f)).</p> <p>(ISO) 4.2.1.d - The organization shall identify the risks. 1) Identify the assets within the scope of the ISMS, and the owners2) of these assets. 2) Identify the threats to those assets. 3) Identify the vulnerabilities that might be exploited by the threats. 4) Identify the impacts that losses of confidentiality, integrity and availability may have on the assets.</p> <p>(ISO) 4.2.1.e - The organization shall analyze and evaluate the risks. 1) Assess the business impacts upon the organization that might result from security failures, taking into account the consequences of a loss of confidentiality, integrity or availability of the assets. 2) Assess the realistic likelihood of security failures occurring in the light of prevailing threats and vulnerabilities, and impacts associated with these assets, and the controls currently implemented. 3) Estimate the levels of risks. 4) Determine whether the risks are acceptable or require treatment using the criteria for accepting risks established in 4.2.1.c.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with management about the existing process and procedures for identifying potential threats that can be disruptive to the systems security and availability and determined that Rackspace has developed a formal methodology for identifying, assessing and addressing any such risks.</li> <li>▶ Inspected Risk Assessment methodology policy and other supporting policies and determined that Rackspace has formal procedures which define risk acceptance level, risk scoring, risk appetite and treatment of residual risk.</li> <li>▶ For one Data center facility, examined the latest formal risk assessment and determined that Rackspace periodically executes risk assessments over its Data center services system in accordance with the formal Risk Assessment methodology.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.1 description (CONTINUED)**

Procedures exist to (1) identify potential threats of disruption to systems operation that would impair system security commitments and (2) assess the risks associated with the identified threats.

**Availability Procedure Criteria 3.1 description (CONTINUED)**

Procedures exist to (1) identify potential threats of disruptions to systems operation that would impair system availability commitments and (2) assess the risks associated with the identified threats.

Security Procedure Criteria 3.1 (CONTINUED) Availability Procedure Criteria 3.1 (CONTINUED)	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) 4.2.1.f - The organization shall identify and evaluate options for the treatment of risks. Possible actions include: 1) applying appropriate controls; 2) knowingly and objectively accepting risks, providing they clearly satisfy the organization's policies and the criteria for accepting risks (see 4.2.1c)2)); 3) avoiding risks; and 4) transferring the associated business risks to other parties, e.g. insurers, suppliers.</p> <p>(ISO) 4.2.1.j - The organization shall prepare a Statement of Applicability. A Statement of Applicability shall be prepared that includes the following: 1) the control objectives and controls selected in 4.2.1g) and the reasons for their selection; 2) the control objectives and controls currently implemented (see 4.2.1e)2)); and the exclusion of any control objectives and controls in Annex A and the justification for their exclusion.</p>	

### Availability Procedure Criteria 3.2 description

Measures to prevent or mitigate threats have been implemented consistent with the risk assessment when commercially practicable.

Availability Communication Criteria 3.2	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC 1) 2.1 - The Data center facilities are equipped redundant HVAC units to maintain consistent temperature and humidity levels.</p> <p>(SOC 1) 2.2 - Redundant lines of communication exist to telecommunication providers.</p> <p>(SOC 1) 2.5 - Data centers are equipped with fire detection and suppression systems (dry-pipe, pre-action water based in DFW1, DFW2, IAD1, IAD2 and LON3; Hi Fog Nitrogen in LON1; FM200 gas system in Hong Kong), and fire extinguishers.</p> <p>(SOC 1) 2.6 - Fire detection systems, sprinkler systems, and chemical fire extinguishers are inspected at least annually.</p> <p>(SOC 1) 2.7 - Data center facilities are equipped with uninterruptible power supplies (UPS) to mitigate the risk of short term utility power failures and fluctuations.</p> <p>(SOC 1) 2.8 - The UPS systems are inspected and /or serviced at least annually.</p> <p>(SOC 1) 2.9 - Data center facilities are equipped with diesel generators to mitigate the risk of long-term utility power failures and fluctuations.</p> <p>(SOC 1) 2.10 - Generators are run at least every 120 days and serviced at least annually by a third-party contractor.</p>	<ul style="list-style-type: none"> <li>▶ Observed the existence of commercial grade HVAC configured for at least n+1 redundancy at each Data center facility and determined that Data center facilities were equipped with redundant HVAC units maintaining consistent temperature.</li> <li>▶ Examined network diagrams and determined that redundant lines of communication were utilized for connectivity from the data center to telecommunication providers.</li> <li>▶ Examined real-time bandwidth monitoring utility and determined that redundant lines of communication existed between Rackspace Data centers and various telecommunications providers.</li> <li>▶ Observed the presence of fire detection and suppression systems and determined that Data centers were equipped with fire extinguishers and dry pipe, hi fog or FM200 systems.</li> <li>▶ Examined the fire detection systems, sprinkler systems and the chemical fire extinguishers inspection documentation and determined that they were inspected at least annually.</li> <li>▶ Observed the presence of multiple UPS complexes and determined that Data centers were equipped with multiple UPS systems.</li> <li>▶ Inquired with Data center managers and determined that the currently installed UPS base is capable of mitigating the risk of short term utility power failures and fluctuations.</li> <li>▶ Examined documentation of UPS systems inspections and determined that the UPS systems are inspected and/or serviced at least annually for each of the Data centers.</li> <li>▶ Observed the presence of diesel generators and determined that the facilities were equipped with diesel generators to mitigate the risk of long-term utility power failures and fluctuations.</li> <li>▶ Inquired with management about periodic self tests and determined that the generators are run at least every 120 days.</li> <li>▶ Examined documentation of diesel generator inspections and determined that the generators are serviced at least annually by a third-party contractor.</li> </ul> <p><b>No deviations noted.</b></p>

**Availability Procedure Criteria 3.3 description**

Procedures exist to provide for backup, offsite storage, restoration, and disaster recovery consistent with the entity's defined system availability and related security policies.

Availability Communication Criteria 3.3	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC 1) 7.1 - Backup utility software is used to schedule and perform backups.</p> <p>(SOC 1) 7.2 - Prior to finalizing backup configuration, an initial test backup is run in order to ensure that backups will run properly.</p> <p>(SOC 1) 7.6 - Customers subscribed to retention with offsite will have media sent out to a third-party secure offsite storage facility in a locked container.</p>	<ul style="list-style-type: none"><li>▶ For a sample of customers' devices, examined the backup schedule requested by the customer and the backup utility logs and determined that an automated backup utility was used to schedule and perform backups.</li><li>▶ For a sample of customer devices, examined the CORE ticket used to document the initial backup test and determined that prior to finalizing a backup configuration, an initial test backup was run.</li><li>▶ Inquired with members of the DC OPS team and determined that tapes storing customer data were sent offsite in a locked container on a periodic basis.</li><li>▶ For a sample of weeks, examined the third party pickup/drop-off receipts and determined that media storage containers were sent out to a third-party secure offsite storage facility.</li></ul> <p><b>No deviations noted.</b></p>

**Availability Procedure Criteria 3.4 description**

Procedures exist to provide for the integrity of backup data and systems maintained to support the entity's defined system availability and related security policies.

Availability Communication Criteria 3.4	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC 1) 7.2 - Prior to finalizing backup configuration, an initial test backup is run in order to ensure that backups will run properly.</p>	<ul style="list-style-type: none"><li>▶ For a sample of customer devices, examined the CORE ticket used to document the initial backup test and determined that prior to finalizing a backup configuration, an initial test backup was run.</li></ul> <p><b>No deviations noted.</b></p>

### Security Procedure Criteria 3.2 description

Procedures exist to restrict logical access to the defined system including, but not limited to, the following matters:

- a) Logical access security measures to restrict access to information resources not deemed to be public.
- b) Identification and authentication of users.
- c) Registration and authorization of new users.
- d) The process to make changes and updates to user profiles.
- e) Distribution of output restricted to authorized users.
- f) Restriction of access to offline storage, backup data, systems, and media.
- g) Restriction of access to system configurations, superuser functionality, master passwords, powerful utilities, and security devices (for example, firewalls).

### Availability Procedure Criteria 3.5 description

Procedures exist to restrict logical access to the defined system including, but not limited to, the following matters: a) Logical access security measures to restrict access to information resources not deemed to be public. b) Identification and authentication of users. c) Registration and authorization of new users. d) The process to make changes and updates to user profiles. e) Restriction of access to offline storage, backup data, systems, and media. f) Restriction of access to system configurations, superuser functionality, master passwords, powerful utilities, and security devices (for example, firewalls).

