Curriculum and Catalog Management Software and Other Related Services

Please note the following answers are to questions that were asked prior to the deadline for inquiries date of June 27th, 2019 (3 P.M., MST).

1. While the RFP (and the addendum #1) is quite comprehensive with respect to other systems that may require integration with the Curriculum/Catalog system, it would be helpful to know what other systems that may "consume" curriculum data/information may exist. Examples include:
   a. The Student Learning Outcomes or Service Area Outcomes system or systems that may "consume" SLO’s defined in curriculum
   b. The class scheduling system (probably in PeopleSoft but it would be helpful to get confirmation of this.
   c. Any sort of Strategic Planning system(s) used for Program Review, Assessment Planning, etc.
   d. Any Learning Management System(s) that are in place or planned.
   e. Other systems of interest

   While integrations are yet to be determined it is reasonable to consider the integrations from the following systems:
   1. PeopleSoft Campus Solutions (Student Information System)
   2. Learning Management System: Canvas
   3. CEM System
   4. ASU Mobile App

2. Could you expand on or provide examples of the reports ASU would like to see as mentioned in the ad-hoc/custom reporting section?

   We are looking for current samples of what your software can offer.

3. SECTION II – PURPOSE OF THE RFP (1. Intent) -- Supplier need to know the details of existing security tools/ technologies/ products which can be reused/ leveraged to secure
the managed web hosting services, which includes but not limited to, User account management tool (such as Active Directory, Identity & Access Management System such as Sailpoint or Okta, Single Sign On solution, etc.), Antivirus protection, Multi factor authentication solution, Auditing & logging solution such as a SIEM monitoring tool, Data encryption solutions, vulnerability scanners, etc.

Please see ASU Security Policies: https://uto.asu.edu/security-policies/policy. ASU has an ecosystem of tools in place for IAM and protections that has proven to integrate well with other supplier tools. As per ASU security standards, the supplier solutions must be at the same level of ASU or higher.

4. SECTION II – PURPOSE OF THE RFP (2. Background Information) -- Please do let us know who would be responsible for the integration of Single Sign On (SSO) solution with the hub like tool to be proposed/ build by Supplier? Also, who would be responsible for the business as usual support of such a SSO solution.

The University Technology Office manages and maintains support of SSO environment.

5. SECTION XIV - SECURITY REVIEW (Responsibility for Secure Design) -- Supplier would like to know the following w.r.t the security controls to be considered for the proposed managed web hosting services platform:

a. What kind of data will be processed in these websites/ web portals which needs data protection controls in line with applicable regulations or to protect the secrecy of the data (such as GDPR, PCI DSS, PII, etc.) and out of 550+ websites mentioned in the RFP, how many of them processes such data and the type and count of their backend databases in respective environments such as PROD, Non-PROD/ DEV, etc.?

As per our data handling standard it is expected that this system will be processing data classified as Sensitive Data. https://uto.asu.edu/security-policies/policy/data-handling-standard

Sensitive and Highly Sensitive information requires strict control. Access to Sensitive information shall be granted only to individuals or entities that are authorized by the relevant Deputy Data Steward. Employees should receive annual training on their responsibilities regarding appropriate use and steps they can take to protect Sensitive information. Any other disclosure of Sensitive or Highly Sensitive information requires the written approval of the appropriate Officer of the University or Data Steward, in consultation with the Office of General Counsel as necessary.

b. Please provide the details of form factor of such data (data in RDBMS systems, flat files object storage, etc.) along with their respective volume (such as number
of database servers with their make/ model, GB/ TB/ PB of data stored in DBMS and storage systems respectively)

SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users. The SaaS application should run directly through the web browser, and not require any downloads or installations on the client side. As such the database solution is determined by the supplier and to be integrated into ASU infrastructure.

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy

c. Any data encryption solution already in place that can be reused in future (such as database encryption, database masking, tokenization, key management solution, etc.)

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy

d. Who are the users who accesses such data types and their respective counts for the respective websites/ web portals where such data is being accesses and used? Also, please do let us know if ASU has any data access governance control in place for controlling user access and monitoring their data usage on such systems/ web portals, etc.)

We estimate over 1,000 active users who have access at either the department or college level. This is purely an estimate as our processes are manual at present. There are less than 20 users with administrative access to the tool. 1-2 staff members at the university manage access requests for that specific tool. Ideally, this is integrated with the university SSO security.

