February 14th, 2018

REQUEST FOR PROPOSAL

DIGITAL ASSET MANAGEMENT SOFTWARE

RFP 301801

DUE: 3:00 P.M., MST, 3/8/18

Time and Date of Pre-Proposal Conference	N/A
Deadline for Inquiries	3:00 P.M., MST, 2/26/18
Time and Date Set for Closing	3:00 P.M., MST, 3/8/18

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SECTION I – REQUEST FOR PROPOSAL

RFP 301801

Arizona State University is requesting sealed proposals from qualified firms or individuals for **Digital Asset Management Software.**

Proposals are to be addressed and delivered to the receptionist area, first floor, University Services Building, Purchasing and Business Services, Arizona State University, 1551 S. Rural Road, (located on the east side of Rural Road between Apache Road & Broadway Road) Tempe, Arizona 85281 **on or before March 8th, 2018** at which time a representative of Purchasing and Business Services will announce publicly the names of those firms or individuals submitting proposals**. No proposals will be accepted after this time.** No other public disclosure will be made until after award of the contract.

Arizona State University's Overnight Delivery (FedEx, Airborne, and UPS) address is:

Purchasing and Business Services
University Services Building
Arizona State University
1551 S. Rural Rd
Tempe, AZ 85281

Arizona State University's U.S. Postal Service Mail address is:

Purchasing and Business Services
Arizona State University
P.O. Box 875212
Tempe, AZ 85287-5212

ARIZONA STATE UNIVERSITY

Allyson Taylor

Allyson Taylor
Buyer

AT/AP

SECTION II – PURPOSE OF THE RFP

1. INTENT

The Arizona Board of Regents (ABOR), on behalf of Arizona State University, is seeking proposals for digital asset management software (DAM) to host a myriad of data and media to service products that impact the lives of learners around the globe. This is further described in Section V.

This DAM will be the central repository for all creative and content materials within ASU, from marketing material to content for educational curriculum, impacting the worldwide recruitment and educational endeavors of the University. This single source of written content, imagery, video and design elements will seamlessly integrate into website assets, learning management systems and other digital communication channels in order to keep our materials up to date and organized. As a center of cutting edge collaborations, ASU looks forward to finding a robust DAM platform that will better expand our reach and further our mission to bring quality education to everyone, everywhere.

2. BACKGROUND INFORMATION

Arizona State University is a new model for American higher education, an unprecedented combination of academic excellence, entrepreneurial energy and broad access. This New American University is a single, unified institution comprising four differentiated campuses positively impacting the economic, social, cultural and environmental health of the communities it serves. Its research is inspired by real world application blurring the boundaries that traditionally separate academic disciplines. ASU serves more than 91,000 students in metropolitan Phoenix, Arizona, the nation's fifth largest city. ASU champions intellectual and cultural diversity, and welcomes students from all fifty states and more than one hundred nations across the globe.

If you would like more information about ASU, please visit us at http://www.asu.edu.
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Digital Assets at ASU

Media is currently created on several platforms throughout the university, ranging from video, to graphic, audio, written and other digital assets. These various units throughout the university also leverage outside vendors and purchase creative media, such as stock imagery, stock video, stock audio and other digital media as well as custom-created media. The DAM system will be the single storage point for all media assets as our many units within the university continue to purchase and create such media.

3. TERM OF CONTRACT

The initial contract term will be for one (1) year with the possibility of four (4) successive one (1) year renewals, for a total term not to exceed five (5) years. The contract will be available for use by other University departments during this term.

The University may consider alternative contract term periods if it is deemed advantageous to do so. If alternative contract terms are proposed, they should be specified in the Pricing Schedule (Attachment A). Note: Alternative terms cannot be in lieu of the term stated above.

SECTION III – PRE-PROPOSAL CONFERENCE

No pre-proposal conference will be held.

SECTION IV – INSTRUCTIONS TO PROPOSERS

1. You must address and deliver your proposal to the receptionist area, first floor, University Services Building, Purchasing and Business Services, Arizona State University, 1551 S. Rural Road, Tempe, Arizona 85281, **on or before the time and date set for closing. No proposal will be accepted after this time.** The University Services Building is located on the east side of Rural Road between Apache Road and Broadway Road. **PROPOSALS MUST BE IN A MARKED SEALED CONTAINER** (i.e., envelope, box):

Name of Proposer
Title of Proposal
RFP Number
Date and Time Proposal is Due

No telephone, electronic or facsimile proposals will be considered. **Proposals received after the time and date for closing will be returned to the proposer unopened.**

2. **DIRECTIONS TO USB VISITOR PARKING**. Purchasing and Business Services is in the University Services Building ("USB") 1551 S. Rural Road, Tempe, AZ, 85281 (located on the east side of Rural between Broadway Ave and Apache Boulevard). A parking meter is located near the main entry to USB.

All visitors to USB are required to check in at the USB Reception Desk to obtain a visitor's badge to wear while in the building. The receptionist will call to have you escorted to your meeting.

3. Proposer should use recycled paper and double-sided copying for the production of all printed and photocopied proposal documents. Furthermore, the documents should be clearly marked to indicate that they are printed on recycled content (minimum 30% post-consumer waste paper).

4. You may withdraw your proposal at any time prior to the time and date set for closing.

5. No department, school, or office at the University has the authority to solicit or receive official proposals other than Purchasing and Business Services. All solicitations are performed under the direct supervision of the Director of Purchasing and Business Services and in complete accordance with University policies and procedures.

6. The University reserves the right to conduct discussions with proposers, and to accept revisions of proposals, and to negotiate price changes. During this discussion period, the University will not disclose any information derived from proposals submitted, or from discussions with other proposers. Once a contract is executed, the solicitation file, and the proposals contained therein, are in the public record and will be disclosed upon request.

7. Proposers submitting proposals which meet the selection criteria and which are deemed to be the most advantageous to the University may be requested to give an oral presentation to a selection committee. Purchasing and Business Services will do the scheduling of these oral presentations.

8. The award shall be made to the responsible proposer whose proposal is determined to be the most advantageous to the University based on the evaluation factors set forth in this solicitation. Price, although a consideration, will not be the sole determining factor.

9. If you are submitting any information you consider to be proprietary, you must place it in a separate envelope and mark it "Proprietary Information". If the Director of Purchasing and Business Services concurs, this information will not be considered public information. The Director of Purchasing and Business Services is the final authority as to the extent of material, which is considered proprietary or confidential. Pricing information cannot be considered proprietary.

10. The University is committed to the development of Small Business and Small Disadvantaged Business ("SB & SDB") suppliers. If subcontracting (Tier 2 and higher) is necessary, proposer (Tier 1) will make every effort to use SB & SDB in the performance of any contract resulting from this proposal. A report may be required at each annual anniversary date and at the completion of the contract indicating the extent of SB & SDB participation. **A description of the proposers expected efforts to solicit SB & SDB participation should be enclosed with your proposal.**

11. Your proposal should be submitted in the format shown in Section X. Proposals in any other format will be considered informal and may be rejected. Conditional proposals will not be considered. An individual authorized to extend a formal proposal must sign all proposals. Proposals that are not signed may be rejected.

12. The University reserves the right to reject any or all proposals or any part thereof, or to accept any proposal, or any part thereof, or to withhold the award and to waive or decline to waive irregularities in any proposal when it determines that it is in its best interest to do so. The University also reserves the right to hold all proposals for a period of **one hundred twenty (120)** days after the opening date and the right to accept a proposal not withdrawn before the scheduled proposal opening date.

13. **EXCEPTIONS:** Proposer is expected to enter into a standard form of agreement approved by the Arizona Board of Regents. The Arizona State University contract terms and conditions are included in this Request for Proposal in Section XII. These terms and conditions are intended to be incorporated into the contract between the University and the successful proposer. **Proposals that are contingent upon any changes to these mandatory contract terms and conditions may be deemed nonresponsive and may be rejected.**

14. Unless specifically stated to the contrary, any manufacturer's names, trade names, brand names or catalog numbers used in the specifications of this Request for Proposal are for the purpose of describing and/or establishing the quality, design and performance required. Any such reference is not intended to limit or restrict an offer by any proposer and is included in order to advise the potential proposer of the requirements for the University. Any offer, which proposes like quality, design or performance, will be considered.

15. Days: Calendar days

May: Indicates something that is not mandatory but permissible/ desirable.

Shall, Must, Will: Indicates mandatory requirement. Failure to meet these mandatory requirements will result in rejection of your proposal as non-responsive.

Should: Indicates something that is recommended but not mandatory. If the proposer fails to provide recommended information, the University may, at its sole option, ask the proposer to provide the information or evaluate the proposal without the information.

16. Any person, firm, corporation or association submitting a proposal shall be deemed to have read and understood all the terms, conditions and requirements in the specifications/scope of work.

17. All proposals and accompanying documentation will become the property of the University at the time the proposals are opened. **It will be the proposer's responsibility to request that samples be returned to the proposer and provide a method for doing so at the expense of the proposer.** If a request is not received and a method of return is not provided, all samples shall become the property of the University 45 days from the date of the award.

18. All required performance and payment bonds shall be held by the University in a secure location until the performance of the contract and the payment of all obligations rising there under have been 100% fulfilled. Upon completion of the project and all obligations being fulfilled, it shall be the proposer's responsibility to request the surety bonding company to submit to the University the necessary documents to approve the release the bonds. Until such time the bonds shall remain in full force and effect.

19. The University of Arizona, Northern Arizona University, and Arizona State University are all state universities governed by the Arizona Board of Regents. **Unless reasonable objection is made in writing as part of your proposal to this Request for Proposal, the Board or either of the other two Universities may purchase goods and/or services from any contract resulting from this Request for Proposal.**

20. The University has entered into Cooperative Purchasing Agreements with the Maricopa County Community College District and with Maricopa County, in accordance with A.R.S. Sections 11-952 and 41-2632. Under these Cooperative Purchasing Agreements, and with the concurrence of the proposer, the Community College District and/or Maricopa County may access a contract resulting from a solicitation done by the University. If you do not want to grant such access to the Maricopa County Community College District and or Maricopa County, **please state so** in your proposal. In the absence of a statement to the contrary, the University will assume that you do wish to grant access to any contract that may result from this Request for Proposal.

21. Arizona State University is also a member of the Strategic Alliance for Volume Expenditures ($AVE) cooperative purchasing group. $AVE includes the State of Arizona, many Phoenix metropolitan area municipalities, and many K-12 unified school districts. Under the $AVE Cooperative Purchasing Agreement, and with the concurrence of the proposer, a member of $AVE may access a contract resulting from a solicitation done by the University. If you **do not** want to grant such access to a member of $AVE, **please state so** in your proposal. In the absence of a statement to the contrary, the University will assume that you do wish to grant access to any contract that may result from this Request for Proposal.

22. All formal inquiries or requests for significant or material clarification or interpretation, or notification to the University of errors or omissions relating to this Request for Proposal must be directed, in writing or by facsimile, to:

Allyson Taylor
Purchasing and Business Services
University Services Building
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

Tel: 480-965-2074
E-mail: Allyson.taylor@asu.edu

Requests must be submitted on a copy of the Proposer Inquiry Form included in Section XI of this Request for Proposal. All formal inquiries must be submitted at least ten (10) calendar days before the time and date set for closing this Request for Proposal. Failure to submit inquiries by this deadline may result in the inquiry not being answered.

Note that the University will answer informal questions orally. The University makes no warranty of any kind as to the correctness of any oral answers and uses this process solely to provide minor clarifications rapidly. Oral statements or instructions shall not constitute an amendment to this Request for Proposal. Proposers shall not rely on any verbal responses from the University.

23. The University shall not reimburse any proposer the cost of responding to a Request for Proposal.

24. In accordance with an executive order titled “Air Pollution Emergency Proclamation” modified by the Governor of Arizona on July 16, 1996, the University formally requests that all products used in the performance of any contract that results from this Request for Proposal be of low- or no-content of reactive organic compounds, to the maximum extent possible.

25. Arizona requires that the University purchase ENERGY STAR® products or those certified by the Federal Energy Management Program as energy efficient in all categories available. If this Request for Proposal is for a product in a category for which ENERGY STAR® or certified products are available, please submit evidence of the ENERGY STAR® status or certification for the products you are bidding. Please note that if you fail to submit this information but a competitor does, the University will select your competitor’s product as meeting specifications and deem your product as not meeting specifications. See A.R.S. §34-451.

26. The University requires that all desktop computers, notebooks, and monitors purchased must meet Electronic Product Environmental Assessment Tool (EPEAT) Gold status as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products. The registration criteria and a list of all registered equipment are at http://www.epeat.net on the Web.

27. To the extent applicable to any contract resulting from this Request for Proposal, the proposer shall comply with the Standards for Privacy of Individually Identifiable Information under the Health Insurance Portability and Accountability Act of 1996 contained in 45 CFR Parts 160 and 164 (the “HIPAA Privacy Standards”) as of the effective date of the HIPAA Privacy Standards on April 14, 2003 or as later determined. Proposer will use all security and privacy safeguards necessary to protect Protected Health Information (PHI), as defined by HIPPA, and shall immediately report to University all improper use or disclosure of PHI of which it becomes aware. Proposer agrees to ensure that its agents and subcontractors agree to and abide by these requirements. **Proposer agrees to indemnify the State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees against all harm or damage caused or contributed to by proposer’s breach of its obligations under this paragraph.**

28. The University believes that it can best maintain its reputation for treating suppliers in a fair, honest, and consistent manner by conducting solicitations in good faith and by granting competitors an equal opportunity to win an award. If you feel that we have fallen short of these goals, you may submit a protest pursuant to the Arizona Board of Regents procurement procedures, section 3-809, in particular section 3-809C. This paragraph does not include all of the provisions of the Regents procedures, but it does tell you what you have to do to initiate a protest. First, you have to be an "interested party." An "interested party" is an actual or prospective proposer whose direct economic interest may be affected by the issuance of a solicitation, the award of a contract, or by the failure to award a contract. Whether an actual prospective bidder or offeror has a *direct* economic interest will depend upon the circumstances in each case. At a minimum, the interest must be substantial and must be tangibly affected by the administrative action or proposed action concerned in the case. For instance, a bidder or proposer who is fourth in line for award does not have a sufficient economic interest to protest the proposed award of a contract to the low bidder or offeror. Second, you must submit the protest in a timely manner. In procurements inviting bids, protests based upon alleged errors, irregularities or, improprieties in a solicitation that are apparent before the bid opening shall be filed before the bid opening. In procurements requesting proposals, protests based upon alleged errors, irregularities or improprieties in a solicitation that are apparent before the closing date for receipt of initial proposals shall be filed before the closing date for receipt of initial proposals. Protests concerning improprieties that do not exist in the initial solicitation, but that are subsequently incorporated into the solicitation, shall be filed by the next closing date for receipt of proposals following the incorporation. In cases other than those just covered, protests shall be filed no later than ten (10) days after the earlier of a) the issuance of a Notice of Intent to Award or b) Award of a Contract in connection with the procurement action. Failure to timely protest shall be deemed a waiver of all rights. Third, and finally, your protest shall be in writing and shall include the following information: (1) The name, address, telephone number, and fax number of the protestor; (2) The signature of the protestor or its representative; (3) Identification of the solicitation or contract number; (4) A detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and (5) The form of relief requested.

Protests should be directed to:

Jamon Hill
Deputy Chief Procurement Officer
Purchasing and Business Services
PO Box 875212
Tempe AZ 85287-5212
Email: Jamon.Hill@asu.edu

Please note that as the University takes protests very seriously; we expect you to do so as well. Frivolous protests will not result in gain for your firm.

