CITY OF SAN ANTONIO
INFORMATION TECHNOLOGY SERVICES DEPARTMENT

COSA Information Technology Standards
Version 3.0/ 2023

Document Change History

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Version 3.0		Kevin Goodwin	05/26/2023

Information Technology Environment Description

The City of San Antonio Information Technology Services Department (ITSD) will provide computing and infrastructure services for the selected hardware and software solution in one or both of two datacenters that are currently in operation. The two datacenters are interconnected by redundant high-speed Dense Wavelength Division Multiplexing (DWDM) links with servers and storage hosted in both environments. ITSD will manage the Data Center Layer, Networking Layer, Device Layer, Operating System Layer, and Application Infrastructure Layer for the information technology components of the proposed System in accordance with a SLA to be jointly developed by ITSD, the system provider, and the business owner of the System. Management of the Application Layer (business logic) will be determined by SLA.

To the extent that information technology equipment necessary to support the System must be deployed outside of the City's managed datacenter environment, the respondent must include in their response the scope necessary to provide appropriate environmental and compliance controls for the proposed System.

The City's Cybersecurity Framework follows the NIST 800-53 controls framework.
The City's Digital Accessibility Framework follows Section 508 of the Rehabilitation Act of 1973 and WCAG 2.1 AA guidelines for web content.

Information Management

*S=Standard Product(s), P=Preferred Product(s), G=Guidance Info Only.
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Information Management: Section 1	Policy or Product	S/P/G*	Remarks
Directory Services	Microsoft Active Directory	S	Microsoft (AD-Hosted)
	Azure AD	S	Azure Active Directory (Cloud) for App Registrations and Cloud SSO
Oracle Directory Services	Oracle Unified Directory v12.2.x	P	Oracle LDAP for Solaris/Linux environment
Enterprise Backup	Rubrik/Cohesity	S	The city does not utilize tape media for backups. The city uses a disk based backup solution for all backup operations.
Relational Database Management Systems	Oracle 19C	S	Enterprise and large-scale systems with high capacity, complex design and/or high volume transactional requirements
	MS SQL Server 2019	S	
	Oracle 19c MS SQL Server 2019 MongoDB	G	Mid-scale systems with moderate capacity and/or transactional volume requirements.
Database Access	SQL*Plus (Oracle)	S	
	SSMS (Microsoft SQL Server)	S	
	OCI – Compliant	G	
	ODBC Client	G	
File Formats	IT guidance	G	Follow IT guidance for recommended file extensions
Data Administration Implementation	IT guidance	G	IT is currently evaluating the use of tools in this area
Data Warehousing and Mining	SAP BI 7.01 / NW 7.01 (EHP1) non-Unicode / SP16	S	For SAP-based data
Messaging	Microsoft Exchange 2016 and Exchange 365	S	
Presentation and Interface Standards • Application Standard Interfaces	.Net 4.6.2 or higher API	P P G	Based on Windows 2016 default .NET installation. Follow IT guidance
Mobile Devices		G	

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Information Distribution: Section 2	Policy or Product	S/P/G *	Remarks
E-Mail with Attachments			
• SMTP	MS Exchange with outbound SMTP	S, G	See IT for guidance (Note; we do utilize Cisco CES for Mail Security and Mail Relay)
• Active Sync	Supported for use with smartphones and mobile devices	G	See IT for guidance
File Transfer Service	SFTP Client (Core FTP LE 2.1 or higher)		
• HTTPS		S	
• SFTP		S	
File Storage / Share	MS Distributed File System	S	Domain based, currently Windows. 2012

Applications: Section 3	Policy or Product	S/P/G *	Remarks
Enterprise Resource Planning	SAP ECC6 / EHP7 / NW 7.01 (EHP1) non-Unicode / SP20	S	Core modules include: HR, FI, MM, SD, PS, PM and GM The application is accessible from any site or client VPN within the corporate network Current access methods include: client server run-time objects, Workspace and SAP Enterprise Portal.
Procurement	SAP SRM 7.0 / NW 7.01 (EHP1) Unicode / SP18	S	Current access methods include: client server run-time objects, Workspace and SAP Enterprise Portal.
Document Management	FileNet P8 v5.2.x	S	The city has plans to upgrade to v5.5 (Digital Business Automation) in 2020
Cooperative Work Applications			
• Collaborative Processing (Internal use only)	MS Exchange 2010 MS SharePoint 2010	S	See IT for guidance
• Workflow	SAP	G	
	IBM FileNet	G	
• External File Sharing	Global scape EFT Server v7.2.x	S	
Content Management	FileNet P8 v5.2.x	G	See IT for guidance
Web Application Server	IIS 10	S	Default for 2016

