

OFFICE OF VA ENTERPRISE ARCHITECTURE

VA EA Architecture Style Guide

Configuration Item #: 5.3.3-2003AF-2017-7-13-309

July 13, 2017

Revision History

Date of Change	Individual Making Change	Description of Change
April 2014	OneVA EA Team	Initial Baseline OneVA EA from COR—Pre-decisional.
September 24, 2015	VA EA Team	Final Version v 1.0
April 28, 2016	VA EA Team	Version 2.0—Updated Sections 2.4, deleted Section 7.2.3, and added Section 3 to replace it. Inserted Section 508 alt text to figures and bookmarks to tables.
July 13, 2017	VA EA Team	Version 3.0—Updated Section 2; deleted the Overview and Summary Information (OSI) narrative because no standard is associated with it. Deleted the Reports section and included any standard associated with reports in the section with its respective model. Updated all sections, including graphics, for consistency and clarity. Moved development narrative associated with Website Style Guide to VEAMS Administrator's Guide. Updated all model sections to correspond with latest VA EA policy, CONOPS, and practices.

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1 Executive Summary

The Department of Veterans Affairs (VA) is transforming in an effort to improve its support to Veterans. To achieve a level of seamless support, a more efficient and better-integrated enterprise is required. The envisioned enterprise creates the alignment of strategic direction, business operations, technology, and data, and is methodically designed, aggregated, and managed to deliver the right information to the right place at the right time.

At the core of this transformation is the VA Enterprise Architecture (EA). The VA EA is the strategic planning and management tool that supports operations, execution, and management accountability, and equips leadership to execute change across the Department. The VA EA provides the enterprise-level line-of-sight needed to support informed decision-making. As an authoritative reference, the VA EA provides an integrated view of the different domains of enterprise data across all levels of the VA: VA-wide Enterprise, Segment, and Solution.

The combination of intent, resources, methodology, and execution aligned through the VA EA enables a VA enterprise that provides a consistent and seamless experience for accessing information and delivering improved services to U.S. Veterans and their families.

The VA EA Architecture Style Guide (ASG) describes the techniques and conventions used to develop the VA EA. The ASG also includes a Website Style Guide (WSG) for the VA EA Intranet and Internet websites.

2 Introduction

The VA EA ASG defines the major techniques, rules, and standards needed for the development and publication of the VA EA content and requirements for the tools needed to accomplish that task. In this document, content refers to models, reports, diagrams, and data. For VA Intranet and Internet websites, content includes text and graphics. The ASG provides the “how” for architecture content and tools, while the VA EA Architecture Development Methodology (ADM) addresses the “what.” Together, the ASG and ADM provide architects and other VA EA team personnel with the guidance necessary to manage and execute an agile architecture development and publication process.

2.1 Background

The VA EA ASG and ADM leverage leading practices outlined in guidance such as the Common Approach to Federal Enterprise Architecture (CAF),¹ Department of Defense Architecture Framework (DoDAF),² and The Open Group Architecture Framework (TOGAF)³ to effectively develop and deliver the VA EA. The definition and understanding of requirements gleaned from the decision-makers who will use the architecture are an integral part of each of these guidance sources and are the foundation of the VA EA ASG. The VA EA ADM includes the concept of architecture content integration, where direct linkages occur among the enterprise, segment, and solution tiers within VA and federation, where indirect linkages occur.

The ASG is a set of standards to ensure consistent architecture modeling and output development, be they reports or visualizations. These standards ensure consistent architecture content, content representation, and presentation of architecture information and materials to the user. As the architecture evolves and the usage expands to a broader audience, additional standards will be needed and included in future versions.

Except for the VA EA Concept Graphic (CG) described in Section 4: Concept Graphic, VA EA models are developed with specific tools that store model information in the VA Enterprise Architecture Repository (VEAR). The VEAR structure is defined in the VA EA Metamodel, which is an integrated set of architectural data objects with defined data types and constrained data-to-object relationships. The additional model descriptions in this ASG are based on the metamodel information that supports each model and include the following:

- Functional Organization Model
- Business Reference Model (BRM)
- Business Process Model (BPM)

¹ *The Common Approach to Federal Enterprise Architecture (CAF)*, Office of Management and Budget, May 2, 2012. <http://www.immagic.com/eLibrary/ARCHIVES/GENERAL/WHITEHSE/W120502C.pdf>.