SECTION V – SPECIFICATIONS/SCOPE OF WORK

A. Proposal for Digital Asset Management Software

ASU seeks to provide its workforce with a digital asset management software ("DAM") to manage large quantities of digital assets in a single and centralized web-based content hub. This should increase the efficiency, productivity and visibility of digital assets and projects where they are needed for all relevant University associates. ASU seeks to include creative media and other assets in the digital asset management software. File types include **images** (in file formats including: bmp, cr2, crw, dng, eps, gif, jpeg, raw, raf, svg, tiff), **documents** (in file formats including: xlx, xlxs, key, ppt, pptx, doc, docx, zip), **videos** (in file formats including: prproj, ProRes, Avid, Divx, DV, FLV, HDV, h.264, MPEG-2, MPEG-4, SWF, QuickTime, Windows Video, XDCAM), **design** (in file formats including: indd), and **audio** (in file formats including: wav, wma). The objective of this RFP is to select a DAM provider that best fits the ongoing content management needs of ASU.

In addition to individual file types, ASU seeks to identify a DAM system that will allow our institution to centrally manage the academic organization of such files. Academic organization typically includes structure (e.g., courses, modules, units) and instructional (e.g., learning objective, instructional resource, assessment) type media.

The University will use the DAM to simplify the content lifecycle. ASU needs a system that will make it easy to store, view, and share files across multiple teams and users. The system will be used regularly by employees in order to collaborate and curate content that resides in a single hub.

Updating media and content across all channels will prevent errors and save time so that the University can continue innovating without having to worry about managing assets.

As ASU continues to grow, a DAM is needed to leverage the large amounts of digital content that are required to keep products and websites up to date.

B. Customer Requirements and Specifications

NOTE: Please fill in details about how your DAM solution will provide the following features/functionalities/services. Please reply directly underneath each item below for ease of the evaluation process.

Media management and organization

1. What file types will your DAM tool support?
2. How does your tool allow for file uploading, downloading, batch uploading and file sharing?
3. Describe how your DAM product allows users to organize assets within the tool.
4. Describe how DAM users are able to share assets with different users within the tool.
5. How does your tool manage video uploads? Does it retain video quality and resolution? What video file formats does it account for? Can videos be shared and embedded from your tool to a website?
6. How does your tool allow for editing of media to create different versions of media assets? Describe how your tool maintains the integrity of the original file (i.e. quality, color, resolution).
7. Describe your solution's capabilities to convert file types.
8. How does your tool compress file sizes for optimized use on web platforms?
9. Describe how media stored in your tool can be accessed via API from websites.
10. How does your tool archive or otherwise treat old files?
11. Describe how your tool allows users to search for specific assets within the database.
12. How does your tool account for duplicate files?

Access & permissions

1. The tool must be accessible by anyone with access via the internet. How do users login and access the media stored in your tool?
2. Does your tool allow users to access the system via different mobile devices and their operating systems? Is it mobile-user friendly? Is there an app to access your tool?
3. The tool must have different levels of permissions for different users within the university. How will your solution provide different levels of access to users and what are the differences between those access levels?
4. How does your tool allow for the management of user types?
5. How does your tool allow for permission based access to specific media or assets within the tool?

Performance and usage tracking

1. The tool must have data reporting structures on the media usage, location, and end user engagement. How does your tool provide data about the media, and what kind of data is represented in your tool?
2. Does your tool allow for a custom login page that reflects the branding of ASU and allows for personalized user experiences for our users?
3. Does your tool allow for custom automated reports or dashboards? If so, how are users able to create these?
4. Please describe how users can receive custom notifications when specified media is downloaded, edited, or used on a web asset.
5. How does your tool provide trend information about the use of media and about the quantity and type of media uploaded to the tool?
6. How does your tool account for files that have time-sensitive use? For example, if we have a limited license to an image for x number of months.

Solution onboarding & integration

1. Describe a traditional onboarding process, timeline, and the support your team provides to train in-house staff on the use of the tool and the support your team provides to ensure all assets are properly uploaded to the tool.

2. Please provide a Gantt chart or visual representation of your implementation process and the necessary ASU resources that we would have to provide in order to assist with implementation of your solution.
3. Describe the training program content provided during implementation, the method of delivery, and materials. How much on-site training is provided? How much remote training is provided? Please describe any costs associated with this training in the Attachment A Pricing Schedule.
4. Describe the process with which you would migrate the data from our current system(s) to yours.
5. What technology systems and platforms is your DAM solution capable of integrating with? (examples include WordPress, Drupal, Google 360).
6. Describe how your solution integrates with tracking technologies and different web platforms such as Google Analytics, Google Optimize and the Drupal platform.

Hosting

1. How does your tool leverage the cloud and/or local components?
2. What server houses your solution?
3. How long has your solution been in the cloud?
4. Are there any elements of your tool that are not cloud-based?

Reliability

1. How are violations of service availability recorded?
2. Describe how your solution is fully fault-tolerant without a single point of failure.
3. Describe any redundancy features.
4. Your solution must have a high degree of availability and response time. Describe how you meet this requirement and provide data demonstrating your solution’s past performance.
5. Describe your guaranteed turnaround time for resolving critical issues that result in system downtime.
6. How does your solution monitor and report on system reliability and performance?
7. How are downtime and service breaches recorded?
8. How are fixes and reported issues prioritized?

Scalability and Performance

1. Describe how scalable your solution is in terms of potentially adding additional users in the future. Please describe functions and features that allow such scalability without decreasing performance.
2. One of the main purposes of using a DAM is to be able to update content seamlessly across all of ASU’s channels. ASU consistently works on multiple projects that impact the lives of learners around the globe. Describe how your system caters to a global audience.
3. How does your solution manage capacity at an infrastructure level?
4. How does your solution accommodate increases in users and collections?
5. How is performance monitored?
6. How does your solution manage peaks and spikes in workload over varying periods of time, including seconds, minutes and hours?
7. How does your solution enable simultaneous batch operations across multiple institutions? Are there any restrictions on simultaneous batch operations?

8. Describe expected performance for batch load processes including factors affecting processing time and performance. What factors affect processing time? Can batch loads be scheduled?
9. Are there governance thresholds or restrictions for the import and export of data?

Backup and Recovery

1. Are backups encrypted, and who can access them?
2. Is periodic testing of backup integrity performed? Describe the timetable for such testing.
3. How and where are backups stored? Please be specific with regard to medium and parties involved.
4. Describe your solution's mechanisms for recovery.
5. What processes are in place for disaster management?
6. What is the expected time frame for a restore to occur?

Support and Maintenance

1. What kind of uptime do you typically deliver (also define any terms within your answer as appropriate)? Do you provide 24x7x365 support on a global scale? Please identify your service level agreements and include these as part of the Attachment A Pricing Schedule.
2. What are the biggest risks to the solution, in terms of availability (e.g., power outages, network outages, data corruption, software bugs, reliance on external partners), and how are these risks mitigated? Provide any examples you can of large outages that have occurred, how long they lasted, and how you resolved them.
3. Describe the parameters of your "typical" Service Level Agreement (SLA). How well does your solution meet those targets?
4. What support options are available for your solution after go-live?
5. What is your guaranteed response time for responding to emergency and non-emergency requests?
6. Where are your support staff located and during what hours are your support team available? What provisions do you have in place for after-hours support?
7. How do you facilitate and encourage support through user groups or communities of practice? What role, if any, does a user group/community of practice have in identifying and prioritizing enhancements?
8. What are the expectations, qualifications, and time commitments of someone managing your solution? Is a local staff member required to be in charge of managing this platform internally?

Security and Privacy

1. Describe the security protections that your tool has in place (encryption, network segmentation, etc.).
2. Do you perform regular 3rd party penetration testing of your solution (note: this is NOT the same as vulnerability scanning)?
3. Describe how your solution supports data transit security.

4. What encryption options are in place? Describe the different levels of encryption.
5. Please provide an SSAE 16 SOC 2 report if available.
6. Describe your information security organizational structure. Include internal and external personnel, roles, and responsibilities.
7. Describe your software development process. Are programmers aware and trained regarding common programming security risks (i.e. OWASP top 10)?
8. Describe your network, system, and web application vulnerability management process. Please share any results of third-party assessments/scans.
9. Will institutions be allowed to perform penetration testing and vulnerability assessment ideally against a staging environment that represents production?
10. Describe security controls that enforce separation of duties.
11. Describe security controls in place for endpoint protection on systems used by your developers, system administrators, and others supporting your solution.
12. Describe how those supporting your solution authenticate to it and how such access is monitored and logged.
13. Describe your ability to prevent, detect, and respond to intrusions, including processes in place to do so.
14. Does your solutions support two-factor authentication?

C. Value-Added Services

Describe any special resources, skills, or services which the firm possess, and which are not addressed as part of this RFP, that would be available as part of an agreement with successful proposer. Please demonstrate any advantages that would be realized by the University as a result of these value added resources (ex. providing content).

SECTION VI – GREEN PURCHASING REQUIREMENTS/SPECIFICATIONS

In order to reduce the adverse environmental impact of our purchasing decisions the University is committed to buying goods and services from manufacturers and suppliers who share the University's environmental concern and commitment. Green purchasing is the method wherein environmental and social considerations are taken with equal weight to the price, availability and performance criteria that we use to make purchasing decisions.

Proposer shall use environmentally preferable products, materials and companies where economically feasible. Environmentally preferable products have a less or reduced effect on human health and the environment when compared to other products and companies that serve the same purpose. If two (2) products are equal in performance characteristics and the pricing is within 5%, the University will favor the more environmentally preferable product and company.

If you are citing environmentally preferred product claims, you must provide proper certification or detailed information on environmental benefits, durability and recyclable properties.

The University and the supplier may negotiate during the contract term to permit the substitution or addition of Environmentally Preferable Products (EPPs) when such products are readily available at a competitive cost and satisfy the university's performance needs.

Unless otherwise specified, proposers and contractors should use recycled paper and double-sided copying for the production of all printed and photocopied documents. Furthermore, the documents shall be clearly marked to indicate that they are printed on recycled content (minimum 30% post-consumer waste) paper.

Proposer shall minimize packaging and any packaging/packing materials that are provided must meet at least one of, and preferably all, of the following criteria:

Made from 100% post-consumer recycled materials
Be recyclable
Reusable
Non-toxic
Biodegradable

Further, proposer is expected to pick up packaging and either reuse it or recycle it. This is a requirement of the contract or purchase order.

SECTION VII – PROPOSER QUALIFICATIONS

The University is soliciting proposals from firms, which are in the business of providing services as listed in this Request for Proposal. Your proposal shall include, at a minimum, the following information. Failure to include these items may be grounds for rejection of your proposal.

1. The proposer shall present evidence that the firm or its officers have been engaged for at least the past three (3) years in providing services as listed in this Request for Proposal.

2. Submit two (2) past and three (3) present client references comparable in scope of this RFP. References should be verifiable and should be able to comment on the firm's experience, with a preference related to services similar to this project. Include the name, title, telephone number, and e-mail address of the individual at the client organization who is most familiar with this engagement.

3. All key personnel proposed by the firm should have relevant experience, and be fully qualified to successfully provide the services described in the Scope of Work. Provide an organizational chart that provides organizational sections, with the section that will have responsibility for performing this project clearly noted.

4. Please provide a copy of the resume(s) of the individual(s) that will be the single point of contact between our organization and yours.

5. Describe your firm's approach to providing the services described in Section V, as well as the methodology used. Provide a detailed timeline, including major milestones, for each of the steps outlined in Section V. Include other steps if appropriate.

6. Describe what distinguishes the ability of your firm from that of your competitors to perform the services described in this Request for Proposal.

SECTION VIII – EVALUATION CRITERIA

Proposals will be evaluated on the following criteria, listed in order of their relative priority with most important listed first:

1. Specifications / Scope of Work – Section V (35%)

2. Proposer Qualifications - Section VII (20%)

3. Pricing Schedule and Attachment A – Section IX (20%)

4. Acknowledgment and acceptance of the terms and conditions of the License Agreement including Insurance Requirements (Section XII). All exceptions must be submitted with justification and alternate language, and MUST be submitted with the proposal. – Section XII (15%)

5. Sustainability Efforts – Section VI and Supplier Sustainability Questionnaire. (10%)

Confidential and/or proprietary information must be submitted per the instructions in Section IV, item 9. Any watermarks, footnotes, or references marked as Confidential and/or proprietary throughout the submitted proposal will be disregarded as boilerplate markings.

SECTION IX – PRICING SCHEDULE

Proposer shall submit a detailed cost proposal to include all aspects of providing the scope of work associated with this Request for Proposal.

ATTACHMENT A- MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL

The Financial proposal shall contain the complete financial offer made to the University. Any additional costs, fees, and expenses must be detailed in the proposer's proposal. Any additional expenses, not explicitly stated, will not be honored by ASU.

SECTION X – FORM OF PROPOSAL/SPECIAL INSTRUCTIONS

Format of Submittal

To facilitate direct comparisons, your proposal must be submitted in the following format:

- **One (1)** clearly marked hardcopy "original" in 8.5" x 11" double-sided, non-binding form. No metal or plastic binding – may use binder, folder, or clip for easy removal of proposal; and
- **One (1) "single"** continuous, no folders, electronic copy (**flash drive only**), PC readable, labeled and no passwords.
- Any confidential and/or proprietary documents must be on a separate flash drive and labeled appropriately.
- Proposer must check all flash drives before submitting. Company marketing materials should not be included unless the Request for Proposal specifically requests them. All photos must be compressed to small size formats.

Content of Submittal

If proposer fails to provide any of the following information, with the exception of the mandatory proposal certifications, the University may, at its sole option, ask the proposer to provide the missing information or evaluate the proposal without the missing information.

1. Mandatory certifications, Sustainability Questionnaire and Substitute W-9 as per Section XIII.

2. Acceptance of ASU's RFP terms and conditions (Section XII). Note: all exceptions and alternative language MUST be submitted with the proposal along with justification.

3. Detailed Response to Specifications/Scope of Work – Section V

4. Detailed Response to Proposer Qualifications – Section VII

5. Response to Pricing Schedule – Section IX and Attachment A

SECTION XI – PROPOSER INQUIRY FORM

Pre-Proposal Questions, General Clarifications, etc.

PROJECT NAME: _**DIGITAL ASSET MANAGEMENT SOFTWARE**
____

PROPOSALNUMBER:
______301801____

INQUIRY DEADLINE: ____3:00 P.M., MST, February 26, 2018____________________________

QUESTIONS ON: _____ ORIGINAL PROPOSAL or _____ ADDENDUM NO. ______________

DATE: _________________________________

WRITER: ____

COMPANY: ____

E-MAIL ADDRESS: ____

PHONE: _______________________________ FAX: ____________________________

QUESTIONS:

____

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SECTION XII – AGREEMENT

Arizona State University
VENDOR LICENSE AGREEMENT

THIS AGREEMENT is made between the **Arizona Board of Regents**, a body corporate, for and on behalf of **Arizona State University** (ASU) and ____, a ___________________________ (Licensor), effective as of _____________, 201_ (the Effective Date).

In consideration of the mutual obligations in this Agreement, the parties agree as follows:

ASU issued a Request for Proposal **301801** for **Digital Asset Management Software**. Licensor responded with its proposal. ASU and Licensor desire to enter into this Agreement for the purpose of Licensor providing ASU with digital asset management software.

1. License. Subject to the terms of this Agreement, Licensor grants to ASU, a non-exclusive, non-transferable license to access and use the Licensed Materials as and to the extent described in this Agreement (the License), for the purpose of utilizing a central repository for all digital assets within ASU (the Purpose). ASU will use the Licensed Materials for the Purpose, and consistent with ASU's educational mission.

2. Licensed Materials and Services. The Licensed Materials are described with specificity on the Order Form attached as Exhibit A (the Order Form). The parties may sign one or more additional Order Forms, sequentially numbered, each of which will reference this Agreement, and when signed and attached to Exhibit A, will become part of the definition of Order Form. In connection with the License, Licensor will provide the services to ASU, including those set forth on the applicable Statement of Work attached to Exhibit B (the SOW), and will meet the service level requirements as and when set forth on each Order Form (collectively, the Services). The parties may execute one or more SOW, sequentially numbered, all of which shall reference this Agreement and shall be incorporated herein. The Services and the Licensed Materials are collectively defined as the Deliverables.