Security Procedure Criteria 3.2 Availability Procedure Criteria 3.5	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC 1) 6.3 - Intensive Active Directory passwords used by Rackspace employees are changed on a regular basis.	<ul style="list-style-type: none"><li>▶ Inspected the sub-domain Default Domain Policy where customer devices reside and determined that Rackspace employees changed their passwords on a regular basis.</li><li>▶ Inquired with members of the Identity Management team and determined that eDirectory was configured to inherit its password configurations from the Active Directory CORP domain.</li><li>▶ Examined the CORP Active Directory Default Domain Policy and determined that Rackspace employees must change their Active Directory and eDirectory passwords every 90 days.</li><li>▶ Re-performed an attempt to connect directly into a network device and determined that direct access to network devices was not allowed by the current configurations.</li><li>▶ Re-performed an attempt to connect to a network device via an intermediate Bastion Host and TACACS+ server and determined that access to network devices was controlled via the TACACS+ software.</li><li>▶ Examined the Active Directory Organizational Units (OUs) structure associated with each Data center and determined that OUs were used to logically segment and partition customers.</li><li>▶ For a sample of new Active Directory users, inspected authorization tickets and determined that user access was requested and approved via the inherent access control functionality within Active Directory and the CORE system.</li></ul>
(SOC 1) 6.4 - Active Directory and eDirectory passwords used by Rackspace employees are changed at least every 90 days.	
(SOC 1) 6.9 - Rackspace secures access to core networking infrastructure utilizing inherent access control functionality in TACACS+ software.	
(SOC 1) 6.18 - Active Directory Organization Units (OU) are used to logically segment the Rackspace Active Directory (at the operating system level) into different logical partitions for customer segregation.	
(SOC 1) 6.19 - Rackspace utilizes inherent access control functionality within Active Directory and CORE to secure access to customer servers by Rackspace technicians.	

**Security Procedure Criteria 3.2 description (CONTINUED)**

Procedures exist to restrict logical access to the defined system including, but not limited to, the following matters:

- a) Logical access security measures to restrict access to information resources not deemed to be public.
- b) Identification and authentication of users.
- c) Registration and authorization of new users.
- d) The process to make changes and updates to user profiles.
- e) Distribution of output restricted to authorized users.
- f) Restriction of access to offline storage, backup data, systems, and media.
- g) Restriction of access to system configurations, superuser functionality, master passwords, powerful utilities, and security devices (for example, firewalls).

**Availability Procedure Criteria 3.5 description (CONTINUED)**

Procedures exist to restrict logical access to the defined system including, but not limited to, the following matters: a) Logical access security measures to restrict access to information resources not deemed to be public. b) Identification and authentication of users. c) Registration and authorization of new users. d) The process to make changes and updates to user profiles. e) Restriction of access to offline storage, backup data, systems, and media. f) Restriction of access to system configurations, superuser functionality, master passwords, powerful utilities, and security devices (for example, firewalls).

Security Procedure Criteria 3.2 (CONTINUED) Availability Procedure Criteria 3.5 (CONTINUED)	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p><b>(SOC 1) 6.20</b> - Processes are in place to review the Intensive Active Directory access control settings and user access list on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.</p> <p><b>(SOC 1) 6.21</b> - After six unsuccessful access attempts, Active Directory locks a user out.</p> <p><b>(SOC 1) 6.22</b> - Per the HR Termination Policy, termination tickets are generated by the appropriate level of management and/or HR representative.</p> <p><b>(SOC 1) 6.24</b> - Network level access is disabled in a timely manner upon termination.</p>	<ul style="list-style-type: none"> <li>▶ For a sample of quarters, inspected results of the Intensive domain periodic review and determined that user access was reviewed on a periodic basis.</li> <li>▶ Examined the list of users marked for deletion during the periodic review, compared it against a current list of AD users, and determined that the access removal was appropriately carried out.</li> <li>▶ Inspected the Default Domain Policy for each sub domain and determined that users were locked out after six unsuccessful login attempts or sooner.</li> <li>▶ For a sample of terminated Rackers, examined the associated termination tickets and determined that the tickets were processed by the appropriate level of management and/or HR representative.</li> <li>▶ For a sample of terminated employees, inspected the Identity Manager console and determined that access was disabled in a timely manner.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.3 description**

Procedures exist to restrict physical access to the defined system including, but not limited to, facilities, backup media, and other system components such as firewalls, routers, and servers.

**Availability Procedure Criteria 3.6 description**

Procedures exist to restrict physical access to the defined system including, but not limited to, facilities, backup media, and other system components such as firewalls, routers, and servers.

<b>Security Procedure Criteria 3.3 Availability Procedure Criteria 3.6</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p>(SOC 1) 1.1 - Proximity cards are used at Rackspace facilities to appropriately secure access to specific areas and building access.</p> <p>(SOC 1) 2.13 - Two-factor authentication is used to gain access to sensitive areas of the Data center facilities.</p> <p>(SOC 1) 2.14 - Only authorized Rackspace personnel have access to Data center facilities.</p> <p>(SOC 1) 2.15 - Closed circuit video surveillance has been installed at all entrance points on the interior and exterior of the buildings housing Data centers and is monitored by authorized Rackspace personnel.</p>	<ul style="list-style-type: none"><li>▶ Inspected site diagrams and determined that proximity card readers were utilized at ingress and egress access points.</li><li>▶ Physically observed building and secure areas and determined that proximity cards were used to appropriately secure access.</li><li>▶ Observed the presence of biometric device scanners and key-card/badge readers and determined that a two-factor authentication was required to access sensitive Rackspace areas such as the production computer floor.</li><li>▶ Re-performed access authentication to Data center sensitive areas by using a combination of valid/invalid hand geometries and valid/invalid magnetic badges and determined that a two-factor authentication was required for a successful access.</li><li>▶ For a sample of months, examined the Monthly Key Card Access Reviews from each Data center facility and determined that the Rackspace personnel allowed into the Data center facilities were reviewed and approved as authorized personnel on a monthly basis.</li><li>▶ Inquired with management about the use and access to surveillance equipment and determined that only authorized personnel have access to surveillance equipment and recordings.</li><li>▶ Observed the cameras installed and determined that video surveillance has been installed at entrance points on the interior and exterior of the buildings housing Data centers.</li><li>▶ Examined remote video feeds and determined that both interior and exterior images are captured by the recording system.</li></ul> <p><b>No deviations noted.</b></p>



**Security Procedure Criteria 3.4 description**

Procedures exist to protect against unauthorized access to system resources.

**Availability Procedure Criteria 3.7 description**

Procedures exist to protect against unauthorized access to system resources.

Security Procedure Criteria 3.4 Availability Procedure Criteria 3.7	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC 1) 6.3 - Intensive Active Directory passwords used by Rackspace employees are changed on a regular basis.</p> <p>(SOC 1) 6.4 - Active Directory and eDirectory passwords used by Rackspace employees are changed at least every 90 days.</p> <p>(SOC 1) 6.9 - Rackspace secures access to core networking infrastructure utilizing inherent access control functionality in TACACS+ software.</p> <p>(SOC 1) 6.20 - Processes are in place to review the Intensive Active Directory access control settings and user access list on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.</p> <p>(SOC 1) 6.21 - After six unsuccessful access attempts, Active Directory locks a user out.</p> <p>(SOC1) 6.2 - TACACS+ access lists are reviewed on a quarterly basis to verify those users on the list still require access. Any discrepancies found are corrected.</p> <p>(SOC1) 6.7 - Non-admin ports are closed by default unless specifically requested by the customer, and administrative activity on customer servers is limited to customer specified IP ranges. SMB customers are open by default.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with members of the Identity Management team and determined that eDirectory was configured to inherit its password configurations from the Active Directory CORP domain.</li> <li>▶ Examined the CORP Active Directory Default Domain Policy and determined that Rackspace employees must change their Active Directory and eDirectory passwords every 90 days.</li> <li>▶ Re-performed an attempt to connect directly into a network device and determined that direct access to network devices was not allowed by the current configurations.</li> <li>▶ Re-performed an attempt to connect to a network device via an intermediate Bastion Host and TACACS+ server and determined that access to network devices was controlled via the TACACS+ software.</li> <li>▶ For a sample of quarters, inspected results of the Intensive domain periodic review and determined that user access was reviewed on a periodic basis.</li> <li>▶ Examined the list of users marked for deletion during the periodic review, compared it against a current list of AD users, and determined that the access was removed.</li> <li>▶ Inspected the Default Domain Policy for each sub domain and determined that users were locked out after six unsuccessful login attempts or sooner.</li> <li>▶ For a sample of quarters, examined the results of a periodic access review and determined that TACACS+ access lists were reviewed on a periodic basis.</li> <li>▶ For an example employee marked for deletion during the periodic review, examined network access credentials and determined that access was properly de-provisioned.</li> <li>▶ Examined the default firewall rules and determined that non-default ports were closed by default and that administrative activity on customer servers was limited to customer specified IP ranges.</li> <li>▶ For a sample of non-default firewall rules, examined CORE tickets used to document the creation of a non-default firewall rule and determined that the changes were authorized by the customer.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.5 description**

Procedures exist to protect against infection by computer viruses, malicious code, and unauthorized software.