² Department of Defense Deputy Chief Information Officer, “The DOD Architecture Framework (DODAF) Version 2.02,” Department of Defense, August 2010, http://dodcio.defense.gov/Portals/0/Documents/DODAF/DoDAF_v2-02_web.pdf.

³ “The Open Group Architecture Framework (TOGAF) Version 9.1 Enterprise Edition,” The Open Group, December 2011, <https://www.opengroup.org/togaf/>.

- Enterprise Conceptual Data Model (ECDM)
- Enterprise Logical Data Model (ELDM)
- Systems Interface Model (SIM)
- Data Dictionary (DD)

The standards for each model include required and optional content as the basis for sound model development and verification.

The ASG also contains the WSG (Section 12: VA EA Website Style Guide), which outlines the VA EA Intranet and Internet web page structure and presentation standards. Appendix D: VA EA Intranet Templates provides templates for submitting content to the VA EA Intranet and Internet websites. Web writing guidelines are also included to assist content providers in translating the language of EA into information that meets the needs of diverse stakeholders and users and adheres to the principles of plain language.

Collectively, these standards and guidance, when applied, ensure the best use of architecture content to achieve business outcomes across VA, including sharing of information between programs.

2.2 Purpose

The architectural principle of reusing existing solutions whenever practical is applied to provide the best solutions at the lowest cost. Enterprise standards are needed to promote data sharing and solution design beyond the program level. The ASG is a reference document that describes the VA EA standards used to define, create, and update content, and expresses and promotes an enterprise approach to addressing VA mission. The ASG defines and describes each content artifact, its purpose, VA-specific conventions used, and each artifact's relationship to the other artifacts in the VA EA.

2.3 Scope

The scope of this ASG is best explained within the context of the VA EA ADM. The guidance in this ASG constrains the activities performed within the ADM “design,” “develop,” and “implement” phases of the architecture management process.

This ASG provides the rules and standards applied to modeling and other types of data entry within the VA EA Management Suite (VEAMS) tools and integrated with other data. Note that the ASG does not recreate guidance that is already documented in industry standards (e.g., BPM and Notation [BPMN]), but rather provides the specific rules for entering the data within the models and constraining the appearance of the models as appropriate for VA.

The scope of this ASG is also defined by its relationship to the other components of the VA EA ADM; this relationship is described in more detail below:

- VA EA Requirements procedures apply to the first two phases—requirements gathering and approval—of architecture development and outline how to define, document, and manage VA EA requirements for approval and prioritization. The content and website

requirements, as defined through epics, user stories, and tasks, are addressed for VA EA updates and constrained by the techniques and conventions prescribed in the ASG.

- VA EA Release procedures include inputs and outputs associated with each release cycle. The release is based on web standards and published on the VA Intranet and Internet websites to provide easy access to people who use VA EA information. The ASG contains standards for the substantive content and presentation of that content on the Intranet and Internet.
- VA EA Configuration Management (CM) procedures outline management and configuration control of VA EA content. The ASG identifies types of configuration items within artifacts.
- VA EA Quality Assurance (QA) procedures outline the various “checks” and reviews necessary to ensure that the guidelines and procedures outlined in the ASG are followed. The VA EA ASG contains the content standards that the QA procedure enforces during quality checks.

2.4 Intended Audience

The VA EA Architecture Team is expected to use the ASG in the course of creating and modifying VA EA content to include models based on the requirements in user stories. Guidance contained in the ASG also helps Segment and Solution Architects understand how VA EA content is developed and aligned, and how use of the standards promotes data sharing, interoperability, and enterprise solutions. To this end, the VA EA Architecture Team, Segment Architects, and Solution Architects federate and integrate content from Segment and Solution architectures to achieve VA EA enterprise alignment and provide a critical Enterprise “view” of data.

The WSG is intended for the designated VA EA team to update and maintain the VA EA Intranet and Internet websites.