3. Pricing and Payment. ASU will pay Licensor for the License and Deliverables as and when set forth on Exhibit A. Unless described with specificity on Exhibit A, (a) ASU must receive all Deliverables prior to payment, and (b) Licensor will be solely responsible for all expenses it incurs in connection with its obligations under this Agreement. Payment terms are Net 30 days upon ASU's receipt of Licensor's invoice.

4. Term and Termination. The License and the obligations of the parties will commence on the Effective Date and, unless sooner terminated as set forth herein, will end 1 year after the Effective Date (the Term). The total Term will not exceed 5 years. ASU may terminate this Agreement or any Order Form for any reason upon 30 days' prior written notice to Licensor. Except as set forth in Section 5, ASU will have no further obligations to Licensor other than payment for Services rendered and Deliverables delivered, in each case as of the effective date of termination. All provisions of this Agreement that anticipate performance after termination, and all provisions necessary to interpret and enforce them, will survive termination of this Agreement. In the event of early termination, Licensor will provide ASU a pro-rated refund of any and all prepaid amounts.

5. Transition. Upon termination of this Agreement or any Order Form, if requested by ASU, the parties will work in good faith to transition any Deliverables to ASU or its designee, and at ASU's cost and expense Licensor will continue to provide the specified Deliverables, and transition support, during a post-termination period of up to 90 days after the effective date of termination.

6. **Independent Contractor.** Licensor is an independent contractor. Neither Licensor nor any of Licensor's owners, officers, directors, members, managers, agents, employees, contractors or subcontractors, nor any of its or their employees or subcontractors (collectively, with Licensor, the Licensor Parties), will be employees, agents, or partners of ASU. Taxes for any amounts paid to Licensor will be Licensor's sole responsibility.

7. **Data Use, Ownership, and Privacy.** As between the parties, ASU will own, or retain all of its rights in, all data and information that ASU provides to Licensor, as well as all data and information managed by Licensor on behalf of ASU, including all output, reports, analyses, and other materials relating to, derived from, or generated pursuant to this Agreement, even if generated by Licensor, as well as all data obtained or extracted through ASU's or Licensor's use of such data or information (collectively, ASU Data). ASU Data includes all data and information provided directly to Licensor by ASU students and employees, and includes personal data, metadata, and user content. ASU Data also includes all images, documents, videos, designs, and audio files, and any other creative media and other assets, regardless of the file format, that are uploaded to or stored on the Licensed Materials (Digital Assets).

ASU Data will be ASU's Intellectual Property and Licensor will treat it as ASU's confidential and proprietary information. Licensor will not use, access, disclose, or license, or provide to third parties, any ASU Data, except: (i) to the extent necessary to fulfill Licensor's obligations to ASU hereunder; or (ii) as authorized in writing by ASU. Licensor will not use any ASU Data, whether or not aggregated or de-identified, for product development, marketing, profiling, benchmarking, or product demonstrations, without, in each case, ASU's prior written consent. Licensor will not, directly or indirectly: (x) attempt to re-identify or de-aggregate deidentified or aggregated information; or (y) transfer deidentified and aggregated information to any party unless that party agrees not to attempt re-identification or de-aggregation. For ASU Data to be considered deidentified, all direct and indirect personal identifiers must be removed, including names, ID numbers, dates of birth, demographic information, location information, and school information. Upon request by ASU, Licensor will deliver, destroy, and/or make available to ASU, any or all ASU Data in Licensor's possession or control.

8. **Intellectual Property.** Intellectual Property means any and all inventions, designs, original works of authorship, formulas, processes, compositions, programs, databases, data, technologies, discoveries, ideas, writings, improvements, procedures, techniques, know-how, and all patent, trademark, service mark, trade secret, copyright and other intellectual property rights (and goodwill) relating to the foregoing.

9. **ASU's Intellectual Property.** ASU retains ownership of all ASU Data, and any other Intellectual Property created by ASU. All Intellectual Property that Licensor or any of the Licensor Parties make, conceive, discover, develop or create, either solely or jointly with any other person or persons including ASU, specifically for or at the request of ASU in connection with this Agreement (Custom IP), will be owned by ASU. Where applicable, all copyrightable works will be considered "*Work Made for Hire*" under the U.S. Copyright Act, 17 U.S.C. § 101, *et seq*. To the extent that any Custom IP is not considered work made for hire for ASU (or if ownership of all rights therein does not otherwise vest exclusively in ASU), Licensor hereby irrevocably assigns, and will cause all applicable Licensor Parties to so assign, without further consideration, to ASU all right, title and interest in and to all Custom IP. Licensor will make full and prompt disclosure of the Custom IP to ASU. During and after the Term, Licensor will, and will cause the Licensor Parties, as and when requested by ASU, to do such acts, and sign such instruments to vest in ASU the entire right, title and interest to any Custom IP, and to enable ASU to prepare, file, and prosecute applications for, and to obtain patents and/or copyrights on, the Custom IP, and, at ASU's expense, to cooperate with ASU in the protection and/or defense of the Custom IP.

10. Licensor's Intellectual Property. As between the parties, all Licensed Materials are and shall remain the property of Licensor. In addition, Licensor owns its pre-existing Intellectual Property that may be incorporated into any Custom IP, provided that if Licensor incorporates any pre-existing Intellectual Property into any Custom IP, Licensor must first inform ASU in writing, and Licensor hereby grants to ASU a perpetual, irrevocable, royalty-free, worldwide right and license (with the right to sublicense), to freely use, make, have made, reproduce, disseminate, display, perform, and create derivative works based on, such pre-existing Intellectual Property as may be incorporated into any Custom IP.

11. Warranties of Licensor. Licensor represents and warrants that: (i) all of the Services will be performed in a professional and workmanlike manner and in conformity with industry standards by persons reasonably suited by skill, training, and experience for the type of services they are assigned to perform; (ii) Licensor will comply, and will be responsible for ensuring its Licensor Parties comply, with all applicable laws in the performance of this Agreement; (iii) Licensor owns or has sufficient rights in all Deliverables, and no Deliverables will infringe on or violate any Intellectual Property of any third parties; (iv) no code or software developed or delivered by Licensor under this Agreement will contain any viruses, worms, Trojan Horses, or other disabling devices or code; and (vi) the Licensed Materials will conform, in all material respects, to any specifications delivered to ASU, and to the Order Form, and will be adequate for the Purpose.

12. Warranties of ASU. ASU will use the Licensed Materials substantially in compliance with any documentation included as part of the Licensed Materials. In addition, ASU will not decompile, disassemble, or reverse engineer the Licensed Materials.

13. No Debarment. None of the Licensor Parties, either directly or indirectly or through subcontractors, have been suspended, excluded from participation in or penalized by any Federal or State procurement, non-procurement, or reimbursement program. Licensor affirms that it has confirmed the above statement by checking The System for Award Management (SAM) https://www.uscontractorregistration.com within 180 days prior to commencing performance under this Agreement. Licensor will provide immediate written notice to ASU upon the subsequent exclusion of any of the Licensor Parties, or upon learning of any investigation or proposed action that could result in such exclusion.

14. Notices. All notices and communications required or permitted under this Agreement will be in writing and will be given by personal delivery against receipt (including private courier service such as Federal Express), or certified United States Mail, return receipt requested. All notices and communications will be sent to the addresses set forth below or to such other address as the parties may specify in the same manner:

To ASU:
EdPlus

1365 N Scottsdale Rd., Skysong 200
Scottsdale, AZ 85257
Attn:

With a copy to:

Purchasing and Business Services
PO Box 875212
Tempe, AZ 85287-5212
Attn: Chief Procurement Officer

To Licensor:

____
____
____
Attn: ____________________________________

With a copy to:

____
____
____
Attn: ____________________________________

Notices, if delivered, and if provided in the manner set forth above, will be deemed to have been given and received on the date of actual receipt or upon the date receipt was refused. Any notice to be given by any party may be given by legal counsel for such party.

15. **Nondiscrimination.** The parties will comply with all applicable state and federal laws, rules, regulations, and executive orders governing equal employment opportunity, immigration, and nondiscrimination, including the Americans with Disabilities Act. **If applicable, the parties will abide by the requirements of 41 CFR §§ 60-1.4(a), 60 300.5(a) and 60 741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status, or disability.**

16. **Conflict of Interest.** If within 3 years after the execution of this Agreement, Licensor hires as an employee or agent any ASU representative who was significantly involved in negotiating, securing, drafting, or creating this Agreement, then ASU may cancel this Agreement as provided in Arizona Revised Statutes (ARS) § 38-511. Notice is also given of ARS §§ 41-2517 and 41-753.

17. **Arbitration in Superior Court.** As required by ARS § 12-1518, the parties agree to make use of arbitration in disputes that are subject to mandatory arbitration pursuant to ARS § 12-133.

18. **Dispute Resolution.** If a dispute arises under this Agreement, the parties will exhaust all applicable administrative remedies provided for under Arizona Board of Regents Policy 3-809.

19. **Records.** To the extent required by ARS § 35-214, Licensor will retain all records relating to this Agreement. Licensor will make those records available at all reasonable times for inspection and audit by ASU or the Auditor General of the State of Arizona during the Term and for 5 years after the completion of this Agreement. Licensor will provide the records at Arizona State University, Tempe, Arizona, or another location designated by ASU on reasonable notice to Licensor. Records may be delivered electronically.

20. **Failure of Legislature to Appropriate** In accordance with ARS § 35-154, if ASU's performance under this Agreement depends on the appropriation of funds by the Arizona Legislature, and if the Legislature fails to appropriate the funds necessary for performance, then ASU may provide written notice of this to Licensor and cancel this Agreement without further obligation of ASU. Appropriation is a legislative act beyond the control of ASU.

21. **Advertising, Publicity, Names and Marks.** Neither party will do any of the following, without, in each case, the other party's prior written consent: (i) use any names, service marks, trademarks, trade names, logos, or other identifying names, domain names, or identifying marks of the other party (Marks), for any reason including online, advertising, or promotional purposes; (ii) issue a press release or public statement regarding this Agreement. In addition, Licensor will not represent or imply any ASU endorsement or support of any product or service in any public or private communication. Any permitted use of any Marks must comply with the owner's requirements, including using the ® indication of a registered trademark where applicable.

22. **Information Security.** All systems containing ASU Data must be designed, managed, and operated in accordance with information security best practices and in compliance with all applicable laws, rules, and regulations. To diminish information security threats, Licensor will (either directly or through its third party service providers) meet the following requirements:
(a) Access Control. Control access to ASU's resources, including sensitive ASU Data, limiting access to legitimate business need based on an individual's job-related assignment. Licensor will, or will cause the system administrator to, approve and track access to ensure proper usage and accountability, and

Licensor will make such information available to ASU for review, upon ASU's request.
(b) Incident Reporting. Report information security incidents immediately to ASU (including those that involve information disclosure incidents, unauthorized disclosure of ASU Data, network intrusions, successful virus attacks, unauthorized access or modifications, and threats and vulnerabilities).
(c) Off Shore. Direct services under this Agreement will be performed within the borders of the United States. Any services that are described in this Agreement that directly serve ASU and may involve access to secure or sensitive ASU Data or personal client data or development or modification of software for ASU will be performed within the borders of the United States. Unless stated otherwise in this Agreement, this requirement does not apply to indirect or "overhead" services, redundant back-up services or services that are incidental to the performance of this Agreement. This provision applies to work performed by subcontractors at all tiers and to all ASU Data.
(d) Patch Management. Carry out updates and patch management for all systems and devices in a timely manner and to the satisfaction of ASU. Updates and patch management must be deployed using an auditable process that can be reviewed by ASU upon ASU's request.
(e) Encryption. All systems and devices that store, process or transmit sensitive ASU Data must use an industry standard encryption protocol for data in transit and at rest.
(f) Notifications. Notify ASU immediately if Licensor receives any kind of subpoena for or involving ASU Data, if any third-party requests ASU Data, or if Licensor has a change in the location or transmission of ASU Data. All notifications to ASU required in this Information Security paragraph will be sent to ASU Information Security at Infosec@asu.edu, in addition to any other notice addresses in this Agreement.
(g) Security Reviews. Complete SOC2 Type II or substantially equivalent reviews in accordance with industry standards, which reviews are subject to review by ASU upon ASU's request. Currently, no more than two reviews per year are required.
(h) Scanning and Penetration Tests. Perform periodic scans, including penetration tests, for unauthorized applications, services, code and system vulnerabilities on the networks and systems included in this Agreement in accordance with industry standards and ASU standards (as documented in NIST 800-115) or equivalent. All web based applications (e.g. HTTP/HTTPS accessible URLs, APIs, and web services) are required to have their own web application security scan and remediation plan. Licensor must correct weaknesses within a reasonable period of time, and Licensor must provide proof of testing to ASU upon ASU's request.
(i) ASU Rights. ASU reserves the right (either directly or through third party service providers) to scan and/or penetration test any purchased and/or leased software regardless of where it resides.
(j) Secure Development. Use secure development and coding standards including secure change management procedures in accordance with industry standards. Perform penetration testing and/or scanning prior to releasing new software versions. Licensor will provide internal standards and procedures to ASU for review upon ASU request.

23. Insurance Requirements. Licensor will (and will cause its subcontractors to) procure and maintain, until all of Licensor's obligations have been discharged or satisfied, including any warranty periods under this Agreement, insurance as described on Exhibit C.

24. Gratuities. ASU may, by written notice to Licensor, cancel this Agreement or any Order Form if ASU finds that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by Licensor, or any agent or representative of Licensor, to any officer or employee of the State of Arizona with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract. If ASU cancels this Agreement pursuant to this provision, ASU will be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Licensor in providing such gratuities.

25. Privacy; Educational Records. Student educational records are protected by the U.S. Family Educational Rights and Privacy Act, 20 U.S.C. § 1232g (FERPA). Licensor will not require any ASU students or employees to waive any privacy rights (including under FERPA or the European Union's General Data Protection Regulation (GDPR)) as a condition for receipt of any educational services, and any attempt to do so will be void.

26. Authorized Presence Requirements. As required by ARS § 41-4401, ASU is prohibited from awarding a contract to any contractor or subcontractor that fails to comply with ARS § 23-214(A) (verification of employee eligibility through the e-verify program). Licensor warrants that it and its subcontractors comply fully with all applicable federal immigration laws and regulations that relate to their employees and their compliance with ARS § 23-214(A). A breach of this warranty will be a material breach of this Agreement that is subject to penalties up to and including termination of this Agreement. ASU retains the legal right to inspect the papers of any contractor or subcontractor employee who works hereunder to ensure that the contractor or subcontractor is complying with the warranty stated above.

27. Confidentiality. ASU is a public institution and, as such, is subject to ARS §§ 39-121 through 39-127 regarding public records. Accordingly, any requirement regarding confidentiality is limited to the extent necessary to comply with Arizona law.

28. Indemnification. Licensor will indemnify, defend, and hold harmless the State of Arizona, its departments, agencies, boards, commissions, universities, and its and their officials, agents, and employees (collectively, Indemnitee) for, from, and against any and all third party claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation, and litigation) for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property to the extent caused, or alleged to be caused, by (i) the negligent or willful acts or omissions of any of the Licensor Parties; (ii) a breach of this Agreement, (iii) any Deliverables infringe on or misappropriate the intellectual property rights of a third party; or (iv) failure to comply with any applicable law. Licensor will be responsible for primary loss investigation, defense, and judgment costs where this indemnification is applicable.

29. Responsibility. Each party will be responsible for the negligence, acts, and omissions of its employees and contractors when acting under such party's direction and supervision. Notwithstanding the terms of this Agreement or any other document: (i) other than for employees and contractors acting under ASU's direction and supervision, ASU is not responsible for any actions of any third parties, including its students; and (ii) no person may bind ASU unless they are an authorized signatory of ASU, as set forth in PUR-202, which is at www.asu.edu/counsel/manual/signatureauthority.html.

