

Attachment D

Alaska Department of Health and Social Services Information Technology Standards

1 Introduction

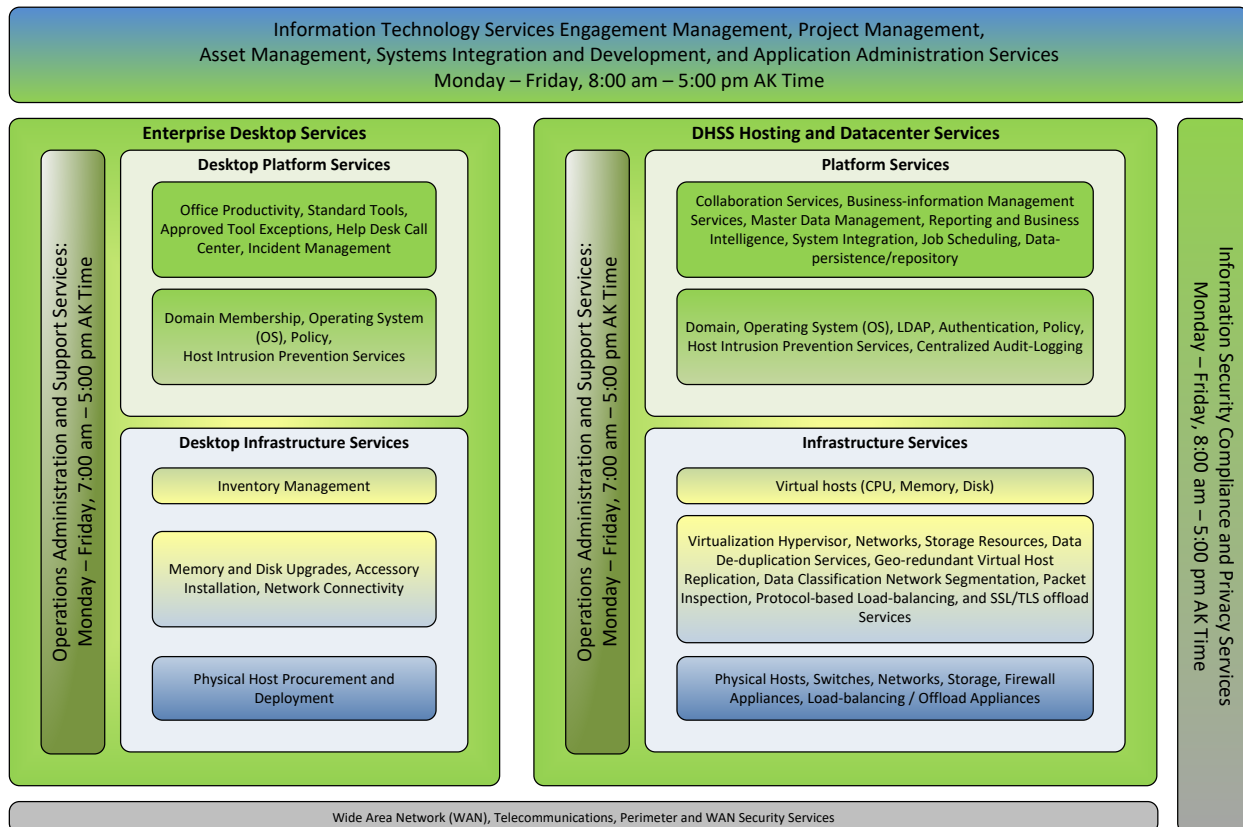
This document presents software, hardware and other Information Technology product standards for Alaska Department of Health and Social Services (DHSS). This document is a reference companion to other documents, such as the DHSS IT RFP IT Requirements template, that clarifies the current IT standards. This IT Standards document is structured according to the service-line/area for the applicable standard.

1.1 State of Alaska Statewide IT Standards

In addition to the DHSS IT Standards identified in this document, the State of Alaska Department of Administration (DOA) Division of Enterprise Technology Services (ETS) maintains IT Standards that DHSS must comply with. The ETS standards are not represented in this document, but are publicly available and can be downloaded from: http://doa.alaska.gov/ets/plan/SOA_ITStandards.pdf. Additional information on ETS standards can be found at: <http://doa.alaska.gov/ets/plan/standards.html>.