3 Federation and Value Mapping Technique

Federation is the approach used at VA to align and integrate architectures across the Department and achieve a balance between the architecture's specific purpose and its benefit to the enterprise. Line-of-sight between architectures and an enterprise perspective is achieved by the alignment of common data from disparate sources. The value mapping technique identifies, aligns, and links separate but related architectures and data sources owned by different VA Administrations and Staff Offices and delivered in different cycles to create a useful, expanded information base. Objects, data assets, and data artifacts are types of architecture entities to which the value mapping technique applies. The value mapping technique is applied to the entities within models in this ASG when mapping between Enterprise level and Segment or Solution level. Integration is applied when data elements between architectures are the same and can be reused.

A two-step process is used to conduct federation between two architectures. The first step is to establish a relationship or mapping between two entities that are being aligned. The typical method used to federate is mapping; however, simply mapping or linking two objects is not useful for decision support given that mappings have no deterministic meaning. This first step pairs common entities together (e.g., activities to activities, performers to performers, functions to functions). Then, a decision must be made about which (and how many) entities will be used in the value mapping. The second step is to analyze the entities as to their individual meanings within the context of each architecture, and then conduct value mapping on the entity pairings based on the analysis. This requires assigning a value to the relationship to indicate the degree to which the objects align. This step, called *value-based mapping* or simply *value mapping*, is the step that relates entities developed in different architectures. Value mapping assigns a predetermined or deterministic value according to specific criteria to the connection between two architecture entities. The deterministic value applied to a relationship is selected from a list of four possible values, referred to as *linking values*, as described in Table 3-1.

Table 3-1: Value Mapping List

Linking Value	Description
Same	Used when an entity in one architecture is equivalent to an entity in another architecture. This requires equivalence of the description of all relevant related items.
Type of/Similar	The entity in one architecture meets some, but not all, of the criteria necessary to be considered the <i>Same</i> as the entity in another architecture. This also may be used to indicate that one entity has far more detail than the other entity, and that <i>sameness</i> cannot be specified with certainty.
Part of	The value given to the semantic alignment between the two entities when the determination is made that one entity addresses part of the scope of the other entity.
Gap	The absence of an alignment value between two architecture entities implies the lack of any semantic alignment between them; however, in certain circumstances, it may be useful to note a specific gap between two architecture entities where only one entity may imply alignment—usually based on <i>name</i> or some other common attribute.

Linking value is the name for the types of relationships that can exist between two entities and for categorizing, grouping, or clustering items that share similar traits.

3.1 Business Domain Federation

Business architects federate entities within the business domain by applying the value mapping technique. This occurred for the VA BRM; following are a few examples of these mapping functions:

- Linking value “same as” (one function maps to another function)
An example of this Federation principle is highlighted in VEAR with the integration of many Veterans Health Administration (VHA) Business Functions from the VHA Business Functional Framework (BFF). The VHA BFF Function and description of *VHA 7.1.2 Provide Security Services* is mapped one-to-one and is the “same as” the *VA BRM Category 3 Function 3.1.3 Manage Physical and Personnel Security*.⁴
- Linking value “part of” (one function of part of another function)
An example of this Federation principle is also highlighted in VEAR with the integration of many VHA Business Functions from the VHA BFF. The following VHA BFF Functions and associated descriptions—*7.1.1.1 Maintain Facilities*, *7.1.1.6 Maintain Medical Assets and Equipment*, *7.1.1.7 Maintain Non-Medical Assets and Equipment*, *7.1.1.4 Provide Facility Housekeeping*, and *7.1.1.5 Provide Facility Waste Management*—are “part of” the single *VA BRM function 3.1.1 Manage Facilities, Fleet and Equipment* to which they are mapped in VEAR.⁵
- Linking value “similar to” (one function seems to map to another function)
An example of this Federation principle is highlighted in the “VA BRM to FEA Services Report.”⁶ This report aligns VA BRM Functions and Business Functions to their corresponding FEA BRM Services.⁷ The *FEA BRM Service “Access to Care”—FEA BRM Code B07.551.217* and its corresponding definition “seems to map” or is “similar” to the *VA BRM Category 1 Business Function 1.1.1.1.2 Perform Enrollment* and its corresponding definition to which it is mapped.

⁴ “VA EA Business Reference Model,” Department of Veterans Affairs, Office of Enterprise Architecture, https://www.ea.oit.va.gov/EAOIT/docs/May_2017_Release_Docs/20170424_BDMR_VA-BRM.pdf.

⁵ Ibid.