30. Americans with Disabilities Act and Rehabilitation Act. Licensor will comply with all applicable provisions of the Americans with Disabilities Act, the Rehabilitation Act of 1973, and all applicable federal regulations. All electronic and information technology and products and services to be used by ASU faculty/staff, students, program participants, or other ASU constituencies must be compliant with the Americans with Disabilities Act and Section 508 of the Rehabilitation Act of 1973, as amended from time to time. Compliance means that a disabled person can acquire the same information, engage in the same interactions, and enjoy the same services as a nondisabled person, in an equally effective and integrated manner, with substantially equivalent ease of use.

31. Assignment; Beneficiaries. Neither party may transfer or assign this Agreement or any of its rights or obligations hereunder, directly or indirectly, or by operation of law, without the other party's prior written consent. Any attempt to the contrary will be void. This Agreement is for the benefit of the parties and is not intended to confer any legal rights or benefits on any third party. There are no third party beneficiaries to this Agreement or any specific provision of this Agreement.

32. **Affirmation of Rights**. All rights and licenses granted pursuant to this Agreement are, and will be, for purposes of Section 365 (n) of the United States Bankruptcy Code and/or any similar or comparable section of the United States Bankruptcy Code (as modified, amended, replaced or renumbered from time to time) (the Code), executory licenses of rights to "intellectual property," as defined under Section 101 (35A) of the Code. The parties will retain and may fully exercise all of their respective rights and elections under the Code. Accordingly, ASU will retain and may fully exercise all of its rights and elections under the Code. Upon the commencement of bankruptcy proceedings by or against either party under the Code, the other party will be entitled to retain all of its license rights and use rights granted under this Agreement.

33. **Availability**. If during the Term, for any reason, Licensor no longer supports or provides any or all of the Licensed Materials, Licensor will continue to allow ASU to (i) use the Licensed Materials at no additional charge, and (ii) receive necessary documentation and code to support the License for the Purpose. This includes providing a current copy of (or access to) the source code for such Licensed Materials. Notwithstanding the foregoing, if Licensor is legally precluded from supporting or providing any of the Licensed Materials due to third party claims of infringement, Licensor may either procure for ASU the right to continue using the Licensed Materials or replace or modify the Licensed Materials or infringing portion thereof so that they are no longer infringing, provided however, the replacements or modifications must provide the essential functions and functionality of the Licensed Materials consistent with the Purpose.

34. **Rights to Inventions Made Under an Agreement.** Contracts or agreements for the performance of experimental, developmental, or research work will provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

35. **Limitations on Liability**. NEITHER PARTY WILL HAVE ANY LIABILITY TO THE OTHER FOR ANY CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND, WHETHER IN CONTRACT, AGREEMENT, TORT OR UNDER ANY OTHER THEORY OF LIABILITY, WHETHER OR NOT THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Due to the nature of the License, any loss of data is a direct damage, and not a consequential damage. ASU is a public institution and, as such, any indemnification, liability limitation, or hold harmless provision will be limited as required by Arizona law, including without limitation Article 9, Sections 5 and 7 of the Arizona Constitution and ARS §§ 35-154 and 41-621.

36. **No Boycott of Israel.** As required by ARS § 35-393.01, Licensor certifies it is not currently engaged in a boycott of Israel and will not engage in a boycott of Israel during the term of this Agreement.

37. **Title IX Obligation**. Title IX protects individuals from discrimination based on sex, including sexual harassment. ASU fosters a learning and working environment that is built on respect and free of sexual harassment. ASU's Title IX Guidance is available at www.asu.edu/titleIX/Vendors-and-an-Environment-of-Respect.pdf. Licensor will: (i) comply with ASU's Title IX Guidance; (ii) provide ASU's Title IX Guidance to any Licensor Parties who may reasonably be expected to interact with ASU students and employees, in person or online; and (iii) ensure that all Licensor Parties comply with ASU's Title IX Guidance.

38. **Export Controls.** Interactions between U.S. nationals and non-U.S. nationals may be subject to U.S. laws and regulations controlling the transfer or sharing of information or technical data, computer software, laboratory prototypes and other commodities (Technology), as defined and restricted by the U.S. Export Administration

Regulations, U.S. International Traffic in Arms Regulations, and through the sanctions and embargoes established through the Office of Foreign Assets Control (collectively, the Export Control Laws). None of the work undertaken pursuant to this Agreement will require either party to take or fail to take any action that would cause a violation of any of the Export Control Laws. If any work to be undertaken pursuant to this Agreement requires, in ASU's sole judgment and discretion, a license or authorization from any agency or authority of the U.S. government and/or any written assurances that the party receiving any Technology will not re-export, transfer, or otherwise share such Technology to or with certain other foreign nationals or destinations without the prior approval of the U.S. government, no such work will be required unless and until the appropriate license or written assurance is obtained. The parties will cooperate to facilitate compliance with applicable requirements of the Export Control Laws.

39. Assignment of Anti-Trust Overcharge Claims. The parties recognize that in actual economic practice overcharges resulting from anti-trust violations are in fact borne by the ultimate purchaser; therefore, the Licensor hereby assigns to the Arizona Board of Regents for and on behalf of ASU any and all claims for such overcharges.

40. Anti-Kickback. In compliance with FAR 52.203-7, ASU has in place and follows procedures designed to prevent and detect violations of the Anti-Kickback Act of 1986 in its operations and direct business relationships.

41. Governing Law and Venue. This Agreement will be governed by the laws of the State of Arizona without regard to any conflicts of laws principles. ASU's obligations hereunder are subject to the regulations/policies of the Arizona Board of Regents. Any proceeding arising out of or relating to this Agreement will be conducted in Maricopa County, Arizona. Each party waives any objection it may now or hereafter have to venue or to convenience of forum.

IN WITNESS WHEREOF, the parties have signed this Agreement as of the Effective Date.

Arizona Board of Regents for and
on behalf of Arizona State University

By: ______________________________
Name: ____________________________
Title: ____________________________
Date Signed: _______________________

Licensor:
____

By: ______________________________________
Name: ____________________________________
Title: _____________________________________
Date Signed: _______________________________

Exhibit A – Order Form.

Licensor's Order Form may be used in place of the form of Order Form attached on Exhibit A only if Licensor's Order Form (i) includes detailed description(s) of Licensed Materials and Services, including any documentation (ii) includes Licensor's Service Level Agreement, and (iii) ASU's pricing and payment terms will apply. All other terms in an Order Form provided by Licensor, or on Licensor's website are expressly rejected by ASU. To the extent any provisions of Licensor's Order Form conflict with the provisions of this Agreement, the provisions of this Agreement will control.

Exhibit B – Service Level Agreement

Exhibit C – Statement of Work

Exhibit D - Insurance Requirements

Exhibit A
Order Form No. 1[1]

This Order is subject to and made in accordance with the Vendor License Agreement dated _________________, between ASU and Licensor (the Agreement). All capitalized terms not defined herein have the meaning in the Agreement. To the extent any provisions of this Order Form conflict with the provisions of the Agreement, the provisions of the Agreement will control. Any other terms in an Order Form provided by Licensor or on Licensor's website are expressly rejected.

ASU	LICENSOR
Arizona Board of Regents, a body corporate, for and on behalf of Arizona State University	
Representative:	Representative:
Shipping Address:	Billing Address:

Effective Date	Term	Delivery Method	Payment Terms
			Net 30 upon receipt of invoice

Licensed Materials Description	Quantity	Price
		$0.00
		$0.00
		$0.00
Total License Fees:		$0.00

Services Description	Services Term	Price
		$0.00
		$0.00
		$0.00
Total Maintenance Fees:		$0.00
Licensor will provide service levels per the Service Level Agreement on Exhibit B.		

Additional Terms:

1. If in this Exhibit A ASU agrees to reimburse Licensor for any travel expenses, all reimbursable travel expenses must be authorized in writing by ASU in advance of the planned travel and must

[1] Licensor's Order Form may be used in place of this Order Form format only if Licensor's order form includes (i) (i) includes detailed description(s) of Licensed Materials and Services, including any documentation (ii) includes Licensor's Service Level Agreement, and (iii) ASU's pricing and payment terms will apply. All other terms in an Order Form provided by Licensor, or on Licensor's website are expressly rejected by ASU. To the extent any provisions of Licensor's Order Form conflict with the provisions of this Agreement, the provisions of this Agreement will control

be consistent with ASU Financial Services Policy FIN 421-01, www.asu.edu/aad/manuals/fin/fin421-01.html.

2. If in this Exhibit A ASU agrees to reimburse Licensor for any expenses, Licensor will submit all receipts and any required backup documentation to ASU within 60 days after the applicable expenses were incurred. ASU will not be required to reimburse Licensor for any expenses, invoices, or receipts for expenses received after that time.

Arizona Board of Regents for and
on behalf of Arizona State University

By: ______________________________
Name: ____________________________
Title: ____________________________
Date Signed: _______________________

Licensor:
____

By: ____
Name: ______________________________________
Title: ______________________________________
Date Signed: _________________________________

EXHIBIT C

SERVICE LEVEL AGREEMENT

EXHIBIT C

STATEMENT OF WORK NO. ____

Project:
Department:

This Statement of Work is made in accordance with the Vendor License Agreement between _________ (“Licensor”) and the Arizona Board of Regents for and on behalf of Arizona State University (“ASU”), dated _______ (the “Agreement”). To the extent any provision in this Statement of Work conflicts with any provisions of the Agreement, the provisions of the Agreement will control.

EXHIBIT D

INSURANCE REQUIREMENTS

Without limiting any liabilities or any other obligation of Licensor, Licensor will purchase and maintain (and cause its subcontractors to purchase and maintain), until all of their obligations have been discharged or satisfied, including any warranty periods under this Agreement, insurance against claims that may arise from or in connection with the performance of the work hereunder by Licensor, its agents, representatives, employees or subcontractors, as described in this Exhibit A.

These insurance requirements are minimum requirements for this Agreement and in no way limit any indemnity covenants in this Agreement. ASU does not warrant that these minimum limits are sufficient to protect Licensor from liabilities that might arise out of the performance of the work under this Agreement by Licensor, its agents, representatives, employees, or subcontractors. These insurance requirements may change if Vendor is a foreign entity, or with foreign insurance coverage.

A. Minimum Scope and Limits of Insurance: Licensor's insurance coverage will be primary insurance with respect to all other available sources. Licensor will provide coverage with limits of liability not less than those stated below:

1. Commercial General Liability – Occurrence Form. Policy will include bodily injury, property damage, personal injury, and broad form contractual liability coverage.

• General Aggregate	$2,000,000
• Products – Completed Operations Aggregate	$1,000,000
• Personal and Advertising Injury	$1,000,000
• Contractual Liability	$1,000,000
• Each Occurrence	$1,000,000

a. Policy will include the following additional insured language: "The State of Arizona, its departments, agencies, boards, commissions, universities, and its officers, officials, agents, and employees, will be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of Licensor."

b. Policy will contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities, and its officers, officials, agents, and employees, for losses arising from work performed by or on behalf of Licensor.

2. Worker's Compensation and Employers' Liability. Applicable statutory limits, as amended from time to time.

a. Policy will contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities, and its officers, officials, agents, and employees, for losses arising from work performed by or on behalf of Licensor.

b. This requirement will not apply to any contractor or subcontractor exempt under ARS § 23-901, when such contractor or subcontractor signs the appropriate waiver (Sole Proprietor/Independent Contractor) form.

4. Technology/Network Errors and Omissions Insurance.

• Each Claim	$3,000,000
• Annual Aggregate	$5,000,000

a. This insurance will cover Licensor's liability for acts, errors and omissions arising out of Licensor's operations or services, including loss arising from unauthorized access, or use that results in identity theft or fraud.

b. If the liability insurance required by this Agreement is written on a claims-made basis, Licensor warrants that any retroactive date under the policy will precede the effective date of this Agreement, and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning at the time work under this Agreement is completed.

c. Policy will cover professional misconduct for those positions defined in the scope of work of this Agreement.

B. Cancellation; Material Changes: Cancellation notices will be delivered to ASU in accordance with all policy provisions. Notices required in this Section must be sent directly to ASU Director of Risk Management, PO Box 876512, Tempe, AZ, 85287-6512 and will be sent by U.S. certified mail, return receipt requested.

C. Acceptability of Insurers: Insurance is to be placed with duly licensed or approved non-admitted insurers in the State of Arizona with an "A.M. Best" rating of not less than A- VII. ASU in no way warrants that the above required minimum insurer rating is sufficient to protect Licensor from potential insurer insolvency. Self-Insurance may be accepted in lieu of or in combination with insurance coverage requested.

D. Verification of Coverage: Licensor will furnish ASU with valid certificates of insurance as required by this Agreement. All valid certificates evidencing insurance required by this Agreement are to be received and approved by ASU before work commences. Each insurance policy required by this Agreement must be in effect at or prior to commencement of work under this Agreement and remain in effect for the term of this Agreement. Failure to maintain the insurance policies as required by this Agreement, or to provide evidence of renewal, is a material breach of contract.

All certificates required by this Section must be sent to ASU Director of Risk Management, PO Box 876512, Tempe, AZ, 85287-6512. ASU's project or purchase order number and project description will be noted on each certificate of insurance. The State of Arizona and ASU may require complete, certified copies of policies at the time of notice of any loss or claim.

E. Subcontractors. Licensor's certificate(s) may include all subcontractors as insureds under its policies as required by this Agreement, or Licensor will furnish to ASU copies of valid certificates and endorsements for each subcontractor. Coverages for subcontractors will be subject to the minimum requirements identified above.

F. Approval. These insurance requirements are the standard insurance requirements of ASU. Any modification or variation from the insurance requirements in this Agreement will require the approval of ASU's Department of Risk and Emergency Management.

SECTION XIII – MANDATORY CERTIFICATIONS

(Fillable PDF versions of mandatory certifications are located on-line under Supplier Forms: http://cfo.asu.edu/purchasing-forms. ORIGINAL signatures are REQUIRED for either version.)

CONFLICT OF INTEREST CERTIFICATION

____
(Date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

The undersigned certifies that to the best of his/her knowledge: (**check only one**)

( ) There is no officer or employee of Arizona State University who has, or whose relative has, a substantial interest in any contract resulting from this request.

( ) The names of any and all public officers or employees of Arizona State University who have, or whose relative has, a substantial interest in any contract resulting from this request, and the nature of the substantial interest, are included below or as an attachment to this certification.

____

____

______________________ (Firm)	______________________ (Address)
______________________ Email address)	______________________
______________________ (Signature required)	______________________ (Phone)
______________________ (Print name)	______________________ (Fax)
______________________ (Print title)	______________________ (Federal Taxpayer ID Number)

(Rev. 4/22/14)

FEDERAL DEBARRED LIST CERTIFICATION

Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters (Dec 2001)

____
(Date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

In accordance with the Federal Acquisition Regulation, 52.209-5:

(a) (1) The Offeror certifies, to the best of its knowledge and belief, that—

(i) The Offeror and/or any of its Principals—

(A) (Check one) Are (   ) or are not (   ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; (The debarred list (List of Parties Excluded from Federal Procurement and Nonprocurement Programs) is at https://www.sam.gov/index.html/.)

(B) (Check one) Have (   ) or have not (   ), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) (Check one) Are (   ) or are not (   ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) The Offeror (check one) has (   ) or has not (   ), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) “Principals,” for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, and United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror’s responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror non-responsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(Firm)	(Address)
(Email address)	
(Signature required)	(Phone)
(Print name)	(Fax)
(Print title)	(Federal Taxpayer ID Number)

(Federal Debarred List Continued)
(Rev. 4/22/14)

ANTI-LOBBYING CERTIFICATION

Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (Sept 2007)

____
(Date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

In accordance with the Federal Acquisition Regulation, 52.203-11:

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989—

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of this contract;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of $100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, Title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than $10,000, and not more than $100,000, for each such failure.

