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# VA Technology Category Framework

## VA Technical Reference Model (TRM)

**VA**

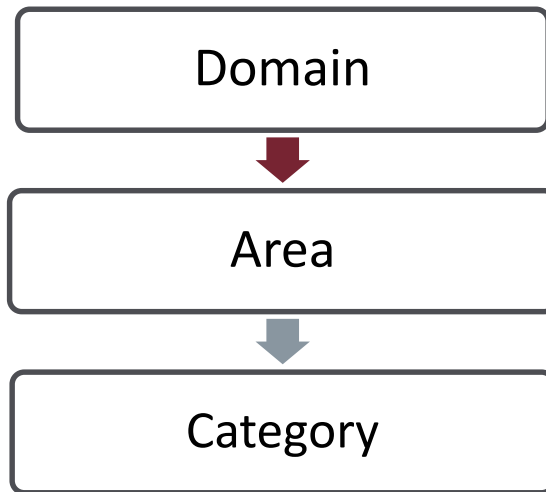


**U.S. Department of Veterans Affairs**

Office of Information and Technology

# VA Technology Category Framework

The VA Technology Category Framework classifies information technology standards, software, and hardware in the VA TRM, the Enterprise Technology Strategic Plan, VA Enterprise Architecture (EA) artifacts, and other guidance documents. The Framework facilitates navigation of the TRM and comparisons between similar technologies.



The VA Technology Categorization Framework has three tiers of increasing specificity

- Technologies and Standards are sorted by function into broad Domains, then separated into more narrowly defined Areas, and finally placed into specific Categories.

# VA Technology Category Framework

## Domain of Collaboration and Electronic Workplace

### Area of Productivity Software

- [Accounting and Finance](#) – 1 VA
- [Desktop Publishing](#)
- [File Manager & Viewer](#) – 8 Ind
- [Graphics Design Software](#) – 3 Ind
- [Health Care](#) – 45 Ind
- [Multimedia Software](#) – 11 Ind
- [Standard Office Suite](#)
- [Misc Productivity Tools & Utilities](#) – 4 Ind
- [Web Browser](#)

### Area of Collaboration Software

- [Content Management](#)
- [Electronic \(Instant\) Messaging](#) – 1 Ind
- [Unified Messaging](#)
- [E-Mail and Calendaring](#) – 5 Ind
- [Real Time & Team Collaboration](#) - 1 Ind
- [Shared Whiteboard](#)
- [Process & Schedule Synchronization Tools](#)
- [Computer Based Training – CBT](#)

## Domain of Information Management Technology

### Area of Data Management

- [Database Connectivity](#) – 1 Ind
- [Desktop DBMS](#)
- [Embedded DBMS](#)
- [Object-Oriented DBMS](#) – 1 Ind
- [Relational DBMS](#)
- [In-memory DBMS](#)
- [Columnar DBMS](#)
- [Non-Relational DBMS](#)
- [DB-Related Management Tools](#) – 1 Ind
- [Data Quality Management](#)
- [Master Data Management](#)

### Area of Data Integration

- [Database Replication and Clustering](#)
- [Extract, Transform, Load \(ETL\)](#)
- [Data at Rest](#) – 1 Ind
- [Data in Motion \(Common Message Terminology and Semantics\)](#) – 28 Ind

### Area of BI & Data Warehousing Platforms

- [Business Intelligence Platforms](#)
- [Data Warehousing Systems](#) – 1 Ind
- [Web Reporting Tools](#)
- [Dashboard/Scorecard Tools](#)
- [Data Mining Tools](#)
- [Geospatial Tools](#)
- [Data Analytics \(Statistical Analysis, Prediction, and Modeling\)](#)
- [Point of Care \(PoC\) Analytical Applications](#)
- [Unstructured Data/Natural Language Processing](#)
- [Clinical Environment and Tools](#)

## Domain of Network and Telecommunications

### Area of Network Infrastructure

- [Switching and Routing](#) – 25 Ind
- [Load Balancing and Failover](#)
- [Network Name & Address](#) – 15 Ind

### Area of Wireless and Mobile

- [Wireless Networks](#) – 6 Ind
- [Cellular Networks](#)
- [Short Range Wireless](#) – 1 Ind
- [Radio and Satellite](#) – 1 Ind

### Area of Transport

- [Local/Campus Area Network \(LAN/CAN\)](#) – 4 Ind
- [Wide Area Network \(WAN\)](#) – 4 Ind
- [Telecommunications](#) – 13 Ind