⁶ Department of Veterans Affairs, Office of Enterprise Architecture, April 2017, https://www.ea.oit.va.gov/EAOIT/docs/May2017docs/20170424_BDMR_VA-BREM-FEA-Service.pdf.

⁷ “FEA Business Reference Model version 3.1,” Office of Management and Budget, May 15, 2013. https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/egov_docs/brm_v3-1-service_codes_and_definitions_rev1_20130615.pdf.

3.2 Data Domain Federation

Data architects conduct federation between entities within the data domain by applying the value mapping technique in a manner similar to that within the VET360 and Master Veteran Index (MVI) mapping. This mapping is an exemplar for how to do data mapping; following is an example of data mappings that are further illustrated in Figure 3-1:

- Linking value “Same As” data scenario:
 - The MVI Person Email Address is the Authoritative Data Source (ADS) for Person Email Address.
 - The MVI Person Email Address class attributes are linked VET360 Beneficiary Email Address attributes. The linked attributes share the same metadata.

- Linking value “Part of” data scenario

The MVI Person class is the ADS for beneficiary person demographics. VET360 Beneficiary Class attributes are linked to “Part of” MVI Person class attributes (i.e., minus the Alias First Name, Alias Middle Name, Alias Prefix, Alias Suffix Name, and Alias Last Name). The remaining VET360 Beneficiary Alias Class attributes are linked to “Part of” MVI Person class attributes (i.e., Alias First Name, Alias Middle Name, Alias Prefix, Alias Suffix Name, and Alias Last Name). The linked attributes share the same metadata as the ADS.

- Linking value “Similar to” data scenario

The MVI Person Email Address is the ADS for Person Email Address. eCIS (Enterprise Contact Information System) Email Address attributes link to eCIS Email Address attributes. The linked attributes captures the same data. The attributes have “Similar” but not identical metadata (e.g., Name and datatype).