(Signature page follows)

____
(Firm)

____
(Email address)

____
(Signature required)

____
(Print name)

____
(Print title)

____
(Address)

____

____
(Phone)

____
(Fax)

____
(Federal Taxpayer ID Number)

(Anti-Lobbying Certificate Continued)
(Rev. 4/22/14)

LEGAL WORKER CERTIFICATION

____
(Date)

Purchasing and Business Services
Arizona State University
PO Box 875212
Tempe, AZ 85287-5212

Authorized Presence Requirements. As required by ARS § 41-4401, ASU is prohibited from awarding a contract to any contractor or subcontractor that fails to comply with ARS § 23-214(A) (verification of employee eligibility through the e-verify program). Vendor warrants that it and its subcontractors comply fully with all applicable federal immigration laws and regulations that relate to their employees and their compliance with ARS § 23-214(A). A breach of this warranty will be a material breach of this Contract that is subject to penalties up to and including termination of this Contract ASU retains the legal right to inspect the papers of any Contractor or subcontractor employee who works hereunder to ensure that the contractor or subcontractor is complying with the above warranty.

A breach of the foregoing warranty shall be deemed a material breach of the contract. In addition to the legal rights and remedies available to the University hereunder and under the common law, in the event of such a breach, the University shall have the right to terminate the contract. Upon request, the University shall have the right to inspect the papers of each contractor, subcontractor or any employee of either who performs work hereunder for the purpose of ensuring that the contractor or subcontractor is in compliance with the warranty set forth in this provision.

____________________________ (Firm)	____________________________ (Address)
____________________________ (Email address)	____________________________
____________________________ (Signature required)	____________________________ (Phone)
____________________________ (Print name)	____________________________ (Fax)
____________________________ (Print title)	____________________________ (Federal Taxpayer ID Number)

(Rev.7/25/16)

Voluntary Product Accessibility Template (VPAT)

All electronic and information technology developed, procured, maintained, or used in carrying out University programs and activities must be compliant with Sections 504 and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, as amended, other relevant local, state, and federal laws, and related university policies.

This VPAT was designed to provide information on how a product or service conforms to the section 508 accessibility standards (from the U.S. Access Board) for electronic and information technology (EIT) in a consistent fashion and format. Supplier must make specific statements, in simple understandable language, about how their product or service meets the requirements of the section 508 standards.

SUPPLIER MUST COMPLETE ALL SECTIONS.

DATE:	
PRODUCT NAME:	
PRODUCT VERSION NUMBER:	
SUPPLIER COMPANY NAME:	
SUPPLIER CONTACT NAME:	
SUPPLIER CONTACT EMAIL:	

SUMMARY TABLE		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
Section 1194.21 Software Applications and Operating Systems		
Section 1194.22 Web-based Internet Information and Applications		
Section 1194.23 Telecommunications Products		
Section 1194.24 Video and Multi-media Products		
Section 1194.25 Self-Contained, Closed Products		
Section 1194.26 Desktop and Portable Computers		
Section 1194.31 Functional Performance Criteria		
Section 1194.41 Information, Documentation and Support		

Section 1194.21 Software Applications and Operating Systems - Detail		
Criteria	**Level of Support & 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.		
(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 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.		
(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.		
(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.		
(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.		
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.		
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.		
(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.		
(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.		
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.		
(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.		

Section 1194.22 Web-based Intranet and Internet information and Applications - Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).		
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.		
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.		
(d) Documents shall be organized so they are readable without requiring an associated style sheet.		
(e) Redundant text links shall be provided for each active region of a server-side image map.		
(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.		
(g) Row and column headers shall be identified for data 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.		
(i) Frames shall be titled with text that facilitates frame identification and navigation		
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.		
(k) A text-only page, with equivalent information or functionality, shall be provided to		

make a web site 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.		
(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.		
(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).		
(n) When electronic forms are designed to be completed on-line, 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.		
(o) A method shall be provided that permits users to skip repetitive navigation links.		
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.		

Section 1194.23 Telecommunications Products - Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
(a) Telecommunications products or systems which provide a function allowing voice communication and		

which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.		
(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.		
(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.		
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.		
(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.		
(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.		
(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the		

volume to the default level after every use.		
(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.		
(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.		
(j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.		
(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.		
(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force		

required to activate controls and keys shall be 5 lbs. (22.2N) maximum.		
(k)(3) Products which have mechanically operated controls or keys shall comply with the following: If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.		
(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.		

Section 1194.24 Video and Multi-media Products – Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
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. Widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone 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, 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.		
(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.		
(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.		
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.		

Section 1194.25 Self-Contained, Closed Products – Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
(a) Self-contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.		
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.		

(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with 1194.23 (k) (1) through (4).		
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.		
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at any time.		
(f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.		
(g) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.		
(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.		
(i) Products shall be designed to avoid causing the screen to flicker		

with a frequency greater than 2 Hz and lower than 55 Hz.		
(j) (1) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.		
(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.		
(j)(3) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.		
(j)(4) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more		

than 24 inches behind the reference plane.		

Section 1194.26 Desktop and Portable Computers – Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
(a) All mechanically operated controls and keys shall comply with 1194.23 (k) (1) through (4).		
(b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with 1194.23 (k) (1) through (4).		
(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.		
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards		

Section 1194.31 Functional Performance Criteria – Detail		
Criteria	**Level of Support & 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 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.		
(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 provided		
(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.		
(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.		
(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 be provided.		

Section 1194.41 Information, Documentation and Support – Detail		
Criteria	**Level of Support & Supporting Features**	**Remarks and Explanations**
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge		
(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.		
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.		

USE THE FOLLOWING LANGUAGE FOR FILLING OUT THE LEVEL OF SUPPORT AND SUPPORTING FEATURES COLUMN IN THE TABLES ABOVE.

SUPPORTS - Use this language when you determine the product fully meets the letter and intent of the Criteria.

SUPPORTS WITH EXCEPTIONS - Use this language when you determine the product does not fully meet the letter and intent of the Criteria, but provides some level of access relative to the Criteria.

SUPPORTS THROUGH EQUIVALENT FACILITATION - Use this language when you have identified an alternate way to meet the intent of the Criteria or when the product does not fully meet the intent of the Criteria.

SUPPORTS WHEN COMBINED WITH COMPATIBLE AT - Use this language when you determine the product fully meets the letter and intent of the Criteria when used in combination with compatible assistive technology. For example, many software programs can provide speech output when combined with a compatible screen reader (commonly used assistive technology for people who are blind).

DOES NOT SUPPORT - Use this language when you determine the product does not meet the letter or intent of the Criteria.

NOT APPLICABLE - Use this language when you determine that the Criteria do not apply to the specific product.

NOT APPLICABLE - FUNDAMENTAL ALTERATION EXCEPTION APPLIES - Use this language when you determine a fundamental alteration of the product would be required to meet the criteria. “Fundamental alteration” means a change in the fundamental characteristic or purpose of the product or service, not merely a cosmetic or aesthetic change. Generally, adding access should not change the basic purpose or characteristics of a product in a fundamental way.

The Supplier Sustainability Questionnaire is used to help ASU understand how sustainable a supplier is. Sustainability is an important goal for the university, and as such, we expect our suppliers to help us support this goal. There are two different questionnaires posted, one is for large companies while the other is for small businesses. A company is considered to be large when there are more than 100 fulltime employees or over 4 million dollars in annual revenue generated.

SUPPLIER SUSTAINABILITY QUESTIONNAIRE – LARGE COMPANY

Firm Name: ______________________ Date: ______________________

The Supplier Sustainability Questionnaire must be completed and returned with your Bid. This questionnaire is applicable to firms that provide services as well as those that provide goods.

Arizona State University's vision is to be environmentally sustainable while expanding our education, research, and community support programs. The University seeks suppliers who share our sustainability vision. Accordingly, please answer the following questions.

To each question please provide at least one of the following types of responses:

- An explanation or description
- A URL of your policy or program

An electronic copy of your illustrative policies or programs must be provided if requested. If the question does not apply, answer with N/A and provide an explanation as to why.

Energy

1. What is your firm doing to be energy efficient?
2. What are your firm's annual greenhouse gas emissions in metric tons of carbon dioxide equivalent? (Enter total metric tons of CO2 equivalency [includes the following GHGs: CO2, CH4, N2), SF6, HFCs and PFCs])
3. What plan is in place to reduce greenhouse gas emissions in the future?

Solid Waste

1. What is your firm doing to reduce waste to landfill?
2. What is your firm's annual waste to landfill generated in metric tons? (Enter total metric tons)
3. What plan is in place to reduce waste to landfill generated in the future?

Water Waste

1. What is your firm doing to reduce water waste?
2. What is your firm's annual water waste in gallons? (Enter total gallons)
3. What plan is in place to reduce water waste in the future?

Packaging

1. What is your firm's plan to minimize packaging and/or describe your firm's packaging "Take Back" program?
2. What kind of reusable, recyclable, and/or compostable packaging materials does your firm use?

3. What does your firm do to encourage/require your suppliers to minimize packaging and/or use reusable, recyclable, or compostable packaging materials?

Sustainability Practices

1. What programs does your firm have to encourage your employees to use alternative transportation while commuting to work and travelling locally?
2. What sustainability guidelines or environmental statement does your firm have to guide the firm as a whole?
3. What are your firm's sustainable purchasing guidelines?
4. What kind of position(s) or team(s) does your firm have dedicated to overseeing sustainability initiatives?
5. List the sustainability related professional associations of which your firm is a member.
6. What kind of effort does your firm make to reduce the use of environmentally harmful materials?
7. Has an environmental life-cycle analysis of your firm's products been conducted by a certified testing organization?
8. Does your firm use Green Seal/EcoLogo certified or biodegradable/eco-friendly cleaning products?
9. Has your firm been cited for non-compliance of an environmental or safety issue in the past ten years?
10. Name any third party certifications your firm has in regards to sustainable business practices?
11. Describe any other initiatives your firm has taken to integrate sustainability practices principles into your operations.

Community

1. What charity, community development, educational programs, or environmental programs is your firm involved in within your local community?
2. What educational programs does your firm have to develop employees?

If your firm is just beginning the sustainability journey, or is looking for tools and resources, here are some suggestions:

Energy

Greenhouse Gas Protocol provides tools to calculate emissions that are industry specific:

- http://www.ghgprotocol.org/calculation-tools

Practice Green health provides basic information and tools for emissions as well:

- https://practicegreenhealth.org/topics/energy-water-and-climate/climate/tracking-and-measuring-greenhouse-gas-emissions

Solid Waste

The EPA's pre-built excel file to help measure and track your waste and recycling:

- http://www.epa.gov/smm/wastewise/measure-progress.htm

Greenbiz's comprehensive guide to reducing corporate waste:

- http://www.greenbiz.com/research/report/2004/03/09/business-guide-waste-reduction-and-recycling

Water Waste

BSR's guide on how to establish your water usage:

- http://www.bsr.org/reports/BSR_Water-Trends.pdf

EPA information about conserving water:

- http://water.epa.gov/polwaste/nps/chap3.cfm

Packaging

Links to get you started on sustainable packaging:

- http://www.epa.gov/oswer/international/factsheets/200610-packaging-directives.htm
- http://sustainablepackaging.org/uploads/Documents/Definition%20of%20Sustainable%20Packaging.pdf

Sustainability Practices

Ideas for alternative transportation programs:

- http://www.ctaa.org/webmodules/webarticles/articlefiles/SuccessStoriesEmpTranspPrograms.pdf

The EPA environmentally preferable purchasing guidelines for suppliers:

- http://www.epa.gov/epp/

EPA life cycle assessment information:

- http://www.epa.gov/nrmrl/std/lca/lca.html

Green Seal green products & services:

- http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=16

Ecologo cleaning and janitorial products:

- http://www.ecologo.org/en/certifiedgreenproducts/category.asp?category_id=21

EPA information on sustainable landscape management:

- http://www.epa.gov/epawaste/conserve/tools/greenscapes/index.htm

The Supplier Sustainability Questionnaire is used to help ASU understand how sustainable a supplier is. Sustainability is an important goal for the university, and as such, we expect our suppliers to help us support this goal. There are two different questionnaires posted, one is for large companies while the other is for small businesses. A company is considered to be large when there are more than 100 fulltime employees or over 4 million dollars in annual revenue generated.

SUPPLIER SUSTAINABILITY QUESTIONNAIRE – SMALL COMPANY

Firm Name: ______________________ Date: ______________________

The Supplier Sustainability Questionnaire must be completed and returned with your Bid. This questionnaire is applicable to firms that provide services as well as those that provide goods.

Arizona State University's vision is to be environmentally sustainable while expanding our education, research, and community support programs. The University seeks suppliers who share our sustainability vision. Accordingly, please answer the following questions.

To each question please provide at least one of the following types of responses:

- An explanation or description
- A URL of your policy or program

An electronic copy of your illustrative policies or programs must be provided if requested. If the question does not apply, answer with N/A and provide an explanation as to why.

Energy

1. What is your firm doing to be energy efficient?
2. What plan is in place to reduce greenhouse gas emissions in the future?

Solid Waste

1. What is your firm doing to reduce waste to landfill?
2. What plan is in place to reduce waste to landfill generated in the future?

Water Waste

1. What is your firm doing to reduce water waste?
2. What plan is in place to reduce water waste in the future?

Packaging

1. What is your firm's plan to minimize packaging and/or describe your firm's packaging "Take Back" program?
2. What kind of reusable, recyclable, and/or compostable packaging materials does your firm use?
3. What does your firm do to encourage/require your suppliers to minimize packaging and/or use reusable, recyclable, or compostable packaging materials?

Sustainability Practices

1. What programs does your firm have to encourage your employees to use alternative transportation while commuting to work and travelling locally?

2. What sustainability guidelines or environmental statement does your firm have to guide the firm as a whole?
3. What are your firm's sustainable purchasing guidelines?
4. What kind of position(s) or team(s) does your firm have dedicated to overseeing sustainability initiatives?
5. List the sustainability related professional associations of which your firm is a member.
6. What kind of effort does your firm make to reduce the use of environmentally harmful materials?
7. Does your firm use Green Seal/EcoLogo certified or biodegradable/eco-friendly cleaning products?
8. Has your firm been cited for non-compliance of an environmental or safety issue in the past ten years?
9. Name any third party certifications your firm has in regards to sustainable business practices?
10. Describe any other initiatives your firm has taken to integrate sustainability practices principles into your operations.

Community

1. What charity, community development, educational programs, or environmental programs is your firm involved in within your local community?
2. What educational programs does your firm have to develop employees?

If your firm is just beginning the sustainability journey, or is looking for tools and resources, here are some suggestions:

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Greenhouse Gas Protocol provides tools to calculate emissions that are industry specific:

- http://www.ghgprotocol.org/calculation-tools

Practice Green health provides basic information and tools for emissions as well:

- https://practicegreenhealth.org/topics/energy-water-and-climate/climate/tracking-and-measuring-greenhouse-gas-emissions

Solid Waste

The EPA's pre-built excel file to help measure and track your waste and recycling:

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Greenbiz's comprehensive guide to reducing corporate waste:

- http://www.greenbiz.com/research/report/2004/03/09/business-guide-waste-reduction-and-recycling

Water Waste

EPA information about conserving water:

- http://water.epa.gov/polwaste/nps/chap3.cfm

Packaging

Links to get you started on sustainable packaging:

- http://www.epa.gov/smm/sustainable-materials-management-road-ahead
  http://sustainablepackaging.org/uploads/Documents/Definition%20of%20Sustainable%20Packaging.pdf

Sustainability Practices

Ideas for alternative transportation programs:

- http://www.ctaa.org/webmodules/webarticles/articlefiles/SuccessStoriesEmpTranspPrograms.pdf

The EPA environmentally preferable purchasing guidelines for suppliers:

- http://www.epa.gov/epp/

EPA life cycle assessment information:

- http://www2.epa.gov/saferchoice/design-environment-life-cycle-assessments

Green Seal green products & services:

- http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=16

Ecologo cleaning and janitorial products:

- http://productguide.ulenvironment.com/SearchResults.aspx?CertificationID=27

EPA information on sustainable landscape management:

- http://www.epa.gov/epawaste/conserve/tools/greenscapes/index.htm

Arizona State University

Financial Services

FATCA Compliant Substitute W-9

RETURN TO ASU		**DO NOT SEND TO IRS**

ATTN: Foreign individuals who are non-residents for US tax purposes only complete IRS Form W-8BEN. Foreign entities complete IRS Form W-8BEN-E.

