Application Risk Survey

Application:	*Order Processing System*	
Portfolio	***Banking***	
Overall Grade Risk Level		***Total Grade:*** 90

ID	*SURVEY QUESTION*	*SURVEY ANSWER*	*Comments*	*Risk Spectrum Score*
	Survey Date	1/1/2018		
1	What is the application's defined criticality of risk?	N/A		0
2	What is the highest sensitiveinformation handled by this application?	Other		10
3	Does the application exchange data externally?	No		0
4	Does the application fall under the FISMA definition?	No		0
5	Related to Financial transactions ($ per txn)?	Yes Small Value		20
6	Number of users for this application?	Medium		10
7	What is the application's primary architecture?	Host / Mainframe		0
8	How many systems does this application relate to/from?	None		0
9	What kind of network this application will be accessible from?	Intranet Segmented		10
10	Does the application allow remote / mobile access using a third-party infrastructure?	No		0
11	How does the application receive data (users or other means)?	Users Only		10
12	Does the application generate multiple output media?	No		0
13	What is the weakest form of authentication supported by this application?	Password		10
14	Does the application provide user credentials?	No		20
15	What is the highest role privilege available to users?	End-User		0
16	Does the application use a role / rule based access control mechanism?	Yes		0
17	Does the application support email?	No		0
18	Does the application support file uploads /downloads?	No		0
19	Does the application have security logging / monitoring controls?	Yes		0
20	Does the application provide audit trails regarding information access?	Yes		0
21	Does the application utilize non-standard security controls / architecture?	No		0
22	Does the application use encryption?	Yes		0