**Availability Procedure Criteria 3.8 description**

Procedures exist to protect against infection by computer viruses, malicious code, and unauthorized software.

Security Procedure Criteria 3.5 Availability Procedure Criteria 3.8	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC 1) 3.5 - Anti-Virus Protection is used to scan servers for viruses and if infected files are found then the server configures alerts at the console (Windows Customers Only) for customers that have selected the AV option. (SOC 1) 3.6 - Rackspace maintains current virus signature updates.	<ul style="list-style-type: none"><li>▶ For a sample of devices, inspected the software configuration and determined that anti-virus protection is used to scan for viruses for those customers who have selected the anti-virus option.</li><li>▶ Inquired with members of the Anti-Virus team and determined that the Anti-Virus Protection software was configured to send alerts to the console (Windows Customers Only) if an infected file was found.</li><li>▶ For a sample of devices, inspected the date of the last virus signature update and determined that Rackspace maintained current (less than 8 hours) antivirus signatures.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.6 description**

Encryption or other equivalent security techniques are used to protect user authentication information and the corresponding session transmitted over the Internet or other public networks.

**Availability Procedure Criteria 3.9 description**

Encryption or other equivalent security techniques are used to protect user authentication information and the corresponding session transmitted over the Internet or other public networks.

<b>Security Procedure Criteria 3.6 Availability Procedure Criteria 3.9</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<b>(PCI) 2.3</b> - Encrypt all non-console administrative access using strong cryptography. Use technologies such as SSH, VPN, or SSL/TLS for web-based management and other non-console administrative access.	<ul style="list-style-type: none"><li>▶ Examined the Information Security Policy and determined that cryptographic techniques such as hardware tokens and challenge/response protocols are formally addressed and documented.</li><li>▶ Examined a typical configuration for an employee issued workstation and determined that VPN software utilizing the IPSEC tunnel technology was installed by default.</li><li>▶ Inspected the configuration of the customer portal and determined that a Secured Socket Layer (SSL) certificate was utilized for customer connections.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.7 description**

Procedures exist to identify, report, and act upon system security breaches and other incidents.

**Availability Procedure Criteria 3.10 description**

Procedures exist to identify, report, and act upon system availability issues and related security breaches and other incidents.

Security Procedure Criteria 3.7 Availability Procedure Criteria 3.10	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(SOC1) 1.5 - A Security Awareness Policy is in place and the Rackspace workforce is trained on security expectations annually.</p> <p>(SOC) 1.10 - An Incident Response process has been established to respond to and document security incidents.</p> <p>(ISO) A.13.1.1 - Information security events shall be reported through appropriate management channels as quickly as possible.</p> <p>(ISO) A.13.1.2 - All employees, contractors and third party users of information systems and services shall be required to note and report any observed or suspected security weaknesses in systems or services.</p>	<ul style="list-style-type: none"><li>▶ Inspected the internal policy site and determined that the Rackspace security and availability commitments are communicated to Rackspace employees (Rackers) via the Security Awareness Policy.</li><li>▶ Observed the presentation and inspected the presented materials of a security presentation delivered to data center personnel and determined that the Rackspace has communicated to users their security and availability responsibilities and commitments.</li><li>▶ For a sample of security incidents, inspected the security incident documentation forms and determined that security incidents were documented and tracked to resolution and that applicable parties are notified.</li><li>▶ Inspected the procedures for detection and reaction to security incidents and determined that the organization has implemented formal processes and procedures for addressing security related incidents.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.8 description**

Procedures exist to classify data in accordance with classification policies and periodically monitor and update such classifications as necessary.

**Availability Procedure Criteria 3.11 description**

Procedures exist to classify data in accordance with classification policies and periodically monitor and update such classifications as necessary.

<b>Security Procedure Criteria 3.8 Availability Procedure Criteria 3.11</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p><b>(ISO) A.7.2.1</b> - Information shall be classified in terms of its value, legal requirements, sensitivity and criticality to the organization.</p> <p><b>(ISO) A.7.2.2</b> - An appropriate set of procedures for information labeling and handling shall be developed and implemented in accordance with the classification scheme adopted by the organization.</p>	<ul style="list-style-type: none"><li>▶ Examined documented procedures and policies and determined that the organization has implemented formal guidelines around information classification and data handling and labeling.</li><li>▶ Inquired with members of the compliance team and determined that the information classification guideline is formally implemented and adhered to.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.9 description**

Procedures exist to provide that issues of noncompliance with security policies are promptly addressed and that corrective measures are taken on a timely basis.

**Availability Procedure Criteria 3.12 description**

Procedures exist to provide that issues of noncompliance with system availability and related security policies are promptly addressed and that corrective measures are taken on a timely basis.

<b>Security Procedure Criteria 3.9 Availability Procedure Criteria 3.12</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p><b>(ISO) 8.2</b> - The organization shall take action to eliminate the cause of nonconformities with the ISMS requirements in order to prevent recurrence. The documented procedure for corrective action shall define requirements for:</p> <ul style="list-style-type: none"><li>a) identifying nonconformities;</li><li>b) determining the causes of nonconformities;</li><li>c) evaluating the need for actions to ensure that nonconformities do not recur;</li><li>d) determining and implementing the corrective action needed;</li><li>e) recording results of action taken (see 4.3.3); and</li><li>f) reviewing of corrective action taken.</li></ul> <p><b>(ISO) 8.3</b> - The organization shall determine action to eliminate the cause of potential nonconformities with the ISMS requirements in order to prevent their occurrence. Preventive actions taken shall be appropriate to the impact of the potential problems. The documented procedure for preventive action shall define requirements for:</p> <ul style="list-style-type: none"><li>a) identifying potential nonconformities and their causes;</li><li>b) evaluating the need for action to prevent occurrence of nonconformities;</li><li>c) determining and implementing preventive action needed;</li><li>d) recording results of action taken (see 4.3.3); and</li><li>e) reviewing of preventive action taken.</li></ul>	<p>► Inquired with members of the compliance team, inspected corresponding Information Security Management System policies and procedures, and determined that the organization has implemented formal procedures for addressing noncompliance and potential noncompliance with security policies.</p> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.10 description**

Design, acquisition, implementation, configuration, modification, and management of infrastructure and software are consistent with defined system security policies to enable authorized access and to prevent unauthorized access.

**Availability Procedure Criteria 3.13 description**

Design, acquisition, implementation, configuration, modification, and management of infrastructure and software are consistent with defined system availability and related security policies.

Security Procedure Criteria 3.10 Availability Procedure Criteria 3.13	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC1) 4.1 - Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy. (SOC1) 4.2 - Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.	<ul style="list-style-type: none"><li>▶ Inquired with IT management, inspected the Technical Change Management Policy, and determined that Rackspace followed a structured change management process.</li><li>▶ For a sample of changes, inspected change tickets and determined that the changes were approved in accordance with the Technical Change Management Policy.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.11 description**

Procedures exist to provide that personnel responsible for the design, development, implementation, and operation of systems affecting security have the qualifications and resources to fulfill their responsibilities.

**Availability Procedure Criteria 3.14 description**

Procedures exist to provide that personnel responsible for the design, development, implementation, and operation of systems affecting availability and security have the qualifications and resources to fulfill their responsibilities.

<b>Security Procedure Criteria 3.11 Availability Procedure Criteria 3.14</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p><b>(SOC1) ELC3</b> - Hiring practices are in place at Rackspace to ensure that competent employees are hired. Hiring decisions are based on various factors, including educational background, prior relevant experience, past accomplishments.</p> <p><b>(SOC1) ELC7</b> - Formal job descriptions exist for all active and approved positions and are effectively utilized (and are updated as needed). Roles, responsibilities, and the significance of meeting them are communicated to employees.</p>	<ul style="list-style-type: none"><li>▶ Inquired with members of the HR management team and determined that the organization has formally established procedures for the determination of the qualifications of the individuals responsible for the design, development, implementation and operation of systems affecting the security and availability.</li><li>▶ Inspected the HR process flow and determined that the organization has formally established procedures for the determination of the qualifications of the individuals responsible for the design, development, implementation and operation of systems affecting the security and availability.</li><li>▶ For a sample of job titles, inspected the corresponding job descriptions and determined that the organization has formally established job descriptions capturing the responsibilities of those individuals responsible for the design, development, implementation and operation of systems affecting the organizations security and availability.</li></ul> <p><b>No deviations noted.</b></p>



**Security Procedure Criteria 3.12 description**

Procedures exist to maintain system components, including configurations consistent with the defined system security policies.