▶ **Taxpayer Identification Number (TIN)**		□ Employer ID Number (EIN) □ Social Security Number (SSN)
▶ **LEGAL NAME:** (must match TIN)		
▶ **LEGAL MAILING ADDRESS:**	(Where tax information and general correspondence is to be sent)	

DBA/Branch/Location:					
ADDRESS LINE 1:					
ADDRESS LINE 2:					
CITY:		**ST:**		**ZIP:**	

▶ **REMIT TO ADDRESS:**	□ **Same as Legal Mailing Address**

DBA/Branch/Location:					
ADDRESS:					
ADDRESS LINE 2:					
CITY:		**ST:**		**ZIP:**	

▶ **ENTITY TYPE (EP: exempt payee [backup withholding] exemption code; FC: FATCA exemption code)**

□ Individual (not a business)	□ Sole proprietor (individually owned business) or sole proprietor organized as LLC or PLLC	□ Corporation (not providing health care, medical or legal services) (EP: 5)	□ Corporation (providing health care, medical or legal services) (EP: 5)	□ Partnership, LLP or partnership organized as LLC or PLLC
□ The U.S. or any of its political subdivisions or instrumentalities (EP: 2 FC: B)	□ A state, a possession of the US or any of their political subdivisions or instrumentalities (EP: 3 FC: C)	□ Tax-exempt organizations under IRC §501 or §403 (EP: 1 FC: A)	□ An international organization or any of its agencies or instrumentalities (EP: 4)	□ State of Arizona employee

Corporations: Is your or an affiliated company's stock regularly traded on one or more established security markets?
□ Yes □ No (FC: D/E)

▶ **CERTIFICATION**

Under penalties of perjury, I certify that:
1. The number shown on this form is my correct TIN (or I am waiting for a number to be issued to me).
2. I am not subject to backup withholding because I am exempt from backup withholding, I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or the IRS has notified me that I am no longer subject to backup withholding.
3. I am a U.S. citizen or other U.S. person (defined below).
4. The FATCA codes entered on this form, if any, indicating that I am exempt from FATCA reporting are correct.

Certification instructions. You must cross out item 2 if you have been notified by the IRS that you are currently subject to backup withholding because you failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN.

Signature of U.S. Individual	Date:

ARIZONA STATE UNIVERSITY

Financial Services
Vendor Authorization Form

RETURN TO ASU		**DO NOT SEND TO IRS**

► **Legal Name:**	**TIN:**

Are you doing business in Arizona for purposes of sales/use tax collection and remittance? □ Yes □ No
If you select Yes, please provide your Arizona License # and sales/use tax rate charged % DUNS#

SECTION 1 - FEDERAL INFORMATION

What is your business' federal classification type? See the definitions in the link or on the Vendor Authorization Form instructions. (S.B.A. Small Business definition FAR 19.001 and size standards FAR 19.102) http://www.sba.gov/size

Large Business? YES □ NO □
Small Business? YES □ NO □

Please check all that apply to your business for the federal supplier type <u>or</u> check Not Applicable here: □

Service-Disabled Veteran-Owned (VD) □	Small Disadvantaged (SD) □	Women-Owned (WO) □
Veteran-Owned (VO) □	Minority Institution (MI) □	HUB Zone (HZ) □

SECTION 2 - STATE OF ARIZONA SMALL BUSINESS INFORMATION

Are you self-certified according to this State of Arizona definition? **"Less than 100 full-time employees <u>OR</u> less than $4 million in volume in the last fiscal year"**	YES □	NO □

Per FAR 52.219-1 and under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUB Zone small, small disadvantaged or women-owned small business concern to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9 or 15 of the Small Business Act or any other provision of federal law that specifically references section 8(d) for a definition of program eligibility, shall be punished by imposition of fine, imprisonment or both; be subject to administrative remedies, including suspension and debarment; and be ineligible for participation in programs conducted under the authority of the Act.

Print Name:	
Signature:	

Phone:	Fax:
Email:	

VENDOR: List the product or service provided.			
If the buyer name is listed, please **return** to the buyer.	Buyer:	Phone:	Email:

SECTION XIV – SECURITY REVIEW PROCESS (Reference Document #1)

Form version: 2016-06-20

ASU Information Security Office

getprotected.asu.edu

Expectations

This checklist is to be filled out by the ASU project team, because the ASU project team is responsible for designing and implementing security controls. Vendor provided documents and diagrams are not sufficient.

Please have your answers completed and your **Security Architecture Diagram** available in your google project folder one week before your scheduled review. Projects with incomplete documentation will be asked to reschedule.

A preliminary review may be held, and is recommended, early in a project's lifecycle while there is still time to change course if design issues are identified. The final review should be held shortly before the project goes live, when the contemplated servers have been set up at least to the point where the required vulnerability scans can be done.

Overview

The ASU security review process is designed to guide each project team to implement solutions efficiently while minimizing security risks. At the beginning of a project, for most of the questions below the answer will probably be "Unknown". As design and development continues, you can start filling in the answers you know. When you are ready for a discussion with an Information Security Architect, please email Security.Review@asu.edu

Where you see the checkbox "☐" symbol below, if that is your answer, delete the checkbox and replace it with an "X".

Projects do not always achieve a "perfect" score; however the goal is to reduce all risks to low or addressed. The purpose of this document is to allow management to get an evaluation of the risk in this project as compared to other projects and ASU standards.

Scope of Review

It is not practical to bring all existing systems up to current standards. Instead, our goal is "No new bad". So for each project we look at what changes are being made as part of that project. This includes:

- New hardware
- New software developed for the project: web sites or otherwise
- New software acquired, installed here, hosted elsewhere...
- New software in the form of a "cloud service" or similar
- New connections between new or existing systems
- New data flows between new or existing systems
- New data stores: added tables or columns, data files, network shares...

For our purposes "new" means new to ASU -- it has not been through an ASU Security Review before. So if ASU starts using an existing "cloud service" that service should be reviewed even if the service is not implementing any changes for ASU's project.

Also if an existing system is changed for the project, the change is "new" because it hasn't previously been reviewed.

Example: Existing system "A" regularly transfers a data file to existing system "B". The project will add software that runs on "B" and makes a new use of the data on "B". System "B" is in scope because it is being changed, but system "A" and the data file transfer are not in scope because they are not changing. System "A" can still be shown on your Security Architecture Diagram to clarify the workflow.

Project Information

What is the name of your project? Please use the same name that appears in project status systems.

If you are using Planview for project management, what is the Planview project ID number (usually 4 to 7 digits?

X This project is not using Planview.

What is the purpose of your project? Briefly describe what you'd like to accomplish.

Who is the Steward for the project (the ASU employee who decided we should do this, the sponsor from a business perspective)?

Name:
Title:
Department:

Who is the Technical Administrator for this system (the ASU employee who will manage ongoing system maintenance, enhancement and patching or manage the vendor who will perform this function)?

Name:
Title:
Department:

(For separation of duties reasons, the Steward and the Technical Administrator should not be the same person. Technical people implement business requirements. Technical people should not unilaterally create systems for which there is no business requirement or sponsor.)

Responsibility for Secure Design

Security practitioners have found that to be effective, security measures must be "baked in from the beginning" rather than "pasted on at the end". This is one of the reasons for using a **System**

Development Life Cycle (mentioned elsewhere in this checklist) that includes security checkpoints as the project progresses.

Attackers usually take advantage of mistakes. These flaws frequently arise at the boundaries between independent components, due to misunderstandings or weaknesses in how the parts are put together. This means you can have a collection of "secure" ***parts***, but yet not have a secure ***whole***. Someone must create a holistic design that ensures all the parts fit together in a way that complies with regulations and ASU standards.

Who is responsible for the secure design of the entire system?

□	**Unknown**	We don't know who is responsible for the security design of the entire system.
□	**High**	Although certain parts may be designed for security, nobody is responsible for the security design and ASU standards compliance of the entire system including users and their devices.
□	**Medium**	A vendor claims to be responsible for the security design and ASU standards compliance of the entire system, but the vendor has not signed ISO language, or the scope of the vendor's contracted responsibility does not cover the entire system including users and their devices.
□	**Low**	A single vendor has accepted responsibility for all of the security design and ASU standards compliance, has signed ISO language, and the scope of the vendor's contracted responsibility covers the entire system including users and their devices.
□	**Addressed**	One or more ASU employees have designed the system with a holistic security perspective from the beginning, selecting components and/or vendors that meet regulatory requirements and ASU standards. The ASU employee(s) responsible for the security design and ASU standards compliance are: ____ ____

Additional information (optional)

Sensitive Data

The expectations for the project's security measures depend on how much harm could occur when things go wrong. For definitions of the following data classifications please see the Data Handling Standard at http://links.asu.edu/datahandlingstandard

What is the most sensitive data in this project? (Check all that apply.)

Regulated Data

☐ PCI regulated (credit card data)

☐ FERPA regulated (student data)

☐ HIPAA regulated (health data)

☐ ITAR (import, export, defense-related technical data or foreign students)

ASU Data Classifications

☐ Highly Sensitive - disclosure endangers human life health or safety

☐ Sensitive - regulated data (including regulations above) or Personally Identifiable Information

☐ Internal - a login is required

☐ Public - anyone can see it without logging in

Additional information (optional) - examples of sensitive data elements etc.

Note: If you checked *any* of the highlighted boxes above, ASU's Data Handling Standard calls for this data to be encrypted for all new systems, and an encryption transition plan for existing systems. In addition, encryption is recommended for all data classifications on all systems. If you can, encrypt everything everywhere.

One reason for encryption in transit is to prevent other computers on the network from reading sensitive data as it goes by.

How will sensitive data be protected in transit, as it travels across the network? (Check all that apply.)

□	**Unknown**	We haven't determined this yet, for some or all connections.
□	**High**	Sensitive data will be traveling across one or more connections without any protection.
□	**High**	All systems and connections storing or processing sensitive data are within the ASU data center, but sensitive data is not encrypted as it moves from system to system.
□	**High**	Firewalls, network segmentation, and/or other techniques limit sensitive traffic to only those systems that are intended to receive it. Other systems are prevented from connecting, or listening to sensitive traffic. However, sensitive data is not encrypted in transit.
□	**Addressed**	All sensitive data is encrypted as it travels over each network connection.
□	**Addressed**	All* web sites are using https encryption. Servers have valid https certificates. (The certificates are correctly configured and installed so that no warnings are seen.)
□	**Addressed**	This project has no sensitive data.
□	**Addressed**	This question is not applicable for this project because all of the following are true: ● No ASU equipment or network connections will be used to transmit sensitive data. ● If a vendor is transmitting or receiving sensitive data, the vendor has accepted responsibility for protecting the data by signing a contract that includes ISO language.

Additional information (optional)

* Note: ASU Information Security recommends https encryption for all web pages, whether there is sensitive data or not. Here are some reasons:

- Some Internet Service Providers have started altering page content so you don't see what you requested, you see what they want you to see. Thus even the simplest public static web page can be abused. The http protocol cannot detect this; https can.
- An increasing variety of entities are interested in eavesdropping on your Internet use, which also becomes much harder under https.
- Google gives preference to https pages in its search results: see http://googleonlinesecurity.blogspot.in/2014/08/https-as-ranking-signal_6.html

Encryption at rest is a defense against the possibility that media might be misplaced, stolen, or not disposed of properly. Sensitive data should be protected wherever it goes -- on servers, desktops, laptops, mobile devices, and backups of these systems.

How will sensitive data be protected at rest, wherever it is stored? (Check all that apply.)

□	**Unknown**	We haven't determined this yet, for some or all devices.
□	**High**	Sensitive data will be stored without any protection, on devices available to the general public without logging in.
□	**High**	Sensitive data will be stored without encryption at rest, even though PCI or other applicable regulations require it.
□	**Medium**	Sensitive data will be stored without encryption, but the devices require a login, and there is no applicable regulation requiring encryption at rest.
□	**Medium**	All systems storing or processing sensitive data are within the ASU data center, but sensitive data is not encrypted on disk. There is no applicable regulation requiring encryption at rest.
□	**Low**	Sensitive data is encrypted on disk, but not on backups. There is no applicable regulation requiring encryption at rest.
□	**Addressed**	All sensitive data is encrypted at every location where it is stored, including user devices and backups.
□	**Addressed**	This project has no sensitive data.
□	**Addressed**	This question is not applicable for this project because all of the following are true: ● No ASU equipment will be used to store sensitive data. ● If a vendor is storing sensitive data, the vendor has accepted responsibility for protecting the data by signing a contract that includes ISO language.

Additional information (optional)

Security Architecture Diagram

For instructions on how to create a security architecture diagram, please see How to Create a Security Architecture Diagram. Note: not all diagrams are security architecture diagrams suitable as the roadmap for your review.

Include administrative interfaces. Although they may not be intended for users, they are still a potential point of attack and, given the privileged access they provide, are even more valuable to attackers.

A Security Architecture Worksheet (example here) is not required, but it can help you gather the information needed for your diagram. You may find a blank worksheet in your security review folder. If not, you can request one by email to security.review@asu.edu

Has a complete security architecture diagram been submitted?

□	**Unknown**	The security architecture diagram has not yet been submitted.
□	**Unknown**	There are one or more diagrams, but they are incomplete, inconsistent, or do not provide the necessary information (all endpoints with fully qualified DNS hostname or IP address, all connections with protocol, encryption type, and listening port). The rating is "Unknown" because there may be systems or connections that are not reviewed because they are not detailed on the diagram.
□	**Unknown**	A diagram has been submitted, but it is a vendor's generic diagram and does not show ASU specific systems, hostnames, IP addresses, connections, or other details. The rating is "Unknown" because there may be systems or connections that are not reviewed because they are not detailed on the diagram.
□	**Addressed**	The security architecture diagram includes every endpoint that will be part of the project, and every connection between endpoints. Every endpoint that listens for connections is identified with its fully qualified DNS hostname and/or IP address. Every connection is labeled with protocol, encryption type if any, and port number on the listening device.
□	**Addressed**	The security architecture diagram includes every ASU specific endpoint and connection, but not vendor internal architecture. However all connections from ASU to the vendor's border are shown, and the vendor has signed a contract including ISO language accepting responsibility for adequately protecting ASU's sensitive data. Every ASU endpoint that listens for connections is identified with its fully qualified DNS hostname and/or IP address. Every ASU connection is labeled with protocol, encryption type if any, and port number on the listening device.

If you checked one of the answers saying there is a diagram, please upload a copy of it to your google Security Review folder and fill in its document name here:

Additional information (optional)

□ Has this project been to the Architecture Review Board? (Suggestion: share this document with ARB to provide advance answers to many possible ARB questions.)

Servers

As you look at your Security Architecture Diagram you will most likely see two types of endpoints: clients and servers. A server is any device that listens on a defined port for incoming connections.

Each server used by your project should be shown on the diagram (unless all connections to the server occur inside a vendor's "cloud", the vendor has signed ISO language, and ASU cannot make any changes to the server's software or configuration). If the server is new for your project, or is being changed for your project, the server should be scanned for vulnerabilities that may be introduced by your changes.