1.2 DHSS Service Lines

The DHSS following IT service lines apply:



1.3 Change Log

This document is updated as needed. The following change log reflects the person, revision date and summary of the change.

Author	Date	Summary of change
S Taylor	2/10/2017	Re-organized document, added change log

2 Standards

This section contains the standards for each service-line. Standards are established for:

- Software
- Hardware
- Other IT products (e.g., other referenced standards)

Standards must be followed for all IT software, hardware and other products. Deviation from standards requires a completed Security Policy Waiver for each individual using the deviant product, as established by DHSS information security policies and standard operating procedure [SOP-Security Policy Wavier](#).

2.1 Engagement and Service Delivery Management Service Standards

Engagement and Service Delivery Management Services focus on how DHSS IT interacts with our DHSS customers, vendors, grantees and other partners. The following standards apply.

2.1.1 Hardware

No unique hardware standards for Engagement and Service Delivery Management Services.

2.1.2 Software

Standard	Function	Uses
Microsoft SharePoint 2010	Enterprise Content and Document Management, Intranet and Social Network, Collaboration, Custom Web Applications and Workflow	IT Matrix Inventory of initiatives (projects, systems, services), Reference document libraries
Microsoft Team Foundation Server 2015	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Service delivery management tracking and reporting
PROPOSED¹ : Microsoft Visual Studio Team Services	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Service delivery management tracking and reporting
LANDesk Service Desk	Help Desk Ticketing System	Service delivery management tracking and reporting

¹ "Proposed" standards are not fully approved, but are expected to be supported at this time.

2.1.3 Other Products

No unique other product standards for Engagement and Service Delivery Management Services.

2.2 Project Portfolio Management Service Standards

Project Portfolio Management Services focus on how DHSS IT supports project management enterprise process development and execution. The following standards apply.

2.2.1 Hardware

No unique hardware standards for Project Portfolio Management Services.

2.2.2 Software

Standard	Function	Uses
Microsoft SharePoint 2010	Enterprise Content and Document Management, Intranet and Social Network, Collaboration, Custom Web Applications and Workflow	IT Matrix Inventory of initiatives (projects, systems, services), Project management and chartering sites, Reference document libraries, activity lists
Microsoft Team Foundation Server 2015	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Work management tracking and capacity allocation reporting
PROPOSED: Microsoft Visual Studio Team Services	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Work management tracking and capacity allocation reporting

2.2.3 Other Products

No unique other product standards for Project Portfolio Management Services.

2.3 Asset Management Service Standards

Asset Management Services focus on how DHSS IT supports managing software licensing and other software assets. The following standards apply.

2.3.1 Hardware

No unique hardware standards for Asset Management Services.

2.3.2 Software

Standard	Function	Uses
LANDesk Inventory Scanner	Software inventory scanning	Licensing support, enterprise standards enforcement
Microsoft Team Foundation Server 2015	Artifact version control repository	Version control, artifact mgmt.

Standard	Function	Uses
PROPOSED: Microsoft Visual Studio Team Services	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Version control, artifact mgmt.

2.3.3 Other Products

No unique other product standards for Asset Management Services.

2.4 Systems Integration and DDI Service Standards

Systems Integration and DDI Services focus on how DHSS IT supports system architecture development, integration between DHSS systems and information system design, development and implementation. The following standards apply.

2.4.1 Hardware

No unique hardware standards for Systems Integration and DDI Services.

2.4.2 Software

Standard	Function	Uses
Mainstream supported Microsoft Visual Studio	Development IDE	Information systems and software development and maintenance
PROPOSED: Microsoft Visual Studio Code	Development IDE	Information systems and software development and maintenance
Supported versions of C# language	Development language	Information systems and software development and maintenance
Microsoft Team Foundation Server 2015	Work management, SDLC support	Work management, requirements definition, design, implementation and test management and execution artifacts
PROPOSED: Microsoft Visual Studio Team Services	Version control, Agile project management, Continuous integration, Release management, Package mgmt., DevSecOps, Testing	Work management, resource scheduling, artifact mgmt., continuous integration and deployment
Mainstream support versions of Microsoft Visio	Diagramming and modeling	Diagramming and modeling various architectural views
Microsoft PowerShell	Automation and DevSecOps	Automate various processes via PowerShell

2.4.3 Other Products

Standard	Function	Uses
PROPOSED: Microsoft Azure cloud App Service	Auto-scaling custom information system application containers in the cloud	Hosting information systems and services in the cloud
PROPOSED: Microsoft Azure Hybrid Connections	Websocket based relay from Azure cloud to other cloud or on premise datacenter end-points	Connecting from cloud environment resources, such as Azure App Service applications, back to on premise resources (data sources, services)

2.5 Systems Operations and Administration Service Standards

Systems Operations and Administration Services focus on how DHSS IT supports technical system operations and system administration. The following standards apply.