ASUs Data Handling Policies and additional security policies are located here: https://uto.asu.edu/security-policies/policy

6. SECTION XIV - SECURITY REVIEW (Expectation) -- Please clarify the expectation from vendor on implementation of security standards. Will ASU completely own the task of security controls implementation?

Please see the ASU Secure Web Development Standard (https://docs.google.com/file/d/0B7bqVGx3GJQbZDZ3U1FHO1JKUmM/edit)

and the

ASU Web Application Security Standard (https://docs.google.com/file/d/0B7bqVGx3GJQbdGc1WkR0ajBXX1U/edit)
7. SECTION XIV - SECURITY REVIEW (Web Servers) -- Please do let us know if any DDoS protection and Web Application Firewall solution already subscribed by ASU which can be reused for supplier proposed platform? If Supplier has to propose a DDoS protection and WAF solution for such websites, please do let us know the following:
   a. Volume of user traffic for these websites (such as in Mbps, Gbps, etc.)
   b. How many domains these websites are using/ hosted on?
   c. Count of URLs across all websites/ web portals combined together for web application scanning and penetration testing? What is the expected frequency of such websites scanning and penetration testing?
   d. Coding language in which these websites are developed and if supplier also need to do any Static or Dynamic Application testing for any of these websites and if yes, how many of them? What is the usual release cycle/ code release frequency?
   e. If there any use of containerization platforms for any set of these websites/ web applications and if any container security product is also being used which can be reused by supplier in the end state?

   ASU maintains a Web Application Firewall and DDoS protection that suppliers will assist in creating a secure architecture environment.

8. Please do let us know the details of websites with their respective user role types & the number of users in each such role for all the websites in scope. This information can be provided in, but not limited to, below categories:
   a. Number of websites whose target users are students along with count of students.
   b. Number of websites whose target users are faculty members along with count of faculty members.
   c. Number of websites who target users are students and faculty members both along with their respective counts.
   d. Number of websites who has any other user types, which may also include any other role that access the type of websites asked in point# 1, 2 and 3 above.
   e. How the user access control is done currently on such web applications?

   These questions are out of scope for this RFP.

9. Please confirm if the Public cloud platform already exist? If No what is the preferred public cloud solution.

   A Public Cloud platform exists within AWS.

10. We would like to understand the Application Infra sizing and associated Database sizing.
SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users. The SaaS application should run directly through the web browser, and not require any downloads or installations on the client side. As such the database solution is determined by the supplier.

11. We would like to understand the instance size, storage requirement, network instance, etc.

No application currently exists. Requirements would be discussed upon award.

12. Please confirm if the Curriculum & Catalog Management Software is Internet or Intranet facing and also the regions to host and support this application.

This is Internet facing.

13. How ASU want to procure Public Cloud licenses i.e. under existing EAS/EA or under CSP model from [supplier]?

SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users. The SaaS application should run directly through the web browser, and not require any downloads or installations on the client side.

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy

14. Provide the current application architecture including its HA and DR requirement.

Please refer to Section II – Purpose of the RFP. No existing system is in place. Implementation and development will be net new.

15. How are the backups being planned? What shall be the frequency and the retention policies?

SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users. The SaaS application should run directly through the web browser, and not require any downloads or installations on the client side. As such the backup solution is determined by the supplier.

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy

16. Provide the current SLA & RTO/RPO requirements for application in scope.

Please refer to Section II – Purpose of the RFP. No application currently exists.
17. Please share the vision for the targeted automation and DevOps pipeline in cloud environment.

SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users.

18. Please confirm your point of view on Micro services and shall we consider the micro services based development for this Curriculum & Catalog Management Software and Other Related Services.

ASU has limited cloud native deployments and solutions with services packaged in containers, deployed as micro-services however this is a direction that ASU would like to go into.

19. Please confirm the use of cloud native deployments and solutions.

ASU has limited cloud native deployments and solutions with services packaged in containers, deployed as micro-services.

20. Does ASU requires connectivity with their existing on-premise/Cloud environment for Active Directory/Domain/ IAM/SSO?

For Active Directory/Domain/IAM/SSO, connectivity to ASU’s cloud environment is not required. However, upon award, architecture requirements will be confirmed.

21. Please provide the Preferred Database solution (PAAS/IAAS) along with number of DB instances/DB engine (SQL/Oracle/Aurora/MySQL/etc.), with expected instance configuration (memory/CPU/etc.). Do we require Database replication / Sync.

SaaS is the preferred solution that utilizes the internet to deliver applications, which are managed by the supplier, to ASU users. The SaaS application should run directly through the web browser, and not require any downloads or installations on the client side. As such the database solution is determined by the supplier.