**Availability Procedure Criteria 3.15 description**

Procedures exist to maintain system components, including configurations consistent with the defined system availability and related security policies.

Security Procedure Criteria 3.12 Availability Procedure Criteria 3.15	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC1) 4.1 - Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy. (SOC1) 4.2 - Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.	<ul style="list-style-type: none"><li>▶ Inquired with IT management, inspected the Technical Change Management Policy, and determined that Rackspace followed a structured change management process.</li><li>▶ For a sample of changes, inspected change tickets and determined that the changes were approved in accordance with the Technical Change Management Policy.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.13 description**

Procedures exist to provide that only authorized, tested, and documented changes are made to the system.

**Availability Procedure Criteria 3.16 description**

Procedures exist to provide that only authorized, tested, and documented changes are made to the system.

<b>Security Procedure Criteria 3.13 Availability Procedure Criteria 3.16</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p><b>(SOC1) 4.1</b> - Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy.</p> <p><b>(SOC1) 4.2</b> - Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.</p> <p><b>(SOC1) 4.3</b> - Infrastructure changes undergo testing when feasible.</p>	<ul style="list-style-type: none"><li>▶ Inquired with IT management, inspected the Technical Change Management Policy, and determined that Rackspace followed a structured change management process.</li><li>▶ For a sample of changes, inspected change tickets and determined that the changes were approved in accordance with the Technical Change Management Policy.</li><li>▶ For a sample of changes, inspected change tickets and determined that where applicable, testing was performed and/or a back out plan was properly documented.</li></ul> <p><b>No deviations noted.</b></p>

**Security Procedure Criteria 3.14 description**

Procedures exist to provide that emergency changes are documented and authorized timely.

**Availability Procedure Criteria 3.17 description**

Procedures exist to provide that emergency changes are documented and authorized (including after-the-fact approval).

Security Procedure Criteria 3.14 Availability Procedure Criteria 3.17	
Controls specified by Rackspace	Testing performed by Ernst & Young
(SOC1) 4.1 - Proposed changes to Rackspace Technical Infrastructure follow the Rackspace Technical Change Management Policy. (SOC1) 4.2 - Technical Change Sponsors or the Technical Change Board review and approve/reject all medium and high priority changes prior to implementation.	<ul style="list-style-type: none"><li>▶ Inquired with IT management, inspected the Technical Change Management Policy, and determined that Rackspace followed a structured change management process.</li><li>▶ For a sample of changes, inspected change tickets and determined that the changes were approved in accordance with the Technical Change Management Policy.</li></ul> <p><b>No deviations noted.</b></p>

**Monitoring:** The entity monitors the system and takes action to maintain compliance with its defined system security policies. The entity monitors the system and takes action to maintain compliance with its defined system availability policies.

**Security Monitoring Criteria 4.1 description**

The entity's system security is periodically reviewed and compared with the defined system security policies.

**Availability Monitoring 4.1 description**

The entity's system availability and security performance is periodically reviewed and compared with the defined system availability and related security policies.

Security Communication Criteria 4.1 Availability Communication Criteria 4.1	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) 6 - The organization shall conduct internal ISMS audits at planned intervals to determine whether the control objectives, controls, processes and procedures of its ISMS: a) conform to the requirements of this International Standard and relevant legislation or regulations; b) conform to the identified information security requirements; c) are effectively implemented and maintained; and d) perform as expected.</p> <p>(ISO) 7.1 - Management shall review the organization's ISMS at planned intervals (at least once a year) to ensure its continuing suitability, adequacy and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the ISMS, including the information security policy and information security objectives. The results of the reviews shall be clearly documented and records shall be maintained</p> <p>(ISO) 4.2.3.b - The organization shall undertake regular reviews of the effectiveness of the ISMS (including meeting ISMS policy and objectives, and review of security controls) taking into account results of security audits, incidents, results from effectiveness measurements, suggestions and feedback from all interested parties.</p> <p>(ISO) 4.2.3.g - The organization shall update security plans to take into account the findings of monitoring and reviewing activities.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with management and determined that the Information Security Management System (ISMS) is reviewed on an annual basis.</li> <li>▶ Examined the report from the annual internal ISMS audit and determined that the Rackspace system security and availability performance was reviewed and compared with the defined system security and availability policies.</li> <li>▶ Examined the ISMS Management Review policy and determined that and the most recent invitation for the ISMS committee to conduct their annual review of the ISMS and determined that the Rackspace system security and availability performance was reviewed and compared with the defined system security and availability policies.</li> <li>▶ Examined the Effective Review of the ISMS Policy and determined that Rackspace has institutionalized a process for the periodic review of the system security and availability effectiveness.</li> <li>▶ Examined the Regular Security Plan Update Policy and determined that Rackspace has a formal process to periodically review and update the system security and availability policies based on findings from various monitoring and reviewing activities,</li> </ul> <p><b>No deviations noted.</b></p>

**Security Monitoring Criteria 4.2 description**

There is a process to identify and address potential impairments to the entity's ongoing ability to achieve its objectives in accordance with its defined system security policies.

**Availability Monitoring 4.2 description**

There is a process to identify and address potential impairments to the entity's ongoing ability to achieve its objectives in accordance with its defined system availability and related security policies.

Security Communication Criteria 4.2 Availability Communication Criteria 4.2	
Controls specified by Rackspace	Testing performed by Ernst & Young
<p>(ISO) A.6.1.1 - Management shall actively support security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities.</p> <p>(ISO) 8.2 - The organization shall take action to eliminate the cause of nonconformities with the ISMS requirements in order to prevent recurrence.</p> <p>(SOC 1) ELC 11 - Rackspace routinely monitors the quality of internal control performance by logging, reporting on, and tracking issues until resolved.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with members of management and examined the Security Risk Management Plan, Continual Improvement of the ISMS Policy, Effective Operation of the ISMS Through Documents and Records Policy and the ISMS Job Description Policy and determined that responsibility and accountability for the Rackspace system availability and related system security policies and changes and updates to those policies are formalized and communicated to Rackers responsible for implementing them.</li> <li>▶ Inquired with members of management and determined that Rackspace has communicated to its employee and customer base a number of processes allowing for the reporting, documenting and tracking until resolution of breaches and complaints threatening the system's security and availability.</li> <li>▶ Inspected the Eliminating Potential ISMS Non-Conformities Policy and the Signed Eliminating ISMS Non-Conformities Policy and determined that Rackspace has implemented a process to identify and address potential impairments to the entity's ongoing ability to achieve its objectives in accordance with its defined system security and availability policies.</li> <li>▶ For a sample of customer support teams, examined the monthly Ticket Cruncher reports and determined that Rackspace has established and routinely monitors the mechanism used for tracking the submission of complaints as related to the security and availability of customers' systems.</li> </ul> <p><b>No deviations noted.</b></p>

**Security Monitoring Criteria 4.3 description**

Environmental, regulatory, and technological changes are monitored and their effect on system security is assessed on a timely basis and policies are updated for that assessment.

**Availability Monitoring 4.3 description**

Environmental, regulatory, and technological changes are monitored, and their effect on system availability and security is assessed on a timely basis; policies are updated for that assessment.

<b>Security Communication Criteria 4.3</b> <b>Availability Communication Criteria 4.3</b>	
<b>Controls specified by Rackspace</b>	<b>Testing performed by Ernst &amp; Young</b>
<p>(SOC 1) ELC 8 - Rackspace ensures strategic compliance to the company's overall objectives through future product offerings that differentiate Rackspace from competitors.</p> <p>(ISO) 7.3.c.4 - The output from the management review shall include any decisions and actions related to Modification of procedures and controls that effect information security, as necessary, to respond to internal or external events that may impact on the ISMS, including changes to regulatory or legal requirements.</p> <p>(ISO) A.15.1.1- All relevant statutory, regulatory and contractual requirements and the organization's approach to meet these requirements shall be explicitly defined, documented, and kept up to date for each information system and the organization.</p>	<ul style="list-style-type: none"> <li>▶ Inquired with senior members of management and determined that senior leadership periodically communicates strategic plans and goals to the entire company base.</li> <li>▶ Examined an example of recent product strategy communication and determined that technological changes are closely monitored by senior leadership</li> <li>▶ Examined the Recording Management Decisions Policy and determined that Rackspace has established a formal process for tracking updates to security and availability policies back to management's decisions.</li> <li>▶ Examined the Legislatures and Standards Policy and determined that Rackspace formally monitors regulatory and environmental changes affecting the security and availability of their system.</li> <li>▶ Inspected email documentation for an example regulatory claim related to the Digital Millennium Copyright Act and determined that Rackspace closely monitors the effect of regulatory changes and their effect on the Rackspace security and availability policies.</li> </ul> <p><b>No deviations noted.</b></p>

## Section V – Other information provided by Rackspace

## Section V - Other Information Provided by Rackspace

Rackspace® Hosting (NYSE: RAX), the open cloud company, enables businesses to buy computing as a service over the Internet, avoiding the expense and hassle of owning and managing their own hardware. Rackspace delivers hosted IT systems and computing to businesses of all sizes. Customers choose Rackspace for its hosting specialization and expertise, backed by the company's award-winning **Fanatical Support®**. Rackspace makes computing faster, less costly, easier, more reliable, and more flexible. We free customers to focus on their core businesses. Rackspace serves more than 197,000 customers in 120 countries, including over 60% of the FORTUNE 100. From our headquarters in San Antonio, Texas, we manage more than 89,000 servers in eight data centers across the U.S., Europe and Asia.