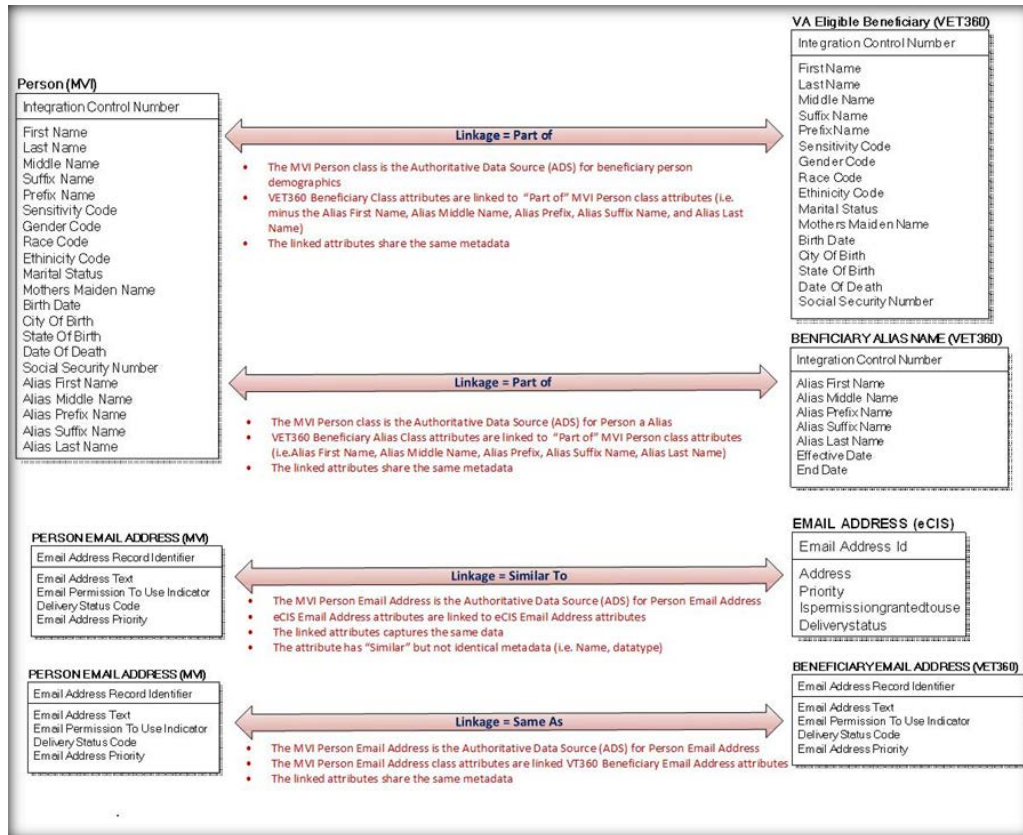


Figure 3-1: Example of Data Federation

4 Concept Graphic (CG)

The CG presents a visual representation of key parts of VA's EA, relationships between them, and the performers and operations involved. The CG shows, at a glance, the scope of VA's enterprise, helps communicate concepts and relationships to users, and enables achievement of a holistic, higher level of understanding. Figure 4-1 is an example CG.

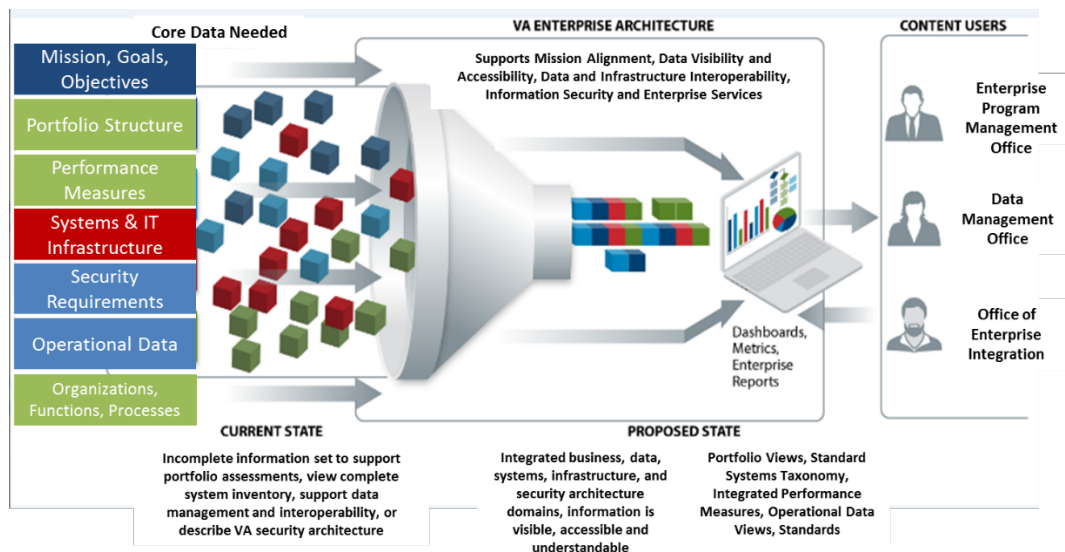


Figure 4-1: EA CG Example

4.1 CG Purpose

The CG depicts the scope of the target architecture and identifies the performers and operations involved.

The intended uses of the CG include:

- Presenting a summary graphic for discussing and presenting the scope of the architecture
- Providing context to operational situations or scenarios
- Depicting a solution to a need or a To-Be state

4.2 CG Description

The CG provides expository text in an executive summary format to accompany and describe the CG. The content of a CG depends on the scope and intent of the architecture. As other models in the architecture are developed, multiple versions of the CG may be produced to reflect adjustments in the architecture purpose and scope. A version used to summarize and present findings to decision-makers may be produced.

4.3 CG Relationship to Other Models

~~Table 4-1~~ summarizes the CG relationships to other models.

Table 4-1: CG Relationships to Other Models

Model	Relationship
BRM	The CG identifies operational scope of the concept that maps to high-level business functions contained in the BRM.
Enterprise Conceptual Data Model (ECDM) and Enterprise Logical Data Model (ELDM)	The CG depicts business operations with underlying data identified in the ECDM and ELDM.
DD	All terms and acronyms used in the CG must be defined in the DD.

4.4 CG Conventions

The CG is a freeform graphical model that has no specific modeling conventions.

5 Functional Organization Model

The Functional Organization Manual (FOM) is the authoritative source that documents the current VA structure, missions, functions, and tasks of the Department and its organizations.⁸ It is a core reference document for the Department to describe what gets done by whom, for whom, and under what authorities.⁹ The FOM is a living document that reflects organizational changes that lead to mature, refined processes and procedures. These processes and procedures are designed to further enhance synchronized and coordinated actions across the Department to ensure optimal execution of the VA mission and strategy.¹⁰ The VA Organization Model automates the FOM.