2.5.1 Hardware

No unique hardware standards for System Operations and Administration Services.

2.5.2 Software

Standard	Function	Uses
Microsoft Windows Remote Desktop Client	Remote desktop access	Remote server access
Microsoft Internet Information Services Manager	System administration	Manage IIS sites and applications
Microsoft SQL Server Management Studio	System administration	Manage SQL Server databases and servers
Microsoft BizTalk Server Administration Console	System administration	Manage BizTalk servers and server groups
Visionware MultiVue Administration Console	System administration	Manage MultiVue Configuration
Microsoft SharePoint Central Administration	System administration	Manage SharePoint site collections and farm configurations
Microsoft PowerShell	System administration	Manage various services via PowerShell

2.5.3 Other Products

Standard	Function	Uses
PROPOSED: Microsoft Azure Portal	Management for all Azure resources and services allocated with a tenant subscription	Administering Azure hosted resources and services

2.6 Information Security Compliance and Privacy Service Standards

Information Security Compliance and Privacy Services focus on how DHSS IT supports legal compliance with information security, privacy, and ongoing development/maintenance of security policy and practice. The following standards apply.

2.6.1 Hardware

No unique hardware standards for Information Security Compliance and Privacy Services.

2.6.2 Software

Standard	Function	Uses
RSA Archer	Information security risk and compliance	Risk and compliance management
Splunk	Enterprise log indexing and reporting	Audit-logging, reporting
Veracode	Software vulnerability scanning	Scan source code, identify software vulnerabilities for remediation, per policy
Veritas	Enterprise confidential data audit-logging	File system based access audit logging

2.6.3 Other Products

Standard	Function	Uses
NIST 800-53 v4	Standardized security controls	Reference for security plan control set
NIST 800-66	Standard subset of NIST 800-53 controls for HIPAA	Selection criteria for security plan control set for HIPAA systems

2.7 Enterprise Desktop Service Standards

Enterprise Desktop and Mobility Services focus on how DHSS IT supports defining, deploying and supporting the DHSS enterprise desktop and mobility endpoints. The following standards apply.

2.7.1 Hardware

Standard	Function	Uses
OptiPlex with 500GB+ SSD HD, 16GB+ memory, core i7 processors	PC workstation	Desktop, non-mobile
Latitude with 256GB+ SSD HD, 16GB+ memory, core i7 processors	PC workstation	Desktop, mobile
Tablets Dell 5280 256+ SSD HD, 16GB+ memory, core i7 processors	Mobile endpoint	Productivity capable, extended use mobile device

2.7.2 Software

Standard	Function	Uses
Microsoft Systems Center Configuration Manager (SCCM)	Systems management	Desktop deployment
LANDesk	Systems management	Desktop software install, upgrade, patching, security scanning
LANDesk Service Desk	Help Desk Ticketing	Incident and service request management. Interface between customers using DHSS systems/IT services and the operational support team for those systems/IT services
Mainstream supported Microsoft Windows on Desktops	Desktop operating system (OS)	Standard DHSS desktop operating system
Dell Data Protection	Disk encryption	Fixed and removable disk encryption
Intel McAfee Agent	Antivirus, host intrusion prevention, policy management	Antivirus, host intrusion prevention, policy management
Currently Supported Microsoft Internet Explorer 11 or Microsoft Edge	Web browser and web-application client	Browsing web, web-application client
Microsoft Office 2010 (transitioning to Office 2013, starting Fall of 2017)	Desktop productivity suite	Document authoring, spreadsheets, presentations, information system integration (e.g., notice processing or other document merge processing)

2.7.3 Other Products

No unique other product standards for Enterprise Desktop Services.

2.8 DHSS Hosting and Datacenter Service Standards

DHSS Hosting and Datacenter Service Standards focus on how DHSS IT supports designing, implementing and operating standard infrastructure and platform offerings. The following standards apply.