This report describes controls in place around many of the products and services which are commonly utilized by most Rackspace's customers.

### ***Fanatical Support®***

Rackspace is unique in the technology industry in that we are not primarily a technology company. We are a customer service company. Our vision is "to be recognized as one of the world's great service companies."

Rackspace strives everyday to deliver the best service experience in the world. The service wrapped around complex technology is what makes hosting a compelling outsourced option. Great service cannot be commanded; it must be volunteered. We believe that an exceptional service experience starts with committed people. Our unconditional commitment to hiring and developing people who are passionate about serving customers is a key element of Fanatical Support.

We also believe that for our people (we call them "Rackers") to deliver Fanatical Support every day, they not only need the expertise, but also great systems, tools, and processes. Rackspace employs operational excellence processes such as six sigma and industry leading software development lifecycle practices. Together, these practices ensure Rackspace has found a way for Fanatical Support to thrive in every customer interaction.

We don't have one person answering your support tickets. We have hundreds of experts available to support our customer's OS and hardware. They perform as an extension of their business and make sure that we deliver Fanatical Support.



## ***Our Portfolio***

Rackspace offers a broad portfolio of integrated hosting offerings, giving customers the flexibility to architect a solution that supports the unique requirements of their specific applications and workloads.

- **Cloud Hosting** - By leveraging pools of resources, customers enjoy greater efficiency than typically found with a managed hosting or in-house environment. Cloud customers pay only for the computing that they use, allowing for increased levels of agility and flexibility. Rackspace portfolio of cloud based hosted services is based on the open cloud, and built on OpenStack, the open and scalable operating system for building public and private clouds. OpenStack provides organizations of all sizes an alternative to closed environments, reducing the risks of lock-in associated with proprietary platforms.
- **Cloud Servers** - Cloud Servers is both persistent and highly elastic. You get the best of both worlds since it looks and feels like a traditional server but is on-demand in the cloud.
- **Cloud Sites** - Rackspace PaaS offering. Whether you work in PHP or .NET, Cloud Sites is always ready with support for sites that run on Joomla, Drupal, DotNetNuke, and MySQL. We even offer a one-click WordPress installer.
- **Cloud Files** - Provides an easy to use online storage for files and media which can be delivered globally at blazing speeds over content delivery network (CDN) powered by Akamai.
- **Cloud Monitoring** - Allows customers to monitor their websites anywhere – whether hosted on the Rackspace Cloud, Rackspace dedicated servers, servers in the customer's data center, or even servers in other providers' data centers.
- **Cloud Databases** - Built for consistent high performance, with container-based virtualization instead of traditional hardware virtualization, high performance SAN storage, and a dedicated storage network.
- **Cloud Block Storage** - Available in standard volumes for everyday file system needs and SSD volumes for higher performance for databases and other I/O-intensive applications. Plus, users are not required to scale up Cloud Servers; both standard and SSD volumes work with all Cloud Servers instance sizes.
- **Cloud Backup** - With Rackspace Cloud Backup you can safeguard your business by protecting the important files that your website or application needs. Cloud Backup allows users to get back to normal operations quickly with the ability to rapidly restore files after a hard drive fails.
- **Cloud Load Balancers** - For your websites or applications uptime and highly responsive by fronting traffic for your applications and making decisions about where to route that traffic. Built in high availability and high throughput (10Gb/Second network) facilitate scale when it is needed most.

- **Cloud Networks** - Create isolated networks to add additional tiers and layers of security to your cloud infrastructure. You can choose whether to interact with the existing Rackspace networks or remain completely isolated from them.
- **Managed Hosting** - Often referred to as “Dedicated Hosting”, Rackspace has been building and supporting Managed Hosting solutions since 1998. Not only does Rackspace help Managed Hosting customers architect and deploy a solution that meets their needs, we also take care of the hardware complexities and application infrastructure management associated with running the infrastructure.
- **Managed Servers** - These single tenant servers are best fit for customers running workloads requiring the control, performance and configurability of a dedicated hosting environment.
- **Managed Virtualization** - Built on proven server virtualization technology from VMware, these dedicated managed solutions provide high levels of security and control through single tenancy, all backed by Fanatical Support from our team of qualified VMware engineers.
- **Managed Storage** - The Rackspace Managed Storage portfolio provides a variety of external storage options to meet the needs of your business: Shared SAN (sSAN), Direct Attached Storage (DAS), Dedicated Storage Area Network (dSAN), and Dedicated Network Attached Storage (dNAS).
- **Managed Backup** - Rackspace Managed Backup service allows customers to backup their most mission-critical data, allowing them to restore data quickly should an incident occur. Backup schedules can be customized as necessary.
- **Hybrid Hosting** - Since the best solution for a customer may span more than one computing platform, Rackspace helps customers create the optimal compute environment for their business by allowing them to align the best fit platform to their applications. We provide this capability with RackConnect®, our Hybrid Hosting enabler, that lets customers leverage the security & control provided with traditional hosting and the flexibility and scalability available in the cloud.
- **Rackspace Private Cloud** - Rackspace Private Cloud is a collection of software, support and training and certification programs. The software is based on OpenStack®, the leading open source cloud operating system that also powers the Rackspace Cloud. We test and package OpenStack to make it extremely easy to deploy a fully functional private cloud within minutes. Once deployed, you can sign up for one of the tiered support level subscriptions from Rackspace to give you as much or as little assistance as you need with managing your private cloud environment. Private clouds can be hosted on the customer's premise or in Rackspace datacenters.

### ***Email and Collaboration***

- **Rackspace Services for SharePoint** provides end-to-end SharePoint solutions including full support for Enterprise class infrastructure, application level support and administrative support (installation/configuration, site collection/creation, maintenance, monitoring, backup and restore). In addition, MVP and MCM delivered Professional Services are available for customization, administration and training.
- Rackspace business **email solutions**, serving over 3 million users. We offer our own popular and attractively priced product (hosted Rackspace Email), as well as dedicated and hosted Exchange email.

### ***Reporting, Monitoring & Administrative Services***

Rackspace puts powerful tools at your fingertips to help you manage your environment and evaluate its performance.

Our customer portal, MyRackspace®, provides detailed information not only on the metrics that drive your hosting environment's success, but also on the tools to help you manage your online operations. Additionally, MyRackspace provides direct access to our incident management and change management systems for easy tracking of open issues and scheduled changes. MyRackspace is available 24 hours a day, 7 days a week.

For optimum server performance, we provide reporting on CPU, memory and disk space utilization along with other server metrics. Microsoft System Center Operations Manager (SCOM) and NimBUS are used to monitor all key server hardware components.

Our Cloud Monitoring product allows you to constantly monitor your websites, blogs and other web-based applications, whether hosted on the Rackspace Cloud, on Rackspace dedicated servers or in your own data centers. Rackspace Cloud Monitoring provides customizable alerts and remote polling of websites, web content, ports and protocols from five of our Data Centers around the globe and is available via a REST-ful API or our control panel.

### ***Hardware***

- Rackspace utilizes best in class hardware from vendors like Dell, HP, EMC, NetApp, Cisco and others. We maintain an on-site inventory of hardware to help enable rapid deployment of new capacity and for replacement of failed components. The Rackspace service level agreement (SLA) guarantees replacement of any failed hardware components within one hour of problem identification.

### ***Software***

- An operating system (OS) license is included in the monthly fee for all managed dedicated servers at Rackspace. Rackspace currently offers Microsoft Windows Server or Red Hat Enterprise Linux as the standard supported operating systems for all dedicated server deployments. In the Rackspace Cloud we offer per hour pricing for Cloud Servers with multiple versions of preinstalled Microsoft Windows, Microsoft SQL Server and Microsoft SharePoint images that include all Microsoft License fees. We also offer the most popular Linux distributions including Ubuntu, CentOS, Debian, Fedora, and Red Hat. Click [here](#) for an up to date list.

- Rackspace utilizes automated deployment tools for consistent dedicated and cloud server builds. Rackspace can provide additional licensing for various other software products for use on Rackspace dedicated servers such as databases (e.g. Microsoft® SQL Server, Oracle, or MySQL), Microsoft® SharePoint, Microsoft® Exchange, and various other commercial and open source software products.