5.1 FOM Purpose

The FOM describes the reporting structures and relationships that exist among VA Administrations and Staff organizations, as well as external organizations. It is used to ensure optimal execution of VA's mission and strategy and illustrates the reporting structures that are key performers in the VA EA. It does not depict relationships relative to business process flows.

5.2 Functional Organization Model Description

The Functional Organization Model is depicted as a hierarchical decomposition illustrating reporting relationships among Administrations and Staff Organizations in VA.

Figure 5-1 depicts an example of objects used in the Functional Organization Model. Department units are represented by rectangular boxes and are entities that are responsible for a discrete set of processes aimed at achieving a goal. Relationships between organizational units are represented by a connector line between them. Connectors show the interface from one organizational unit to another. A documentation block contains information about the model.

Table 5-1 provides a legend for the numbered callouts in Figure 5-1.

⁸ "2014–Functional Organization Manual – v4.0," Department of Veterans Affairs, 1, <https://vaww.oit.esp.va.gov/sites/OneVaEa/entarch/SitePages/Business.aspx>.

⁹ Ibid.

¹⁰ Ibid.

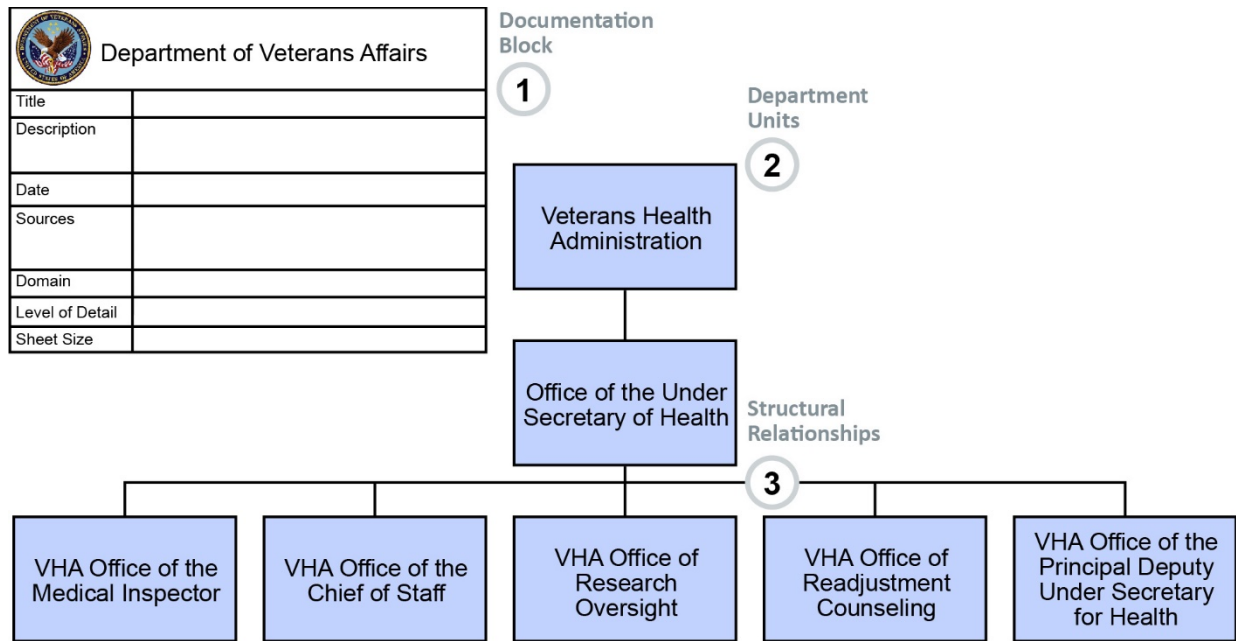


Figure 5-1: Functional Organization Model Example

Table 5-1: Legend for Figure 5-1: Functional Organization Model Example

Callout #	Description
1	A Documentation Block is located in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
2	Department units are boxes in the model that contain the name of each organizational unit comprising VA.
3	Structural relationships are the connecting lines between each department unit. These represent the decomposed structure and hierarchical lines of authority within VA. Each lower-level or child unit reports to the parent that appears above it.