22. Please provide the compliance level requirements.

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy

23. Please confirm if ASU has a preferred Solution/ Tools for - Reporting, Logging & Monitoring, Backup Solution, End Point protection/Antivirus Solution, Image Scanning, etc. If no? [Supplier] recommend the use of Cloud Native solutions.

Please see ASU Security Policies:  https://uto.asu.edu/security-policies/policy. ASU has an ecosystem of tools in place for reporting and protections that has proven to integrate
well with other supplier tools. As per ASU security standards, the supplier solutions must be at the same level of ASU or higher.

24. Please provide the list of reports expected by ASU as part of cloud operations model along with frequency of these reports.

This has not been determined at this time. Upon award, these requirements would be determined. Please refer to Section V (pages 13 and 16).

25. Which tools is be used for ITSM services? Which all processes are currently being used by client?

IT Service Management services are managed via ServiceNow with Request, Incident, Problem, Configuration management processes utilized. Salesforce is used for Case Management.

26. SECTION V -- Can ASU provide list of current applications along with their functionalities used in the curriculum management process?

Please refer to Section II – Purpose of the RFP. No curriculum management system exists.

27. SECTION V -- Can ASU provide the current architecture diagram of the system(s).

Please refer to Section II – Purpose of the RFP. No curriculum management system exists.

28. SECTION V -- How many internal stakeholders are supposed to access the curriculum systems?

We estimate around a 1,000 users at the department and college levels, and a small number of administrative users. This is purely an estimate as our processes are manual at present.

29. SECTION V -- How any concurrent users are supposed to access the system? What is the expected load requirements?

We must expect many concurrent users, especially during curricular deadlines. We would estimate fewer than 50 users at a time.

30. SECTION V -- Will ASU prefer a custom or COTS solution for the required application? If COTS, is there any preference for any specific COTS?
Commercial of the shelf. This RFP process is assisting in identifying COTS options in the marketplace.

31. SECTION V -- What is the scope of customer support services? Is it for internal users?

ASU expects that customer support service requests from the larger (internal) ASU community will be funneled through support staff for the Provost’s Office, Graduate College, and the University Technology Office, and that the solution provider will work 5-10 technical and functional contacts.

32. SECTION V -- Do you have any existing ticketing system for customer support?

ASU utilizes ServiceNow and Salesforce for Case Management.

33. SECTION V -- What is the number of tickets per month for the current systems?

Please refer to Section II – Purpose of the RFP. No curriculum management system exists.

34. SECTION V -- What is the current team size supporting the current systems?

Please refer to Section II – Purpose of the RFP. No curriculum management system exists. A staff of 10-12 currently supports the manual processes.

35. SECTION V -- What is the current size of the data for the entire system in scope

Please refer to Section II – Purpose of the RFP. No curriculum management system exists.

36. SECTION V -- Is there a need to migrate existing curriculum data in the new system?

Please refer to Section II – Purpose of the RFP. No curriculum management system exists, but our existing course catalog details from PeopleSoft would need to be imported into the tool in order to provide baseline data for course changes. Other foundational table data may need to be imported to provide form field options, including ASU’s list of degree types, course prefixes, etc.

37. SECTION V -- Can ASU provide details of its current SSO solution and whether it needs to be leveraged for new solution or not?

Details will be provided upon award to the supplier and the SSO team will work closely to leverage existing SSO tools.
38. SECTION V -- For Mobile accessibility, what is the preference - Native App or Progressive Web App (PWA)?

   There is no preference at this time.

39. SECTION V -- What is expected timeline for implementation of the solution post contract signing?

   This is a high priority for ASU, and we are hoping to swiftly move this RFP process forward.

40. SECTION V -- Please elaborate requirements for connected user community and conference

   This question is asking whether you as the respondent offer a connected user community and conference. Please provide us with details regarding how you do or do not meet this qualification including details where possible.

41. SECTION V -- What level of documentation exists for the current business processes & systems?

   Please visit https://provost.asu.edu/curriculum-development

42. SECTION V -- How many users are required to be trained? Will it be based on train-the-trainer model?

   Yes, we will use a train the trainer model wherein ASU will sustain ongoing training efforts. We estimate around a 1,000 users at the department and college levels, and a small number of administrative users. This is purely an estimate as our processes are manual at present.

If you have any questions regarding this notice, please contact me at allyson.taylor@asu.edu

Thank you,

Allyson Taylor
Buyer
Arizona State University Purchasing and Business Services