### Services

- At Rackspace, it doesn't matter if it's 2PM or 2AM. You and your Managed Hosting solutions will always be taken care of by people that know what they're doing.
- No matter the size of your business, you will always get the kind of support that goes far beyond the ordinary. It's truly exceptional. And since different businesses have different needs, we offer you two service levels—**Managed** and **Intensive®**. So you can determine what kind of support works best for you, instead of us deciding for you.
- For our Rackspace Cloud Customers, we include Fanatical Support at no extra charge. We are available via chat, phone and ticket 24x7x365. Customers with a managed cloud account enjoy an additional level of support for nine products within our cloud portfolio including access to our trained cloud team who help you **plan, deploy, and run** your cloud infrastructure.

### Rackspace Critical Application Services

- Critical Application Services advanced service level agreement (SLA) provides 100% production platform uptime guarantee and a 2x service level credit for businesses that demand the highest level of performance and uptime on critical applications and websites.
- For businesses that require maximum uptime and performance from their web sites and web applications, Critical Application Services is a turnkey support offering that employs a unique combination of Web Scale Engineers, deep level performance monitoring and on-going consultation to optimize platform performance through the application.

### Advisory Services

- Rackspace Advisory Services helps enterprises harness the power of cloud computing. Driven by a team of dedicated Enterprise Architects, Rackspace Advisory Services provides Fanatical Support during the IT strategic planning process and creates true end-to-end IT transformation solutions for Rackspace customers.

### Professional Services

- Rackspace Professional Services offers a portfolio of consultative services that help enable customers to optimize their hosted environment. From load testing to penetration testing; server migration and remediation, our professional services team helps your environment to sustain peak performance.

## **Managed Security Solutions**

Rackspace offers a comprehensive suite of security solutions to help you meet your business's compliance needs. These include:

- Dedicated, Managed Firewall Services
- Anti-Virus
- SSL Certificates
- Virtual Private Networking
- Threat and Log Management
- Patch Management Services
- Web Application Firewalls
- Two Factor Authentication
- Rackspace DDoS Mitigation
- Vulnerability Assessment Services

### **Dedicated, Managed Firewall Service**

We offer a number of services for the security of your hosted solution. These include qualified security engineers maintaining our network, outstanding Cisco firewalls, our Firewall Control Panel and Intrusion Detection Systems as well as our 1-Hour Hardware Replacement Guarantee.

### **Anti-Virus**

- Our anti-virus offering provides proactive, sustained protection against viruses, worms, Trojans, spyware and other malware in one solution. This technology uses Behavioral Genotype Protection™ to provide zero-day protection by proactively identifying programs that will behave maliciously before they execute.

### **SSL Certificates**

- We not only sell six certificates from VeriSign® and Thawte, our services include ordering, installing and renewing the certificates for our customers and comes standard with Fanatical Support®

### **Virtual Private Networking**

- Rackspace offers optional virtual private networking (VPN) services for secure remote access to servers hosted in Rackspace facilities. VPN services can be configured in a site-to-site, a client-based configuration, or a combination of both. With a VPN, strong encryption technology is utilized to create a secure tunnel to help protect all administrative communication.

### **Web Application Firewalls**

- Our dedicated Rackspace Web Application Firewall (WAF) provides that extra level of protection our customers need to guard web applications against online threats.

### **Two Factor Authentication**

- Rackspace offers two-factor authentication to our customers for remote network access over a client based VPN. Two factor authentication requires two forms of identification, a personal identification code and a temporary token to access establish identity and privileges. This adds an extra layer of security to our customers' accounts.

## Rackspace DDoS Mitigation

- Rackspace offers a combination of its proprietary technologies and commercially available solutions to quickly and accurately locate suspect traffic at the advent of an attack and sanitize it. This is done without disrupting the free flow of legitimate network traffic, dramatically shortening detection and resolution times. Threat and Log Management solutions at Rackspace can help customers simplify their network security, availability and compliance management by providing 24x7x365 security management technologies.

## Vulnerability Assessment

- Vulnerability Assessment services from Alert Logic gives customers managed scanning that is easy to implement and use, saving time and money by proactively finding possible vulnerabilities before they are exploited. Customers can choose between three service options: a one-time scan, recurring scans and a PCI scan.

## Business Resiliency Solutions

- Rackspace offers a variety of solutions to enable the resiliency and recoverability of business critical data and applications, both for hosted and on-premise workloads. Rackspace does not offer a full disaster recovery solution, we only provides the tools that can be used by a customer as part of their overall Disaster Recovery and Business Continuity plans. Rackspace will design the most suitable solution based on the scope of disaster that a customer is trying to protect from. The table below breaks down the three levels of protection along with the most suitable solutions currently offered within the Rackspace portfolio of services.

File loss or corruption	Server Failure	Full Datacenter Outage
Cloud Backup	Server Clustering	VM Replication
Managed Backup	Managed Backup	Storage Replication
Cloud Files		Database Replication
		Host Based Replication

## Vendor Relationships

### Microsoft Premier Support Services (PSS)

PSS is the highest level of Microsoft support. It's a 24x7 team of experts assembled by Microsoft to solve the most complicated application issues.

Rackspace, because of its scale in hosting, is able to leverage our strong relationship with Microsoft and our PSS agreement for the benefit of our entire customer base. When it becomes necessary, we have a direct channel to Microsoft technical experts and can easily escalate any customer's incident for problem resolution. Our agreement with Microsoft provides for direct access to third tier support resources within Microsoft premier support.

### **Microsoft Gold Certification**

Rackspace received the Microsoft Gold Certified Partner accreditation for its expertise in Microsoft hosting. To achieve Microsoft Gold Certified Partner status, Rackspace passed rigorous evaluations by certified, independent auditors who determined that we deliver the highest level of fully managed services available on the Microsoft platform.

The Microsoft Gold Certified Partner Program provides recognition to companies providing Hosting and Application Services that have demonstrated a consistent, high quality delivery of solutions built on Microsoft technology and framework. The program only awards certification status for those specific hosted or application services that meet eligibility qualifications, prove service quality, and demonstrate operational readiness.

### **Early Adoption of Emerging Technologies**

Our distinction as a Microsoft Gold Certified Partner means we receive emerging products and technologies while they're still in the development cycle. From product betas to trial software and security fixes, our early access allows us to work with our customers on platform upgrades and technology testing months before public release.

### **Linux Expertise**

Rackspace worked with Red Hat to become the first hosting company to offer hosting service for Red Hat Enterprise Linux deployments. Rackspace is currently a Red Hat Premier Hosting Partner.

### **Cisco**

Rackspace is a Cisco Service Provider Partner and maintains a Cisco support agreement for access to Cisco Technical Assistance Center for support on its Cisco® Powered Network.

### **EMC Service Velocity Program**

Rackspace is an EMC Velocity(TM) Service Provider Program Platinum partner. The two companies have collaborated since 2001 to bring a full range of innovative solutions leveraging EMC's portfolio of information infrastructure products including virtual storage and a range of cloud-based data management services.

With the expanded relationship the companies will work together on new, joint solutions that will enable enterprises to optimize efficiencies and reduce costs. Through the Velocity Service Provider Partner Program, EMC will work with Rackspace to enable Rackspace to deliver a wide variety of cloud-based IT services to the global IT market.

Current service offerings include Rackspace managed Enterprise Private Clouds that are based on EMC Symmetrix VMAX(TM) and EMC VNX(TM) unified storage to deliver enterprise storage area networks. Additionally, Rackspace provides data replication services based on EMC RecoverPoint, EMC Data Domain®, and EMC Isilon® products. Rackspace also offers EMC solutions with Fanatical Support®, giving end-users a wider choice of cloud-based IT strategies and tactical advantages such as cost savings, flexibility and scalability coupled with world-class support to boost its efficiency.

### **NetApp TSP Program**

Rackspace is a NetApp platinum partner in their TSP program. NetApp Partner Program expanded with the integration of service providers as part of the broader NetApp partner ecosystem. This global program, which is the first of its kind in the storage industry, tightens the relationship between NetApp, and service provider partners, and its value-added reseller (VAR) partners, enabling them to work together to more effectively help customers move to a cloud computing environment.

### **Adobe CQ Program**

Rackspace is a partner with Adobe and launched a new offering for application support for the Adobe Content Management Application - CQ coupled with our industry leading Critical Application Services. We have been growing our relationship with Adobe, including joint marketing efforts and referral programs. Rackspace recently signed the first customer for Critical Application Services with Support for Adobe CQ and has many more potential customers in the pipeline.