5.3 FOM Relationship to Other Models

Table 5-2 shows the relationship of the Functional Organization Model to other models.

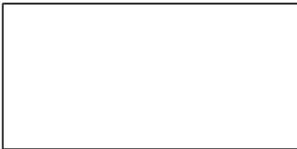
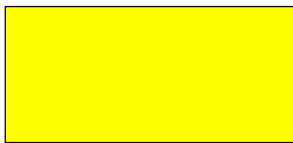



Table 5-2: Functional Organization Model Relationship to Other Models


Model	Relationship
BRM	Organizational units in the FOM provide the capabilities and perform the business functions depicted in the BRM.
BPM	Organizational units in the FOM execute business processes depicted in the BPM.
DD	All terms and acronyms used in the FOM must be defined in the DD.

5.4 Functional Organization Model Modeling Conventions

Table 5-3 lists modeling conventions used to create the Functional Organization Model. In the Format column, custom color fill settings are provided using the Red/Green/Blue (RGB) additive color model. The RGB additive color model is used as a convention throughout the ASG.

Table 5-3: Functional Organization Model Modeling Conventions

Element	Symbol	Format
Documentation Block		Position: Upper left corner Border: Solid black Fill: None Text: Color: Black — Font: Arial — Size: Default
VA Corporate	Rectangle 	Position: Not applicable (N/A) Border: Solid black Fill: Custom color settings are RGB 255/255/166. Text: Color: Black — Font: Arial — Size: Default
Veterans Benefits Administration (VBA)	Rectangle 	Position: N/A Border: Solid black Fill: Custom color settings are RGB 182/227/166. Text: Color: Black — Font: Arial — Size: Default
VHA	Rectangle 	Position: N/A Border: Solid black Fill: Custom color settings are RGB 194/210/254. Text: Color: Black — Font: Arial — Size: Default
National Cemetery Administration (NCA)	Rectangle 	Position: N/A Border: Solid black Fill: Custom color settings are RGB 255/213/213. Text: Color: Black — Font: Arial — Size: Default

Element	Symbol	Format
Structural Relationship	Connector 	Position: N/A Border/ Line: Solid Fill: N/A Text: Color: N/A — Font: N/A — Size: N/A

5.4.1 Functional Organization Model Creation and Modification Guidelines

The following guidelines are used to create or modify the Functional Organization Model:

- Modeling objects shall not have truncated names on the diagram.
- All department unit labels shall be centered at the top of the department unit rectangle, and the label should not fall outside the boundary of the rectangle.
- Each department unit name shall be title case, use only approved acronyms, be non-plural, and use no special characters except “-”, a hyphen (Unicode character code 2010).

6 Business Reference Model (BRM)

The VA BRM provides a classification and taxonomy for organizing and understanding significant relationships among the business entities (e.g., business areas, lines of business, and business functions) within and across VA. It also contains BRM element definitions and their relationships within the VA EA.

6.1 BRM Purpose

The VA BRM provides a functional view of VA. This functional view is a hierarchy that relates categories of business operations, capabilities VA possesses, and the functions the Department performs. The VA BRM describes the entirety of *work* (operational business functions) performed by VA.

6.2 BRM Description

The BRM describes the entire set of VA functions from the enterprise level down to the field-office or activity level and provides a comprehensive view of all activities undertaken within VA. This integrated model can be used by the Department to begin to understand, from an enterprise-wide perspective, where VA has amassed capability and capacity across the enterprise rather than simply within each Administration or Staff Office.

The VA BRM is based on the Office of Management and Budget (OMB) Federal Enterprise Architecture (FEA) BRM, tailored to reflect the unique capabilities and functions of VA. It comprises cascading levels of increasing detail. The first level of the VA BRM is the Category level; it provides a high-order grouping of affiliated capabilities. Level 2 within each Category is the Capability level, which describes the distinct abilities that VA requires to complete a category. Level 3 is a further distillation of a capability into its respective Functions that enable better mapping of the efforts (e.g., programs, metrics, or offices) that engage in activities associated with the function. Level 4 and below are referred to as Business Functions that further describe Functions and/or Business Functions.

VA enterprise-level Capabilities and Functions do the following:

- Act as the “connective tissue” among mission strategies and the programs, projects, and investments intended to execute them
- Establish a common vocabulary that can be used across the Department
- Represent a stable element in the architecture, making them ideal for longer-term planning

Appendix C: References lists Guidance and Reference Model documentation from the OMB FEA.