CONTROL SURVEY

Order Processing System

#	ASKD Domain	Security Control Requirement	Applicable Policy/Standard	Response	Comments	Short Name	Applicable NIST 800-53 (Rev 4) Objective
1.1	Authentication & Identification (AN)	Does the application leverage a company's standard authentication control for providing single-sign-on capability?	Best Practice	Yes		User Authentication	
1.2		Is multi-factor authentication as defined by the Information Security Standard leveraged for all users this application?	GISS Information Systems: 8.1.5	No		Multi-Factor Auth	
1.3		Is multi-factor authentication as defined by the Information Security Standard leveraged for administrative users this application?	GISS Information Systems: 8.1.4	TBD		Multi-Factor Admin Auth	
1.4		Are minimum password requirements for user accounts established in compliance with Information Seucrity Standards?	GISS Information Systems: 7.2	Yes		Password Strength	
1.5		Are service account credentials stored and managed using a Privileged Account Management solution?	GISS Information Systems: 6.6.3	No		Credential Management	
1.6		Are passwords secured using hash + salt functions using strong cryptographic algorithms?	GISS Information Systems: 7.1.13 & 13.x	TBD		Secured Passwords	
1.7		Are user accounts in the application locked out after a defined number of failed login attempts	Best Practice	Yes		Account Lockout	
2.1	Authorization / Access Control (AZ)	Is the process for provisioning and deprovisioning users within the application documented?	GISS Information Systems: 6.4	No		User Provisioning	
2.2		Are users authorizations managed within a centralized tool?	Best Practice	TBD		User Authorization	
2.3		Is a centralized list of all personnel with access to "SECRET" data established and maintained	GISS Information Classification: Exhibit 1: Applicability	Yes		Secret Data Access	
2.4		Does the application use role-based access controls and principles of least privilege to assign user authorization?	GISS Information Systems: 6.2	No		RBAC	
2.5		Are periodic reviews of user access rights conducted, at minimum, every six months?	GISS Information Systems: 6.7	TBD		Access Audits	
3.1	Configuration Security (CS)	Has the application been deployed on approved images or configurations and kept up to date using a patch management lifecycle?	GISS Information Systems: 4 & 5	Yes		Patch Management	
3.2		Has a web application firewall been deployed and configured specifically for this application?	Best Practice	No		WAF Implementation	
3.3		Does the application employ a multi-tiered design in which the presentation layer is isolated from other network segments?	Best Practice	TBD		Multi-tier Application Design	
3.4		Is the application hosted on servers that are installed in a company owned data center or authorized secure facility?	0	Yes		Authorized Hosting	
3.5		Is the application hosted on cloud service providers such as AWS, Azure, Google Cloud, etc.?	0	No		Cloud Hosted	
3.6		Is the application protected by standard Anti-DDOS solution?	Best Practice	TBD		DDOS	
4.1	Logging & Audit (LG)	Does the application log sufficient information regarding user successes and failures to reconstruct user activity?	GISS Information Systems: 10.2 & GISS Monitoring: 3.1	Yes		Logging	
4.2		Are application logs written to a location that is protected from unauthorized access by systems personnel or other external parties?	GISS Monitoring: 3.5	No		Log Management	
4.3		Is an automated log retention mechnism established to ensure the availability of log files?	GISS Information Systems: 10.3	TBD		Log Retention	
4.4		Are application events forwarded to centralized and monitored SIEM with event notifications defined?	GISS Information Systems: 10.4	Yes		Log Events	
4.5		Is user activity routinely reviewed to identify potential anomolous user activity or fraudlent use?	Best Practice	No		Log Activity Audits	
5.1	Request Forgery / Non-Repudiation (RF)	Does the application make use of standard components for implementing anti-request forgery tokens?	Best Practice	TBD		Request Forgery	
5.2		Do critical user actions (changing password, initiating a financial transaction, etc.) require re-authentication of the user?	Best Practice	Yes		ReAuthentication	
6.1	Sensitive Data Protection (SD)	Does the application leverage encryption on all communications channels that transmit Secret, Confidential or Personal data?	GISS Information Systems: 13.1.2	No		Encryption in Transit	
6.2		Does the application leverage encryption to protect all Secret, Confidential or Personal data that is written to files?	GISS Information Systems: 13.1.3	TBD		File Encryption at Rest	
6.3		Does the application leverage encryption to protect all Secret, Confidential or Personal data that is written to databases?	GISS Information Systems: 13.1.3	Yes		DB Encryption at Rest	
7.1	Session Management (SM)	Are users sessions automatically terminated after a defined period of inactivity?	Best Practice	No		Session Inactivity	
7.2		When user sessions are terminated, does the application remove all sensitive data from the screen/page or redirect the user to a new screen/page?	Best Practice	TBD		Session Termination	
7.3		Does the application make use of common libraries or components for generating and managing session identifiers?	Best Practice	Yes		SM Libraries	
8.1	Validation & Encoding (VE)	Does the application make use of any Anti-Cross Site Scripting or other common input validation libraries/components?	Best Practice	No		Anti XSS	
8.2		Are acceptable/expected input characteristics defined for all data elements received from the user or other external systems?	Best Practice	TBD		Input Validation	
8.3		Is standard output encoding used on all user entered data returned to the user interface?	Best Practice	Yes		Output Encoding	
9.1	Extensible Design (XD)	Are reusable common libraries used for any typical application functionality (Authentication, Authorizataion, Logging, etc.)?	Best Practice	No		Common Libraries	
9.2		Is the creation of design specifications, requirements definitions and other project artifacts enforced?	Best Practice	TBD		Sec Requirements	
9.3		Have common application functions been designed according to common design guidance or reference architectures?	Best Practice	Yes		Secure Design	
10.1	Security Verification (SV)	Does the application undergo penetration testing on a monthly basis?	GISS Vulnerability Management: 8	No		Penetration Testing	
10.2		Do application development teams submit application source code for a security review during the development lifecycle?	Best Practice	TBD		Code Review	
10.3		Are Design Reviews/Threat Modeling conducted as part of the early concept phases of application development?	Best Practice	Yes		Threat Modeling	
10.4		Are infrastructure level vulnerability scans performed against the application's servers consistent with the Information Security Standard on Vulnerability Management?	GISS Vulnerability Management: 8	No		Infrastructure Scans	
10.5		Are infrastructure level vulnerability scans performed against the application's servers consistent with the Information Security Standard on Vulnerability Management?	GISS Vulnerability xvxcvbcxvxcv 8	TBD		Infrastructure Scans	
11.1	Third-Party Management (TM)	Has a vendor security assessment been performed against the vendor of this application?	GISS Third-Party Management: 4.1b	Yes		Vendor Assessment	
11.2		Does the application's vendor provide regular security vulnerability updates to the organization?	Best Practice	No		Vendor Security Updates	
11.3		Have vendor contracts been structured to include performance objectives and penalties for resolution of security vulnerabilities?	Best Practice	TBD		Vendor Contracts	
11.4		Has the application vendor provided attestation of security assurance activities (vulnerability scans, penetration tests) conducted?	Best Practice	Yes		Vendor Attestation	
11.5		Has the vendor signed a confidentiality agreement with Company?	GISS Third-Party Management: 3.1	No		Vendor NDA	