### **VMware Program**

With over 25,000 ESX virtual machines under management, Rackspace is one of VMware's largest partners included in their VMware Service Provider Program (VSP). The VMware VSP is a cornerstone of VMware's vCloud® initiative. VSP was designed to facilitate a successful relationship with VMware, through offering benefits such as support and tools through which partners can develop, promote, and sell their VMware - based products, services and solutions.

## ***Data Centers and Network***

### **Infrastructure Services**

#### **Network**

The Rackspace network has been engineered from the ground up to accommodate the high-availability demands of our customers' mission-critical web applications. Our Cisco-powered, Network has unique self-healing attributes that allow us to deliver on our 100% infrastructure availability guarantee.

Rackspace doesn't rely on any single connectivity provider or backbone carrier. Instead, we employ a multi-provider strategy. This offers benefits over simply working with one network carrier. Working with multiple network carriers creates natural redundancy in our network architecture and ensures that packets can leave our network from multiple points. Additionally, if one or more providers experience congestion or downtime, traffic can be rerouted through other network partners until the issue is solved.

Beyond simply providing redundancy in case a particular provider experiences downtime, our proprietary networking technology allows our network operations team to actively probe the public Internet for packet loss and latency and automatically reroutes traffic around these areas. This enables that traffic leaving the Rackspace network is not bound for a part of the public Internet that is heavily congested.



### **Bandwidth Utilization**

Rackspace's substantial bandwidth capacity allows us to accommodate even the largest spikes in traffic. To provide rapid delivery of content, we continuously add network connectivity and new routes. Low bandwidth utilization allows for maximum uptime, even if multiple transit partners experience simultaneous outages.

Rackspace collects and reports to customers comprehensive, real-time bandwidth information that includes usage, historical data, and trending analysis for incoming and outgoing traffic.

### **Network Providers**

Rackspace works closely with leading telecommunications providers to build and maintain our world-class network. Rackspace's data centers typically have between four and seven different bandwidth providers for the best Internet connectivity available.

### **Monitoring - Network Layer**

Rackspace monitors all routers, switches, and connectivity to provide the integrity of our data centers. We also analyze the network backbone, bandwidth providers, and the overall health of the Internet.

### **Network Security**

Our 100% Cisco Powered Network, built on hardened routers and audited by Cisco, for security protection and network availability. Our network incorporates a patented Intrusion Detection System to protect against external threats.

#### **Security**

### **Threat Analysis**

Rackspace employs advanced technologies to identify and address security weaknesses in web-oriented servers, applications and activities. Rackspace monitors firewalls, load-balancers, SSL accelerators and switches, as well as external developments, for any potential security events.

### **Security Testing Laboratory**

Rackspace subjects all devices to full security testing before they are deployed – including the installation and configuration of the Operating System, the disabling of vulnerable or unneeded services, and advanced vulnerability tests.

### **Certified Engineers and Security Teams**

To help provide a fast response to a security event, qualified personnel are available 24x7x365. Our security specialists have earned Cisco Certified Security Professional, Certified Information System Security Professional, and other security certifications.

### **Security Patching**

By constantly updating our security systems, we help provide optimum protection for our customers. Rackspace monitors and address emerging threats and quickly process and apply new security patches.

**Applications Tools**

Our security regimen also addresses the inherent vulnerabilities of applications, including enterprise databases, Microsoft IIS, Apache, Linux, mail services, FTP servers, DNS, and streaming media. We implement firewalls and deactivate non-essential features to further protect applications.

**SLAs**

For years Rackspace has set the standard with a strong Service Level Agreements (SLAs) including a one-hour host failure replacement guarantee. For more details on our SLAs, please check:

<http://www.rackspacecloud.com/legal> and  
<http://www.rackspace.com/information/legal/index.php>



# College Scheduler

Additional Attachments for RFP #MLO-803

## Project Details

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# College Scheduler Project Details

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# PeopleSoft Implementation Flow



**College Scheduler**  
([devteam@collegescheduler.com](mailto:devteam@collegescheduler.com))



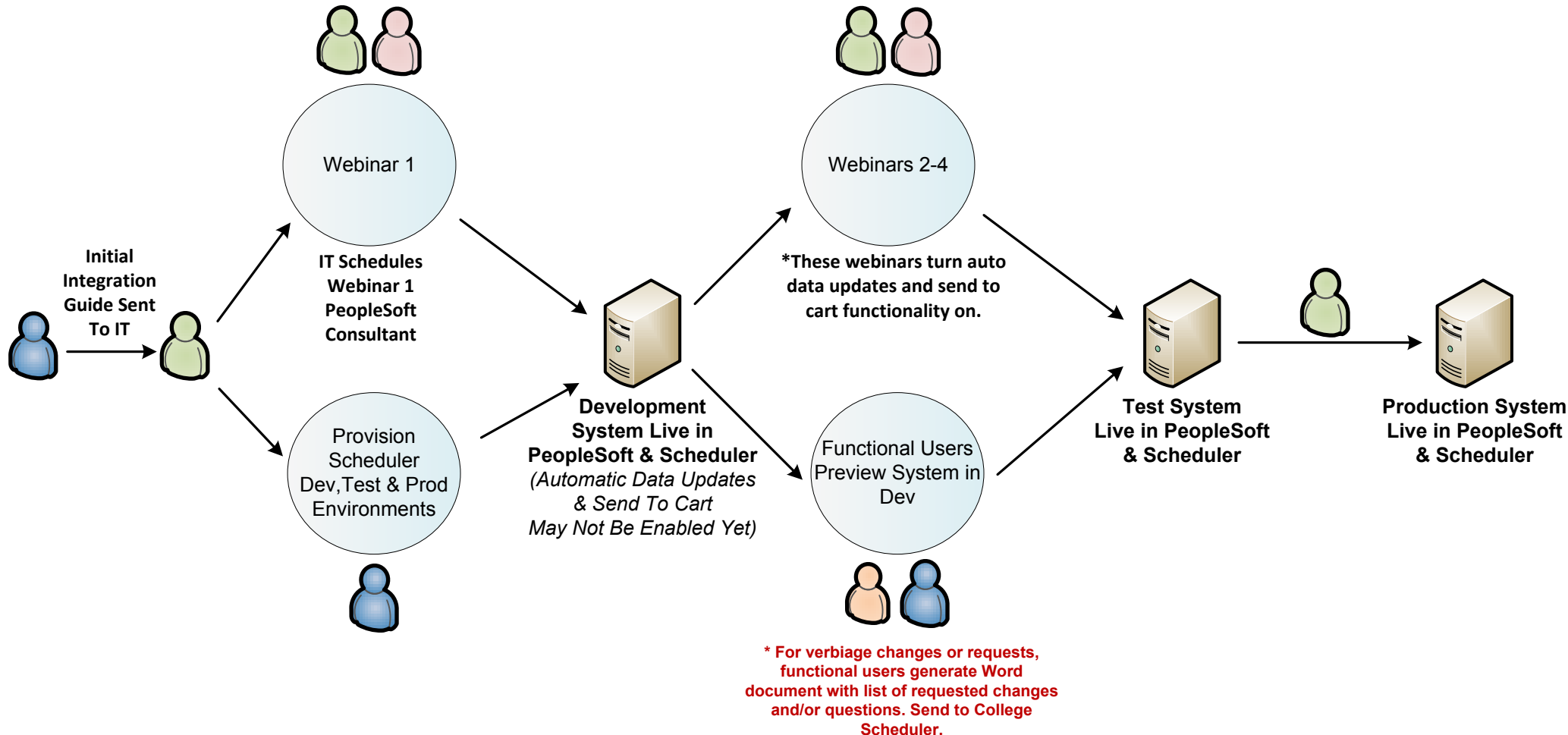
**PeopleSoft Consultant**  
(Provided by College Scheduler)