List each server's fully qualified DNS hostnames and/or IP addresses here:

(Note: A DNS name is not a URL. URLs for web servers are requested in a different question.)

If you filled out a Security Architecture Worksheet (example here) you probably already have some of this information on the first tab (endpoints) under the Servers heading.

Production (intended for normal use)

QA (should be virtually identical to production)

Development (for unfinished work, programmer testing etc.)

Additional information (optional)

Have the above servers been scanned or penetration tested for security vulnerabilities? What was the outcome? Note: to request a server scan send email to scanrequest@asu.edu

□	**Unknown**	Some new or changed servers have not yet been scanned or penetration tested.
□	**High**	A scan or penetration test reported one or more high severity issues that have not yet been addressed.

□	**Medium**	A scan or penetration test reported one or more medium severity issues that have not yet been addressed (but no highs).
□	**Low**	A vendor says the server(s) have been scanned or penetration tested and issues have been addressed but we do not have evidence (e.g. a copy of the report).
□	**Addressed**	All new servers have been scanned or penetration tested. No high or medium severity security issues were reported, or all issues have been addressed. Any fixes have been rescanned to confirm the fix. We have evidence of the scan (e.g. a copy of the report).
□	**Addressed**	This project has no new servers and no changes to existing servers (other than servers inside a vendor's "cloud" and the vendor has signed ISO language).

Additional information (optional)

Web Servers

Each device that accepts connections using the http (or https) protocol is a web server. In addition to the server vulnerability scan above, each web site on a web server should be scanned.

A "web site" is anything that responds to the Hypertext Transfer Protocol (HTTP) whether or not a traditional web browser is used. The term includes, for example, Web Services and device control interfaces, in addition to human-oriented "web applications".

To facilitate automated vulnerability discovery (scanning) a web site should have an entry point that provides links, directly or indirectly through intermediate pages, to all of the URLs offered by that site. For example, some web services use a WSDL to allow automated enumeration of the available calls and parameters. Any URLs that are not found by automated testing should be manually tested for potential security vulnerabilities.
The web site may offer more than one entry point, for example to support different user roles. In this case each entry point should be listed. If you filled out a Security Architecture Worksheet (example here) you probably already have some of this information on the third tab (web sites).

If your project includes new web sites or changes to existing web sites show their entry point URLs here:

Production (intended for normal use)

QA (should be virtually identical to production)

Development (for unfinished work, programmer testing etc.)

Additional information (optional)

Based on the above URLs, do the web sites have adequate test environments?

□	**Unknown**	At present we don't know if there will be development or QA instances of the web site(s).
□	**Medium**	Only a production instance exists. There is no place to test code or changes without impacting live systems and data.
□	**Low**	A QA or development instance exists, but it is different from production to the extent that there could be flaws in one environment that do not exist in the other.
□	**Addressed**	All sites have QA instances that are sufficiently identical to production that the results of tests in QA can be relied on to evaluate the production instance.
□	**Addressed**	This project has no web sites.

Additional information (optional)

Have these new web sites or changes to existing web sites been scanned or penetration tested for security vulnerabilities? What was the outcome? Note: For best results, we recommend scanning QA first, then after any issues are resolved and migrated to production, scan production to verify the fixes. To request a web scan send email to scanrequest@asu.edu.

□	**Unknown**	Some web sites have not yet been scanned or penetration tested.
□	**High**	A scan or penetration test reported one or more high severity issues that have not yet been addressed.
□	**Medium**	A scan or penetration test reported one or more medium severity issues that have not yet been addressed (but no highs).

□	**Low**	A vendor says the site has been scanned or penetration tested and issues have been addressed but we do not have evidence (e.g. a copy of the report).
□	**Low**	All sites have been scanned or penetration tested, but the tests were not run against the production site or against a QA site that is essentially identical to production. No high or medium severity security issues were reported, or all issues have been addressed. Any fixes have been rescanned to confirm the fix.
□	**Addressed**	All sites have been scanned or penetration tested against the latest version of code that has gone live or will go live. Tests were run against the production site or against a QA site that is essentially identical to what is or will be in production. Either ASU did the scan, or we have evidence of the scan (e.g. a copy of the report). No high or medium severity security issues were reported, or all issues have been addressed. Any fixes have been rescanned to confirm the fix.
□	**Addressed**	This project has no web sites.

Additional information (optional)

Based on the project's access to sensitive data, what is the proposed criticality rating of your web site(s)?
For a definition of "criticality" see the Web Application Security Standard at http://infosec2.uto.asu.edu/files/web%20application%20security%20standard.pdf.

□High	The web site will have access to modify the authoritative source of sensitive data. (To request that an application be considered for ASU's High Criticality list, submit a request to your Security Review Architect.)
□Medium	The web site has access to sensitive data, but is not rated High.
□Medium-Low	The web site has confidential data, but not sensitive data. (Most web sites with a password fall in this category, unless they have sensitive data, which would be Medium or High.)
□Low	The web site only has public information. Web sites in this category do not use a password.

Additional information (optional)

Database Servers

Servers that have databases containing sensitive data should be protected from various types of attacks. A database server directly connected to the Internet has no defenses except the ID and password that may be required. A database server directly connected to a web server may lose *even that ID/password defense* if the web server is compromised.

What database protections are in place?

□	**Unknown**	The database protections have not yet been determined.
□	**High**	There are one or more databases with access to sensitive data. The database servers have publicly routable IP addresses and there is no firewall limiting connections to the database. People from anywhere in the world can connect directly to the database server.
□	**Medium**	A database containing sensitive data is directly accessible by a web server, but the database only accepts requests from the web server. Other devices cannot make connections to the database.
□	**Low**	Web servers can connect to database servers directly, but alternate protections are in place to defend the database from a web server compromise, such as a Web Application Firewall in front of the web server. (Describe in the notes how the protective technology protects the database from a web server compromise.)
□	**Addressed**	Web servers cannot connect directly to database servers due to network segmentation, firewall rules, etc. Web servers interact with database servers through an application server that only permits a white list of known good transactions (a three tier architecture). Web servers also have defenses against typical attacks (such as SQL injection) via parameterized queries, stored procedures, or other techniques that do not pass arbitrary strings to the SQL command interpreter.
□	**Addressed**	None of the systems in this project have access to a database containing sensitive data.
□	**Addressed**	This question is not applicable for this project because all of the following are true: ● No ASU equipment will be used to store a database with sensitive data. ● If a vendor has a database with sensitive data, the vendor has accepted responsibility for protecting the data by signing a contract that includes ISO language.

Additional information (optional)

User Authentication

How do the project's systems verify user identity and access rights?

□	**Unknown**	User authentication systems have not yet been defined.

□	**High**	When a user logs in, their password is sent across the network without encryption. For example, users log in from a web page that does not use https encryption. Or as another example, users have client software on their computers which logs in to a server, but the connection to the server is not encrypted.
□	**High**	One or more systems maintain an independent user authentication technique instead of standard ASU enterprise "single-sign-on" authentication systems such as WebAuth or CAS.
□	**Medium**	The login page uses https encryption and standard ASU enterprise "single-sign-on" authentication systems such as WebAuth or CAS, but subsequent pages revert back to http.
□	**Low**	Ordinary users are authenticated using standard ASU enterprise "single-sign-on" systems, but privileged users, such as site owners or administrators, are authenticated using a separate mechanism.
□	**Addressed**	All systems that require users to identify themselves use standard ASU enterprise "single-sign-on" authentication systems such as WebAuth or CAS.
□	**Addressed**	Because all data is public, no user authentication is needed. Administrator access is controlled through existing mechanisms outside the scope of this project.

Additional information (optional)

Servers Authentication

When one server connects to another server, both ends of the connection should have a way to verify that the other server is the correct one and not an impostor.

How do the project's servers authenticate each other?

□	**Unknown**	Server authentication techniques have not yet been defined.
□	**High**	One or more servers initiate or accept connections with their peers, but do not verify or otherwise restrict which servers can connect.
□	**High**	When a server logs in to another server, a password or other secret is transmitted across a network connection without encryption.
□	**Medium**	Firewalls, network segmentation, or other controls make it impossible for connections to be opened between anything other than the intended servers. Connections are limited by a "black list" identifying which addresses are not allowed to connect.
□	**Low**	Firewalls, network segmentation, or other controls make it impossible for connections to be opened between anything other than the intended servers. Connections are limited by a "white list" specifically identifying which addresses are allowed to connect, and denying all others by default.

□	**Low**	Servers use credentials to identify each other, but there are weaknesses (explain in the notes). For example: (A) the credentials are not unique to one application (B) the credentials are not safely stored, or (C) it is difficult to change the credentials.
□	**Addressed**	Each server uses a standard mechanism, such as https, to verify the other server's identity when initiating a connection to another server. If using https, servers have valid https certificates, and clients verify certificate validity. (The certificates are correctly configured and installed so that no warnings are seen.) The listening server authenticates the requesting server using credentials that are unique to this application. The credentials are not stored where they can be accessed without authorization. Credentials are periodically updated, and can be quickly updated if a compromise is suspected.
□	**Addressed**	The project does not have more than one server, so there is no need for servers to authenticate each other.
□	**Addressed**	The changes being made as part of this project will not affect a situation where two or more servers are communicating with each other, so the question does not apply.

Additional information (optional)

Vendor Involvement

□ This project is being done entirely by ASU employees, including development and hosting of all components.

If you did not check the box above, list the companies or people contributing to this project who are not ASU employees, and indicate when (if) the vendor agreed to ISO Contract Language**:**

Any vendor that provides hosting services, physical or virtual, has access to the data stored or processed there. Thus even hosting providers should be included in your list of vendors.

Vendor	**Date vendor signed contract with ISO language**

Additional information (optional)

Is there a contract with each vendor, and does the contract include ISO language?
Note: ISO's standard contract language can be found here and is essential for contracts involving sensitive or highly sensitive data.

□	**Unknown**	Vendors have not yet been selected, or the decision to do this entirely within ASU has not been finalized.
□	**Unknown**	Status of vendor contract(s) or inclusion of ISO language is presently unknown.
□	**High**	There are one or more vendors with whom we do not yet have a contract.
□	**Medium**	There is a contract with each vendor, but one or more contracts do not include current ISO language. The vendor is not willing to change the contract to include ISO language.
□	**Low**	There is a contract with each vendor, but one or more contracts do not include current ISO language. The vendor is willing to change the contract to include current ISO language.
□	**Addressed**	There is a contract with each vendor, and each contract includes current ISO language.
□	**Addressed**	This project has no vendor involvement.

Additional information (optional)

Backup, Disaster Recovery, and Business Continuity Strategy

Systems should be able to recover from damaging events such as hardware failures or accidental or malicious data or software corruption.

What is the backup strategy?

□	**Unknown**	The backup strategy has not yet been determined.
□	**High**	There are no backups of some or all systems that are relied upon to store data.
□	**Medium**	Backups are being made, but the ability to fully restore after a total data loss has not been tested.
□	**Low**	All essential systems are regularly backed up. Restore capability is tested at least once a year. If data or software damage or loss were to occur, restoring the

		latest backup or reinstalling the software would be sufficient; the loss of updates since the last backup would be tolerable.
□	**Addressed**	All essential systems are frequently and automatically backed up to a separate physical location. Restore capability is tested at least once a year. Audit logs or other mechanisms are in place that can back out accidental or malicious changes.
□	**Addressed**	Not applicable. The systems involved in this project are not the authoritative store of any data. It could be recreated from elsewhere if lost, so no backups are needed. Original software install media and ASU-specific install instructions will be kept in a safe place so that the system can be rebuilt in the event of hardware failure or system corruption.

Additional information (optional)

For the following question, your project has "Mission Critical" components if any of the following are true:

- Any web site associated with this project has a "Tier 1" rating. (The Web Application Security Standard at https://getprotected.asu.edu/sites/default/files/web%20application%20security%20standard.pdf defines these ratings.)
- There are regulatory requirements that mandate Disaster Recovery and/or Business Continuity planning.
- Your project sponsor wants this considered a "Mission Critical" system for some other reason (by whatever definition is meaningful to the sponsor).

A plan is recommended whether your project includes Mission Critical elements or not. However, expectations are higher for Mission Critical components.

□ This project has no Mission Critical components.

Have you documented and tested your disaster recovery and business continuity plan?

□	**Unknown**	We do not currently know the status of Disaster Recovery and Business Continuity plans.
□	**High**	This is a Mission Critical project but it doesn't currently have Disaster Recovery and Business Continuity plans.

□	**Medium**	Disaster Recovery and Business Continuity plans don't exist at this time, however, the project is not Mission Critical.
□	**Medium**	The Disaster Recovery and/or Business Continuity plans have been drafted, but key elements are missing, for example: redundant systems are not in place, contracts with vendors are not finalized, or the plan has not been tested.
□	**Low**	All mission critical components have geographically-dispersed redundancy with enough capacity to sustain mission critical operations during an extended loss of the primary systems. Disaster Recovery and Business Continuity plans are in place, complete with any contracts for vendor services during an adverse event. However, these are not regularly tested by staging mock disaster scenarios.
□	**Addressed**	All mission critical components have geographically-dispersed redundancy with enough capacity to sustain mission critical operations during an extended loss of the primary systems. Disaster Recovery and Business Continuity plans are in place, complete with any contracts for vendor services during an adverse event. Systems, plans, and recovery-critical personnel are tested annually by staging mock disaster scenarios.
□	**Addressed**	The Disaster Recovery and/or Business Continuity plan has been documented and tested, and there are no Mission Critical components. (Projects with Mission Critical components should choose one of the other answers.)

Additional information (optional)

If this project is "Mission Critical", please upload a copy of your plans to your google Security Review folder and fill in the document name(s) here:

Logging and Alerting

Please see ASU System Audit Requirements Standard http://links.asu.edu/systemauditrequirementsstandard for information about what is required to be logged.

Systems should be designed to recognize and alert on typical attacks. For example, authentication or authorization systems should watch for brute force password attempts or other unauthorized access. Web servers, or protective appliances, should watch for the OWASP Top Ten Vulnerabilities and similar attacks.

Do systems watch for undesirable or unexpected activity and log these events? Do logged events trigger alerts? What happens then?

□	Unknown	The availability of logging is presently not known.
□	High	Some systems do not recognize and log typical attacks, or other unexpected or undesired events.
□	Medium	Potential security events are logged, but there is no human or automated review of those logs to alert on possible problems.
□	Medium	Potential security events are logged, but the logs do not fully comply with the ASU System Audit Requirements Standard http://links.asu.edu/systemauditrequirementsstandard.
□	Low	Logs are maintained in compliance with the ASU System Audit Requirements Standard http://links.asu.edu/systemauditrequirementsstandard, alerts are raised when appropriate, but staff may not be available to respond to the alerts.
□	Addressed	Logs are maintained in compliance with the ASU System Audit Requirements Standard http://links.asu.edu/systemauditrequirementsstandard, events are raised when appropriate, and staff will be available to respond to the alerts throughout the lifecycle of the application.

Additional information (optional)

Software Integrity

Whoever writes your software gains control of your computer, sensitive data, and identity. Thus it is important to be sure the software comes from sources you trust. Verify the origin of software before installing it, and keep it up to date if security fixes have been released.

Current versions should be originally installed, upgrades should be applied when available, and security patches should be applied promptly. During original installation or subsequent updates, controls should be in place to ensure that all software comes from trustworthy authors, and has not been tampered with along the way.

Are current versions of software being deployed? Will upgrades and patches be promptly applied?

□	Unknown	Version and/or patch management information is presently unknown for one or more systems.
□	High	Some systems run outdated versions of their operating system, utilities, or installed applications. Or, systems are initially deployed with current software, but nothing will be in place to keep them current in the future.
□	Medium	There is a capability in place to distribute the most recent software version or updates, but it does not have controls to protect against fake (malicious) updates.