Web Content Management	OpenCities DotNetNuke Enterprise Edition 7.0.x	S G	
Web Portal	OpenCities DotNetNuke Enterprise Edition 7.0.x	S G	
Office Automation	MS Office 2010 MS Edge Firefox 60.x (or higher) Safari 12.x (or higher) Chrome 70.x (or higher)	S S, G P S, G S,G	Excludes MS Access See IT for guidance on "extensions." See IT for guidance
	MS Outlook 2010 Adobe Reader 2019.x MS Project 2010 Std. MS Visio 2010 Std.	S S G G	Continues Release Track
GIS Mapping	ESRI ArcGIS Desktop v10.3.1 ESRI ArcGIS Server v10.3.1 ESRI ArcSDE v10.3.1	S S S	Using Windows OS Using IIS with SSL if external Using MS SQL Server
GIS Web Development	Microsoft .NET MVC Microsoft Web API Javascript API Rest API	S S S S	
Web Development Tools	MS Visual Studio 2017	S	Follow IT guidance in extending. legacy systems to the Web and Service-Oriented Architecture
Digital Signature	Pending	G	
Application Development Tools	MS Visual Studio 2016 MS Visual Studio 2017 Netweaver 7.x PL SQL	S S S	Follow IT guidance for configuration
Application Integration	Web Services Netweaver XI 7.11 SP18	S G	Follow IT guidance
Report Writers	Business Objects 4.1 Crystal Reports 2008 Xcelsius Dashboards	S G G	Follow IT guidance for data integrity. and access
Data Visualization	MS PowerBI	S	
Open Data	OpenGOV	S	
Enterprise Vault	Mail Archive v11.x and O365 archiving	S	

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Computing Resources: Section 4	Policy or Product	S/P/G *	Remarks
Workstation • **Tier 1** • **Tier 2**	 2.5GHz Intel Core i7 Two 2.5GHz Intel Core i7	 S P G	In general, current IT standards provide a minimum baseline. IT will provision best value desktops that efficiently support the Refresh Policy. For specialized requirements seek IT guidance
Bus Standards	PCI	G	
Memory (RAM) Standards (EDO, SDRAM, DRAM) • **Tier 1** • **Tier 2**	 16GB 32GB	 S P G	In general, current IT standards provide a minimum baseline. IT will provision best value desktops that efficiently support the Refresh Policy. For specialized requirements seek IT guidance
Server Hardware Configuration	Oracle SPARC M8 Oracle SPARC M7 Oracle SPARC S7 UltraSPARC T2 Intel Xeon	P S, P	Solaris Database Server: T54 Solaris Application Server: T72 • Virtual Hosts: Cisco UCS w/B-Series Blade Servers • Dell PowerEdge for Physical Security Video servers. • Cisco Hyperflex for Hyperconverged Infrastructure.
Virtual Server Environment	VMWare vSphere 6.5 - 7.0	S, P	The City uses a virtualization first approach when provisioning servers.
Mainframe Environment	IBM z890 z/OS 1.10 Software AG Natural 4.2.4 Software AG Adabas 8.1.4	G	The IBM z-series mainframe platform is being twilighted by the City
Disk Storage	FC SAN (HDS, Cisco, Nimble, Nexsan) iSCSI (HDS, Nimble) NTFS ZFS CIFS\SMB	S S S S S	IT guidance for application specific requirements

	(HDS\BlueArc\Nexsan)		

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Computing Resources: Section 4	Policy or Product	S/P/G *	Remarks
Workstation Operating Systems	Windows 10 Mac OSX 10.14	S G	
Desktop / Application Virtualization	VMware Horizon View 8.4	S	IT guidance for application specific requirements
Server Operating Systems	Windows Server 2022	S, P	
• General File & Print Servers	Windows Server 2022	S, P	
• Application Servers	Windows Server 2022 Solaris 11.4	S, P G	Follow IT guidance
• Database Servers		S, P	
	Windows Server 2022 Solaris 11.4	G	
• Linux		S P	
	RedHat 8 Ubuntu 21.10		
Telephony **• IVR**	Cisco Unified Communications Manager 14.0.1.11005-1	P	
• VoIP **• ACD**	Cisco Unified Contact Center Express 12.5.1.11001-348	S S	