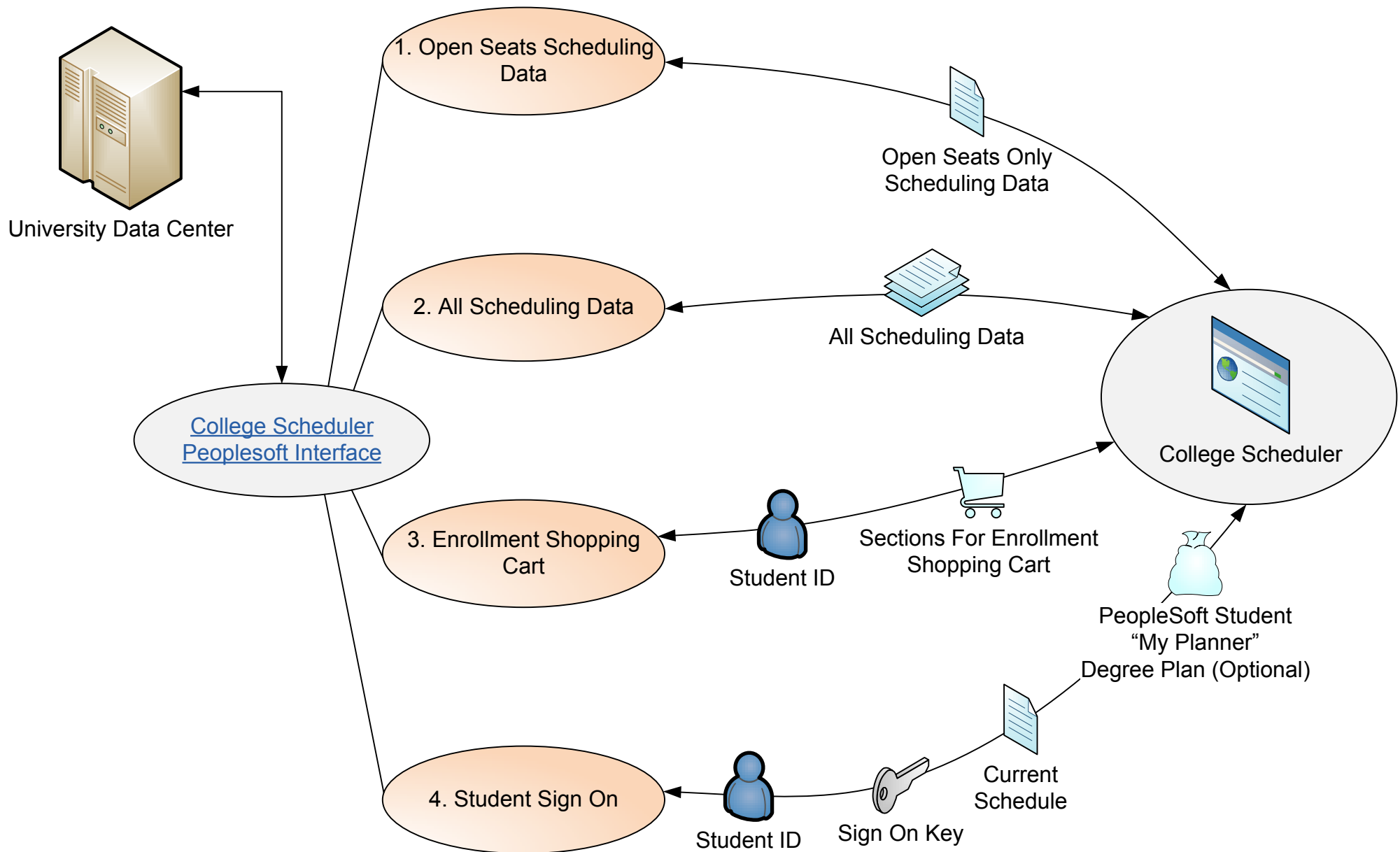
**Institution IT Personnel**



**Institution Functional Users**



# Peoplesoft Interface Overview





# College Scheduler Interface Project Plan

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PeopleSoft Campus Solutions

NOT FOR DISTRIBUTION

4 pages redacted due to Proprietary/Confidential Information













# College Scheduler

## Schedule Planner Customizations

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### PeopleSoft Campus Solutions

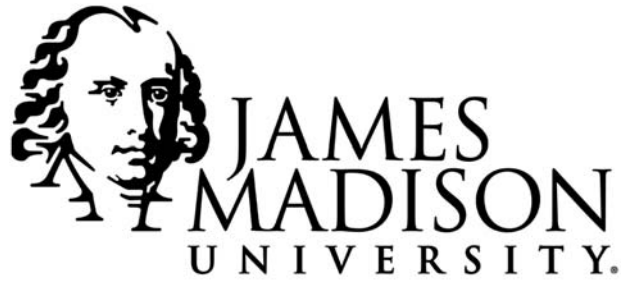
NOT FOR DISTRIBUTION

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# Request for Proposal

## **RFP # MLO-803**

**Student Class Schedule Planner**

**July 2, 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 # MLO-803**

**Issue Date:** July 2, 2014  
**Title:** Student Class Schedule Planner  
**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 August 5, 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: Matasha Owens, MPA, CUPO, VCO, Buyer Senior Procurement Services, [owensml@jmu.edu](mailto:owensml@jmu.edu), 540/568-3137, (Fax) 540/568-7936 no 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 # MLO-803*

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[C.](#) Sample of Standard Contract

## **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 a Student Class Schedule Planner 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. Further information about the University may be found at the following website: <http://www.jmu.edu>.

The University currently uses Oracle/PeopleSoft Campus Solutions 9.x as its Student Information System. Students utilize the self-service component to register for classes each semester. They are encouraged to meet with their academic adviser and then search for available classes and put a schedule together manually course by course. Students enroll via an enrollment appointment given to them based on hours earned prior to the current semester.

## **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**

The Contractor shall have available and be able to demonstrate the use and functions of the following components and/or features for a Student Class Schedule Planner. It is expected that any proposed system will already be fully developed, tested, offered publicly for sale and available immediately for installation. For this project, the University is not interested in a custom developed system. Describe in detail the manner in which each item is addressed by the system.

### **A. Application Functionality:**

1. Describe the features, functionality and ease of use of the proposed Student Class Schedule Planner.
2. Describe how the product integrates with PeopleSoft's Enrollment Shopping Cart and "My Planner".
3. Describe any help tutorials or videos available to students.
4. Describe the ability to block time periods the student is not able to take classes for various reasons.
5. Describe the ability to "lock" specific class sections a student must take which are not flexible.
6. Describe how students compare multiple schedules.

7. Describe how the system provides the University with course demand information.
8. Describe all reports available to the University.
9. Describe the benefits the University and student will receive by using this product.

B. Application Technology:

1. Describe any portion of your technology that is not real-time and list all batch processes.
2. Define what *customizable* and *configurable* mean for your application.
3. Describe capabilities of the application administrator including client requirements.
4. Describe the tools and expertise which university technical staff would use to support, troubleshoot, configure or customize the application.
5. Describe other customizations available and associated cost, i.e., hourly and fixed fee.
6. Describe how configuration and customization will affect future releases of software.
7. Describe how JMU's e-mail systems would be incorporated with your system's operation. (*Faculty/Staff – on-premise Exchange and students - Live@Edu*).
8. Describe third party e-mailing, if this functionality is part of your solution. What messaging service is utilized by your system? Describe details of how messages look (*from, etc.*)

C. 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.

D. 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

- e. Capacity Planning
  - f. Installation and Configuration
  - g. Performance and Scalability
  - 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 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.

E. 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 your relationship with the vendor(s) of any third party tools included in this proposal including licensing, costs, support for the product(s), and versions (*e.g. full or modified*).
5. 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.
6. Describe active user groups and how they function.
7. Describe licensing. If licensing is based on number of users, describe the models used to obtain numbers both for current and future usage.

F. 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 how scalability is accomplished as the criticality of the system(s) and number of users increase.
6. Describe the average client response time for all the various functions of the proposed system.
7. Describe services not available during scheduled maintenance.
8. Describe the client operating system and browser requirements for your application. List any additional client-side software required for development/management of your toolset.
9. Describe any aspects of your application that do not support the Macintosh. Describe any changes to default browser or client security settings.
10. Describe any functionality loss, installation problems, upgrade problems, or other difficulties if client applications are run using a regular user account.
11. Describe your support for mobile technologies including technology used, distribution method, functionality, integration and development toolset and security.
12. Describe your SLA to stay current with versions of software utilized by your product.
13. 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.
14. 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*).
15. 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.
16. 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.
17. 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.
18. 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.

19. 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*).

G. 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.
2. 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.*).
3. Describe auditing and logging capabilities and data. Include the information recorded with each event.
4. 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.

H. 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.

I. 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.

J. 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.

#### 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](http://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. 3/5/14 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 I § 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](http://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](http://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 June 30, 2014, 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 July 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](http://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.
- X. E-VERIFY REQUIREMENT OF ANY CONTRACTOR: Any employer with more than an average of 50 employees for the previous 12 months entering into a contract in excess of \$50,000 with James Madison University to perform work or provide services pursuant to such contract shall register and participate in the E-Verify program to verify information and work authorization of its newly hired employees performing work pursuant to any awarded contract.
- Y. TAXES: Sales to the Commonwealth of Virginia are normally exempt from State sales tax. State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against this contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.

## **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](http://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: S WAM 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, S WAM**

**Subcontracting Compliance, MSC 57 20, 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 two (2) 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 TO SOFTWARE:** By submitting a proposal, the 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](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 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](http://www.dmbv.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	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)

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

Revised 3/20/14 (ABS)

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ATTACHMENT C



COMMONWEALTH OF VIRGINIA  
CONTRACT

STANDARD

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) Negotiation Summary dated \_\_\_\_\_.

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: \_\_\_\_\_