**Technical Reference Model  
Austin Water Utility**

05/27/2016

| **Area** | **Category** | **AWU** |
| --- | --- | --- |
| **Application Technology** | | |
| Application and Web Server Software | Application Server Software | ArcGIS for Server |
| WebSphere |
| Web Server Software | Apache |
| Internet Information Services (IIS) |
| Application Testing Software | Debugging Test Tools | Fiddler |
| FLEX Builder |
| Function Testing Tools |  |
| Load and Performance Testing Tools |  |
| System Testing Tools | Visual Studio |
| Unit Testing Tools | Visual Studio |
| Development Tools | Analysis, Design and Modeling | Unified Modeling Language (UML) |
| Application Development Tools | Visual Studio |
| ColdFusion |
| Notepad++ |
| MobileFirst |
| Requirements Management | Rational Software Architect (RSA) |
| Software Change and Configuration Management Tools | GIThub |
| Subversion |
| Web Authoring Tools | Dreamweaver CS6 |
| Integration Software | Device Integration |  |
| Enterprise Service Bus (ESB) | WebSphere Process Server |
| Messaging Oriented Middleware (MOM) |  |
| Service Registry |  |
| SOA Governance |  |
| Software Engines | Business Process Management Engines |  |
| Business Rules Engines |  |
| Geographic Information System (GIS) Engines | ESRI |
| ArcGIS for Desktop |
| ArcGIS for Server |
| ArcGIS Online |
| ArcSDE |
| Search Engines |  |
| **Collaboration and Electronic Workplace** | | |
| Collaboration Software | Computer Based Training (CBT) | Adobe Connect |
| Content Management | SharePoint |
| Electronic Messaging | Microsoft Exchange |
| Email and Calendaring | Microsoft Outlook |
| Process and Schedule Synchronization |  |
| Real Time and Team Collaboration | Sharepoint |
| GoToMyPC |
| Cisco VPN |
| NetMotion |
| Citrix |
| Adobe Connect |
| Spark IM |
| GoToMeeting |
| Box.com |
| Shared Whiteboard | SmartBoard |
| Unified Messaging | Lync/Skype |
| Productivity Software | Accounting and Finance | Advantage |
| Case Management | AMANDA |
| BMC Magic Service Desk Express |
| LIMS |
| Desktop Publishing | Microsoft Publisher |
| Adobe CS |
| Enterprise Faxing |  |
| File Manager and Viewer | Adobe Acrobat |
| Graphics Design Software | Adobe Creative Suite |
| Miscellaneous Productivity Tools and Utilities | Snagit |
| Multimedia Software | Adobe Creative Suite |
| Standard Office Suite | MS Office 2013 |
| Surveys | Survey Monkey |
| Web Browsers | Internet Explorer 11 |
| Firefox current minus 1 |
| Chrome current minus 1 |
| Safari current minus 1 |
| **Enterprise Architecture** | | |
| Employment | Application | Rational Software Architect (RSA) |
| Unified Modeling Language (UML) |
| IBM UPIA |
| Framework |  |
| **Information Management Technologies** | | |
| Business Intelligence and Data Warehouse Platforms | Business Intelligence Platforms |  |
| Dashboard/Scorecard Tools |  |
| Data Analytics (Statistical Analytics, Prediction, and Modeling) |  |
| Data Mining Tools | TOAD |
| MS SQL Server Management Studio |
| Data Warehouses | SQL Server |
| Geospatial Tools | ArcGIS Desktop |
| Location Analytics (Maps for Cognos) |
| Unstructured Data/Natural Language Processing |  |
| Web Reporting Tools | Cognos |
| Crystal Reports |
| Data Integration | Data at Rest | Compellent |
| Equallogic |
| Data in Motion (Common Message Terminology and Semantics) |  |
| Data Synchronization | GeoKNX Sync, and Toolbox |
| GeoAdministrator (Infor Hansen/IPS) |
| Database Replication and Clustering | SQL Server AlwaysOn Cluster |
| Extract, Transform, Load (ETL) | MS SSIS |
| Data Management | Columnar DBMS |  |
| Database Connectivity | ODBC/OLE DB |
| Oracle TNS |
| Oracle SQL \*Net |
| Database Related Management Tools | Toad |
| MS SQL Server Management Studio |
| Object Oriented DBMS |  |
| Relational DBMS | Oracle |
| SQL Server |
| **Network and Telecommunications** | | |
| End User Computer Devices | Hardened Laptops | Panasonic |
| Mobile Hardware | iPad |
| iPhone |
| Samsung Android |
| Microsoft Surface |
| Microsoft Surface Pro |
| Personal Computers (PCs) | Dell Workstations/Laptops |
| Panasonic |
| Transport | Cabling |  |
| Local/Campus Area Network (LAN/CAN) | Brocade |
| Wide Area Network (WAN) |  |
| Wireless and Mobile Networks | Aircards | Verizon |
| AT&T |
| Cellular Networks | AT&T |
| Verizon |
| T-Mobile |
| Pagers |  |
| Public WiFi | Meraki WAP |
| Radio |  |
| Satellite |  |
| Secure WiFi |  |
| **Platforms and Storage** | | |
| Cloud Services/Virtualization | Cloud Technologies | ArcGIS Online |
| Box.com |
| Virtualization Software | VMWare |
| Operating Systems | Desktop/Laptop | Win 7 |
| Win 8.1 |
| Win 10 |
| Mainframe |  |
| Mobile Device | Android |
| iOS |
| Win 10 |
| Server | Windows Server |
| Storage | Long Term Back-up | Commvault |
| Operational Recovery | Commvault |
| Production |  |
| System Management Tools | Logging | Orion Solarwinds |
| Network Performance Optimization | Orion Solarwinds |
| Patch Management | Shavlik |
| Microsoft SCCM |
| **System Management** | | |
| Network Infrastructure | Load Balancing and Failover |  |
| Network Name and Address | Windows DHCP |
| Windows DNS |
| IP |
| Switching and Routing | Brocade |
| System Management Tools | Alert Management | Orion Solarwinds |
| Microsoft SCCM |
| Dameware |
| Application Management | Microsoft SCCM |
| Asset Management and Work Order | Infor Hansen |
| Infor EAM |
| MicroMain |
| Data Center Automation Software |  |
| Disaster Recovery | Sungard Availability Services in Cloud |
| Monitoring | Orion Solarwinds |
| Remote Desktop Management | Dameware |
| Microsoft SCCM |
| System Change and Configuration Management | Microsoft SCCM |