□	**Low**	Initial install files and/or updates carry a signature (e.g. a hash or checksum) to verify file integrity, but the file must be (and will be) manually checked against a trusted list of valid signatures.
□	**Addressed**	Software, including operating system, utilities, applications, and any other executable code, is only obtained from trusted sources. It is distributed using mechanisms that automatically ensure it is not altered, for example, files are cryptographically signed or delivered over a channel that ensures end-to-end file integrity. Current versions of software are initially installed. Patching and upgrades are performed regularly and as needed. Patches are automatically verified so that administrators and users cannot be tricked into installing a malicious update.
□	**Addressed**	This project does not include any new software. Nothing new is installed on user computers or on servers used by this system. There are no new web pages with code that runs on the server (for example, receiving form input) and no new web pages with code that runs on the browser (such as media players, Java, Active X, JavaScript etc.)

Additional information (optional)

ASU's Software Development Life Cycle (SDLC) standard (https://getprotected.asu.edu/sites/default/files/Software_Development_Life_Cycle.pdf) calls for all software development to occur within an SDLC that includes information security controls and separation of duties to help ensure the controls are effective.

Is the software included in this project developed under a written Software Development Life Cycle?

□	**Unknown**	We do not know if software (including vendor software, ASU developed software, or software obtained from other sources such as libraries or frameworks) is or was developed under the control of a written SDLC.
□	**High**	One or more software components used within this project have no SDLC.
□	**Medium**	An SDLC exists, but it is not written, it is not routinely followed, or it does not include security controls.
□	**Low**	We have evidence that a written SDLC with security controls is routinely followed, however the development organization does not have enough people to implement full separation of duties.
□	**Addressed**	All software (including vendor software, ASU developed software, and software libraries imported from other sources) is or was developed under the control of a written SDLC which includes security checkpoints and separation of duties to control the advancement of software past those checkpoints.
□	**Addressed**	This project does not include any new software. Nothing new has to be installed on user computers or on servers used by this system. There are no new web pages with code that runs on the server

		(for example, receiving form input) and no new web pages with code that runs on the browser (such as media players, Java, Active X, JavaScript etc.)

If you checked one of the answers saying there is a written SDLC, please upload a copy of it to your google Security Review folder and fill in its document name here:

Additional information (optional)

Has the new software developed or purchased in this project undergone vulnerability scanning or penetration testing by an entity other than the developer?

□	**Unknown**	The status of vulnerability scanning or penetration testing is not known at this time.
□	**High**	One or more components of new software (other than web sites) have not been vulnerability scanned or penetration tested.
□	**Medium**	Vulnerability scanning or penetration testing has been performed, but by a member or close affiliate of the development team or vendor, such that its independence is not assured.
□	**Low**	New software (other than web sites) has been vulnerability scanned or penetration tested by a party independent from the developer or vendor, however some issues remain unaddressed. The project team has evaluated the open issues and does not consider them a risk to ASU (explain in notes below).
□	**Addressed**	New software (other than web sites) has been vulnerability scanned or penetration tested by a party independent from the developer or vendor, and any issues found have been addressed.
□	**Addressed**	Vulnerability scanning or penetration testing is not required for this project because there is no new software other than web sites, and the web sites have been scanned for security vulnerabilities.
□	**Addressed**	This project does not include any new software. Nothing new has to be installed on user computers or on servers used by this system. There are no new web pages with code that runs on the server (for example, receiving form input) and no new web pages with code that runs on the browser (such as media players, Java, Active X, JavaScript etc.)

Additional information (optional)

Deprecated or Dangerous Technologies

Frequently an exciting new technical capability is rapidly adopted without due consideration for the security consequences. Hackers begin taking advantage of weaknesses, so some technologies carry added risk. Users can defend themselves by disallowing unwanted technologies, but then some web sites refuse to serve those users until they place themselves at risk again.

Many of these techniques include automatically or manually downloading software from unknown or untrusted authors. Also see the **Software Integrity** section for additional questions that pertain to any executable code that is downloaded or installed such as a plug-in or media player.

Does the project require any of the following technologies in order to make full use of the system?

□	**Unknown**	We do not know if the project will use any of the technologies listed in this section.
□	**Medium**	Users are required to enable Java in their web browsers. (Due to a history of many vulnerabilities that go unpatched for months or years, Java has become one of the top malware distribution mechanisms.)
□	**Medium**	Users are required to permit Active-X controls. (Active-X controls give a web site more control of a user's computer, making it easier for attackers to exploit defects in the operating system, browser, or Active-X control itself. Also, dependence on Active-X locks out users of operating systems and browsers that may be more secure.)
□	**Medium**	A password protected web site imports JavaScript code or other client-executed code from another web site that is beyond ASU's control. (This makes it possible for the other site's script to perform identity theft against ASU users.) Users are not allowed to use essential features of the site if they protect themselves by disabling JavaScript.
□	**Medium**	A password protected web site imports JavaScript code or other client-executed code over an http (unencrypted) connection. (This makes it possible for a man-in-the-middle to inject a script to perform identity theft against ASU users.) Users are not allowed to use essential features of the site if they protect themselves by disabling JavaScript.
□	**Low**	Users are required to enable Flash in their web browsers. (Due to a history of many vulnerabilities that go unpatched for months or years, Flash has become a common malware distribution mechanism.)
□	**Low**	Users are required to allow pop-up windows in their browsers. (Several popular web browsers now disable pop-ups by default because they have been abused by advertisers and malware.)
□	**Low**	The web site only allows certain browsers, and refuses service to users of other browsers. (Such web sites frequently lock out users of operating systems and browsers that may be more secure.)
□	**Low**	Users are required to enable or install other plug-ins or media players not listed above. (Please describe in notes below.)

□	**Addressed**	The project uses one or more of the above technologies, but they are entirely optional. Users can still accomplish all the functions of the system even if the user shuts off the deprecated technologies.
□	**Addressed**	The project will not use any of the technologies listed in this section.

Additional information (optional)

Other Risks

If you are aware of other risks you would like to document, describe them here and assign what you think is the appropriate risk rating, considering the classification of the data involved. (Copy and paste a table cell containing the rating you want to apply.)

□		
□		
□		

Additional information (optional)

Risk Score

Total up the boxes checked above. Each question should have at least one box checked.

Risk Rating	**Unknown**	**High**	**Medium**	**Low**	**Addressed**
Count of boxes checked					

Approval

Please be aware that if your Risk Score includes any **Red** items, approval of the ASU Provost or CFO may be needed. **Orange** items may require approval of the sponsoring business unit's Dean or comparable leadership.

Upon award, the successful Proposer(s) is expected to submit a Security Architecture Diagram.

How to Create a Security Architecture Diagram
Revised 2016-05-27

This describes how to make a Security Architecture Diagram for a security review.

Here is the information you will need to gather to create a Security Architecture Diagram:

- Identify each role your new system will support. A role is a group of users who can all do pretty much the same things. For example your system may offer one collection of services to *students* and other services to *faculty*. These are two roles. Roles may also depend on the type of device being used. For example if mobile devices use an "app" instead of using the web site provided for desktop users, you probably have a *mobile users* role and a *desktop users* role, although different descriptions may be more applicable.
  - Don't leave out the administrators. The *administrator* role is an important part of system maintenance, and privileged roles are an attractive hacker target.
- Identify each endpoint in the system. Each role will be an endpoint, and each type of server is also an endpoint. Endpoints include any device that sends or receives data. But if there are multiple devices that perform the same operation, they can be represented as a single endpoint. For example, we don’t need to distinguish each end user computer when they all do the same thing. Similarly, if there is a cluster of identical servers doing the same thing, that’s one endpoint.
- Identify each connection between endpoints. If data is moving, there must be a connection to carry it. But unlike a data flow diagram, what matters here is not *which way* the data flows (it might be both ways) but *which endpoint* initiates the connection. Usually a connection is requested by a client (for example, your web browser) and accepted by a server (the web site). The server is listening for connections, usually on a predefined port.
- If you make backups, that is yet another data flow from one endpoint to another. How does the data get there? Show the connection if it is network based, or describe the physical security if sensitive data is moved by hand (e.g. backup tapes to a vault).
- For each server, determine what IP address and/or Fully Qualified DNS hostname will be used by the server, and on what port(s) it will be listening. What protocol is being used to communicate over each connection? Is the data protected in transit? How do the

endpoints of the connection authenticate each other? (How do they verify that they have connected to the correct endpoint?)

You are now ready to start making your drawing.

- Choose a symbol to represent the endpoints. Typically this is a box, but it could be something else. Draw a box (if that's your choice) for each endpoint. Again, that would be one box to represent all the users who share a single role, and another box for each server (or group of identical servers). If different users connect to different servers, that would be a distinct endpoint. Don't forget the users! The system can't work without them.

- Label endpoints that are permanent (e.g. servers) with their IP address and/or Fully Qualified DNS hostname*. Users, of course, come and go all the time, and their IP address or name doesn't matter.

- Choose a symbol to represent the connections. Typically this is a line, but it could be something else. Draw a line (or whatever) from each endpoint to each other endpoint with which it communicates.

- Choose a symbol to identify which end of the connection is the client and which end is the server. Remember that the server is passively listening on a port for requests, and the client is initiating those requests. You could represent this, for example, by an arrowhead on the server end of the line, indicating that the client sends a connection request to the server.

- Near the server end of the connection, identify the port number on which the server is listening.

- Indicate the communication protocol used by the connection. For example, a web site may use the http or https protocol. Even for public sites, https is preferred.

- Describe, on the diagram or elsewhere, what type of data is flowing along each connection. Is it confidential? Regulated? If the data is sensitive, describe how it is protected in transit. For example, is it encrypted? Using what type of encryption? Describe any controls to limit who or what can connect and fetch the information.

- If there is confidential or sensitive data, describe how it is protected at each endpoint of the connection. Is it encrypted at rest? If so, how? Is the endpoint protected by a firewall? If so, what does the firewall block or allow? Is the data viewed but not stored (e.g. by a client) so that secure storage is a non-issue?

*See https://en.wikipedia.org/wiki/Fully_qualified_domain_name

Summary

So for each server (anything that accepts connections) you should have:

- Fully Qualified DNS name and/or IP address
- Description of what it is or what it does (web server? database?)

For each connection you should have:

- Port number where the server is listening
- Protocol (http, ssh...)
- Sensitivity of data flowing across that connection
- Protection of data flowing across that connection, if it is not public (encryption? what type?)
- If the server authenticates the client, how? (User ID and password?)
- If the client authenticates the server, how? (For example https uses a server certificate signed by a known certificate authority, which the client can verify.)

Additional Info

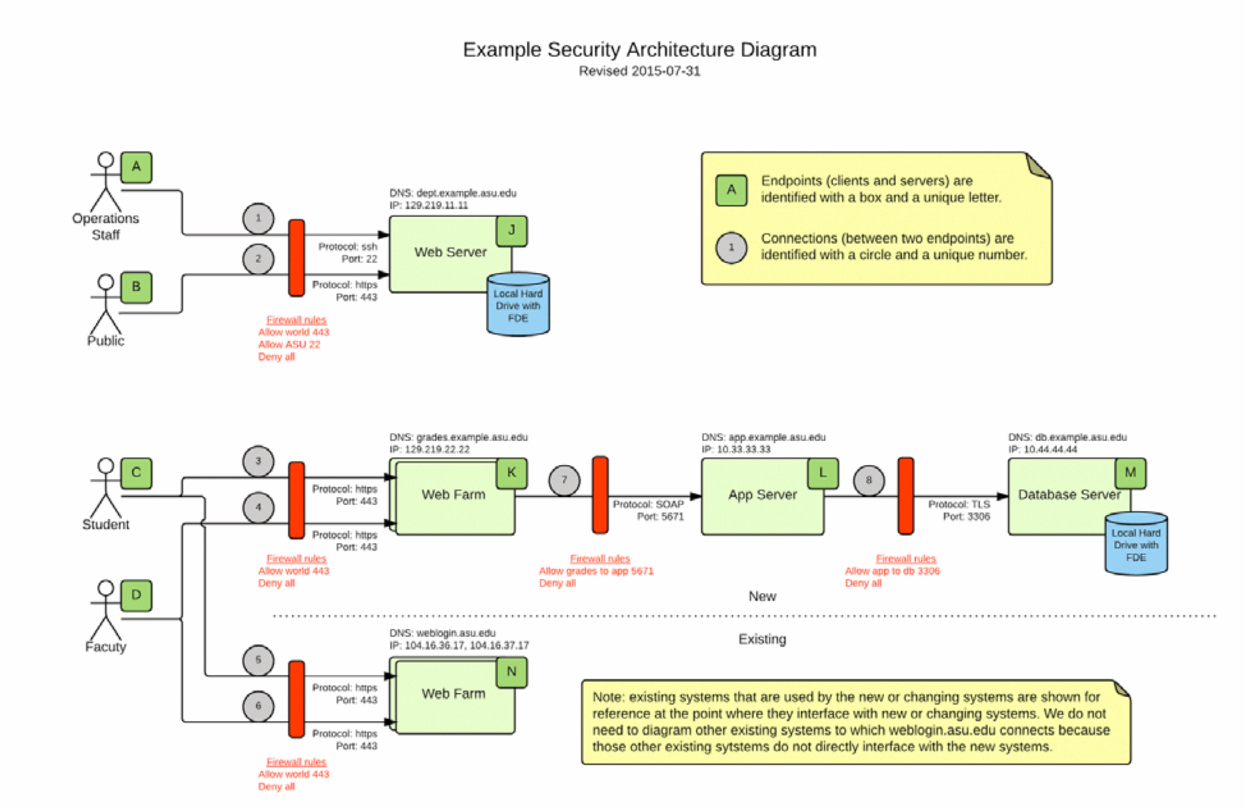
It may also help to distinguish existing endpoints, to which you will merely connect, from new endpoints that will be created as part of your project.

It may also help, if it is not obvious, to briefly describe the role or purpose of certain endpoints. For example: web server, database server, normal user, administrative user -- don’t forget to show them too if they use different connections! Use consistent and unique names throughout; don’t call it the “data server” here and “MySQL server” somewhere else and “repository” a third place.

It is not necessary to show disk drives that are physically within a single server. However network shares are most likely part of a file server, and the file server should also be shown as a distinct endpoint.

When you are done, save your diagram in a format that will open on other types of computers (e.g. pdf) for people who may not have your software.

EXAMPLES

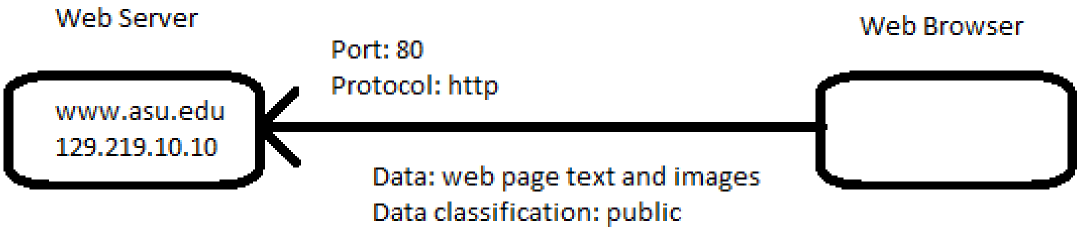


Endpoints (clients and servers) are identified with a box and a unique letter.

Connections (between two endpoints) are identified with a circle and a unique number.

Note: existing systems that are used by the new or changing systems are shown for reference at the point where they interface with new or changing systems. We do not need to diagram other existing systems to which weblogin.asu.edu connects because those other existing sytstems do not directly interface with the new systems.

The diagram need not be colorful. Although this diagram (below) is very simple, it conveys all the requested information. Visual appeal can be beneficial, but the factual information is what really matters.


Web Server
www.asu.edu
129.219.10.10
Port: 80
Protocol: http
Web Browser
Data: web page text and images
Data classification: public