2.8.1 Hardware

Standard	Function	Uses
Cisco UCS Blade Server	Physical host	Datacenter virtualization resources
Dell PowerEdge Server	Physical host	Datacenter virtualization resources or remote location physical server
NetApp Storage Area Network	Enterprise storage	Datacenter disk storage
Citrix Netscaler	Load balancing, proxy, protocol optimization, SSL/TLS offload appliance	Load balancing, SSL/TLS offload

2.8.2 Software

Standard	Function	Uses
VMWare ESXi or Microsoft Hyper-V Hypervisor Virtualization	Hypervisor	Datacenter hypervisor for host virtualization
NFS for VMware or SMB 3.0 for Hyper-V Network Attached Storage (NAS)	Storage management protocol	Allocate/manage/use storage, printers, etc
iSCSI for VMware or Hyper-V Storage Area Network (SAN)	Storage management protocol	Allocate/manage/use storage
Mainstream supported Microsoft Windows Server	Server operating system	Access and manage server hosts
Mainstream supported Microsoft .NET	Underlying enterprise services platform API	Support 3 rd party and custom .NET components and services
PROPOSED: .NET Core	Underlying enterprise services platform API	Support 3 rd party and custom .NET Core components and services
Mainstream supported Microsoft Active Directory	Domain, LDAP, authentication, policy	Manage domain, LDAP, authentication (Kerberos, Integrated) and policy
Mainstream supported Microsoft Active Directory Federation Services	Federated authentication	Manage authentication in federated identity scenarios
Mainstream supported Microsoft SQL Server	Information persistence / data repository	Online Transaction Processing / Information system database storage
Splunk	Enterprise log indexing and reporting	Audit-logging, reporting
Mainstream Microsoft Internet Information Services	Application server and web content delivery	Support IIS hosted applications and content
Mainstream supported Microsoft SQL Server Reporting Services	Reporting and business intelligence	Report authoring, scheduling, and subscription services
Mainstream supported Microsoft SQL Server Analysis Services	Reporting and business intelligence	Online Analytical Processing / Information and metrics trend reporting
Mainstream supported Microsoft SQL Server Agent (bundled with SQL Server)	Batch job processing and scheduling	Scheduled offline batch processes for line of business systems
Mainstream supported Microsoft SharePoint (2010 and 2013 compatible)	Enterprise Content and Document Management, Intranet and Social Network, Collaboration, Custom Web Applications and Workflow	Collaborative self-service business productivity, including: intranet, document libraries, simple data lists and simple workflows. Approved applications.

Standard	Function	Uses
Mainstream supported Microsoft BizTalk (2010 <u>and</u> 2013 <u>and</u> 2016)	System integration, Enterprise Service Bus	Master Client Index, line of business system integration
Microsoft Dynamics CRM (2016)	Extensible relationship/case management, rapid design and scalable business information systems platform	Case management, registries, grants management
Visionware MultiVue	Master data management	Master Client Index
DHSS Master Client Index	Line of business system client cross-reference	System integration support, Client Services Dashboard
DHSS Client Services Dashboard	Client services analysis	Research and policy support

2.8.3 Other Products

Standard	Function	Uses
PROPOSED: Microsoft Azure cloud App Service	Auto-scaling custom information system application containers in the cloud	Hosting information systems and services in the cloud
PROPOSED: Microsoft Azure Hybrid Connections	Websocket based relay from Azure cloud to other cloud or on premise datacenter end-points	Connecting from cloud environment resources, such as Azure App Service applications, back to on premise resources (data sources, services)

2.9 DHSS Wide Area Network, Telecommunications and Perimeter and WAN Security Service Standards

DHSS Wide Area Network, Telecommunications and Perimeter Security Services focus on how DHSS IT supports integrating the DHSS LAN with the State of Alaska (SOA) wide area network, telecommunications and perimeter security managed by Department of Administration (DOA) Enterprise Technology Services (ETS). The following standards apply.

2.9.1 Hardware

No unique hardware standards for DHSS Wide Area Network, Telecommunications and Perimeter Security Services.

2.9.2 Software

Standard	Function	Uses
Service Desk Manager (SDM)	Incident and service request management tracking	Interface between DHSS and ETS for addressing ETS supported service incidents and requesting changes or other services

2.9.3 Other Products

No unique other product standards for DHSS Wide Area Network, Telecommunications and Perimeter Security Services.