# VA Technology Category Framework

## Domain of Platforms and Storage

### Area of Operating Systems

- [OS - Desktop/Laptop](#)
- [OS – Mainframe](#)
- [OS – Mobile Device](#)
- [OS – Server – 1 Ind](#)
- [OS Cluster and Availability](#)
- [Application and OS Deployment](#)
- [OS Tools](#)

### Area of Peripherals

- [Input Devices](#)
- [Output Devices](#)
- [Multifunction Devices](#)

### Area of Cloud Services/Server Virtualization

- [Virtualization SW](#) – 4 Ind, 1 VA
- [Cloud Technologies](#)

### Area of Storage

- [Long Term Backup](#)
- [Operational Recovery](#)

### Area of End-User Computer Devices

- [Personal Computers \(PCs\)](#)
- [Small Form Factor Mobile Devices](#)

### Area of Physical Servers

- [Blade Servers, Chassis, and Racks](#)
- [Terminal Servers](#)
- [Extreme Low Energy Servers](#)

### Area of Miscellaneous

- [Telepresence VTC Systems](#) – 6 Ind, 2 VA
- [Other](#)

## Domain of Application Technology

### Area of Development

- [Analysis, Design & Modeling](#) – 1 Ind
- [Application Development Tools](#) – 22 Ind, 1 VA
- [Build and Deployment Tools](#)
- [Defect Tracking](#)
- [Development Framework](#) – 44 Ind, 3 VA
- [User Interface Design Tools](#)
- [Integrated Development Environment \(IDE\)](#)
- [Legacy Modernization](#)
- [Process Management Tools](#)
- [Requirements Management](#)
- [Software Change and Configuration Management](#)
- [Web Authoring Tools](#)

### Area of Software Engines

- [Business Process Management Engine](#) – 1 Ind
- [Business Rules Engine](#)
- [Geographic Information System Engine](#) – 2 Ind
- [Search Engine](#)
- [Context Management](#)

### Area of Integration Software

- [Enterprise Service Bus \(ESB\)](#)
- [Service Registry](#) – 3 Ind
- [SOA Governance](#) – 1 Ind
- [Messaging Oriented Middleware](#) – 7 Ind
- [Device Integration](#) – 4 Ind

### Area of Application

- [Debugging Test Tools](#)
- [Functional Test Tools](#)
- [Load & Performance Testing Tools](#)
- [System Testing Tools](#)
- [Unit Testing Tools](#)

### Area of Application Delivery Platform Software

- [Application Server SW](#)
- [Web Server SW](#) – 1 Ind

### Area of User Interface

- [Web UI Framework](#)
- [Portlets](#) – 1 Ind
- [Rich Internet Application \(RIA\) Framework](#)
- [Mobile Framework](#) – 1 Ind

# VA Technology Category Framework

## Domain of Systems Management

### Area of Systems Management Tools

- [Alert Management](#)
- [Application Management](#)
- [Asset Management](#)
- [Data Center Automated Tools](#)
- [Disaster Recovery](#)
- [IT Service Desk](#)
- [Knowledge Management](#)
- [Mobile Device Management](#)
- [Monitoring](#)
- [Network Performance Optimization](#)
- [Project Management](#)
- [Remote Desktop Management](#)
- [System Change and Configuration Management](#)

### Area of Facilities and Infrastructure Management

- [Power Management](#)

### Area of Operations Management

- [Emergency Management](#)
- [Human Resources](#)

## Domain of Security

### Area of Identity & Access Management

- [Identity Management](#)
- [Authentication](#)
- [Authorization](#)

### Area of Network Security

- [Antivirus and Anti-malware](#)
- [Content Filtering](#)
- [Encryption](#)
- [Security Administration](#)
- [Security Event & Information Management](#)
- [Vulnerability Management](#)
- [Network Auditing](#)
- [Network Intrusion Detection and Prevention](#)

### Area of Data Security

- [Data Loss Prevention](#)

### Area of Platform Security

- [Secure OS Boot](#)
- [Application Security](#)

## Domain of Health Care

### Area of Administration

- [Health Administration](#)
- [Health Delivery Support](#)
- [Operational Support](#)
- [Quality Systems](#)

### Area of Health Services

- [Dentistry](#)
- [Geriatrics and Extended Care](#)
- [Imaging](#)
- [Medicine Services](#)
- [Mental Health Services](#)
- [Pathology and Laboratory Medicine Services](#)
- [Pharmacy](#)
- [Primary Care](#)
- [Radiation Oncology](#)
- [Rehabilitation Services](#)
- [Specialty Services](#)
- [Surgery](#)

### Area of Standard

- [Health Care Standard](#)