6.2.1 BRM Guiding Principles and Architecture Style Guidelines

VA BRM guidance is provided in the form of nine Guiding Principles (GP) and six Architecture Style Guidelines that outline the ownership, intent, and use of the VA BRM. The GPs are general rules applied to enable implementation of strategic oversight and governance of the VA BRM. The Architecture Style Guidelines are techniques applied to enable function modeling uniformity and consistency to support effective federation of Segment BRMs. Each VA BRM GP and Architecture Style Guideline is described by five properties: Name, GP or Architecture Style Guideline, Applicability, Rationale, and Implications. VA BRM “element” as used herein is a generic term applicable to any or all VA BRM categories, capabilities, functions, or business functions.

[Table 6-1](#) contains a summary of guidelines and principles. Appendix C: References lists referenced sources.

Table 6-1: BRM GPs and Architecture Style Guidelines

GP 1: VA BRM Ownership and Management	
GP	The VA BRM is owned and managed by the Assistant Secretary for Enterprise Integration. This includes responsibility for addressing stakeholder (i.e., Administration and Staff Offices) concerns and oversight of the Architecture Board (AB) voting and approval process for VA BRM content before publishing.
Applicability	VA BRM-specific.
Rationale	Ownership of the VA BRM by the Assistant Secretary for Enterprise Integration ensures that its content and use are defined from an Enterprise perspective and addresses business and technology alignment and oversight. The AB voting and approval process ensures that all stakeholders have a voice in VA BRM development and evolution.
Implications	Having an entity ultimately responsible for the VA BRM mitigates impasses in voting that can adversely affect timely publishing and use of the VA EA and the VA BRM located therein.
GP 2: VA BRM Ownership and Management	
GP	VA BRM Levels 4 and below are owned and managed by VA functional owners who serve as subject matter experts [SME] for a VA business area. The VA functional owners, in collaboration with the VA Office of Enterprise Integration (OEI) and the VA Office of Enterprise Architecture (OEA), have the authority to make decisions on behalf of stakeholders of that business area. This includes responsibility for addressing stakeholder concerns and addressing any required changes to the VA BRM content before publishing.
Applicability	VA BRM Level 4 and below.
Rationale	Ownership of this content by VA functional owners ensures a single accountable authority for each VA Segment business area. VA BRM content at Level 4 and below is socialized to ensure content uniqueness and standardized decomposition.
Implications	The absence of functional ownership and management of this content will adversely affect VA EA use in VA strategic planning and other decision-making processes that require a more granular view of VA business functions. Having an entity ultimately responsible for BRM Levels 4 and below mitigates impasses in voting that can adversely affect timely publishing and use of the VA EA and the BRM located therein.

GP 3: VA BRM Use #1	
GP	The VA BRM must enable realization of the line-of-sight between mission strategies and the programs, projects, and investments intended to execute them. ¹¹
Applicability	VA BRM—General.
Rationale	The VA BRM provides a stable framework for VA business that is ideal for long-term planning.
Implications	Long-term planning and investment management require a line-of-sight that connects information from all levels of VA (i.e., Enterprise, Segment, and Solution). Without the VA BRM, a “missing link” exists that would hinder VA’s ability to see gaps, overlaps, and redundancies across the Department.

GP 4: VA BRM Use #2	
GP	The VA BRM must support the OMB Collaborative Planning Methodology by enabling VA Planners to look across VA to shape scope and strategic intent of enterprise needs. ¹²
Applicability	VA BRM—General.
Rationale	“Planners analyze stated needs in the context of overarching drivers to help aid decision makers in their assessment of whether stated needs are feasible and realistic.” ¹³ The “stated needs” shape the scope and strategic intent for planning where the VA BRM is used to assist in defining functional scope. Therefore, the VA BRM must be developed in a way that enables OEI to look across VA through an enterprise “lens” that enables the most informed decision-making possible.
Implications	The VA BRM must be built in a manner that provides an organizing construct that enables cross-VA capability and functional analysis. Not building the VA BRM to be used in this way negates the ability of the VA BRM to support VA in achieving the enterprise outcomes as outlined in the FEA and CAF (i.e., Improved Service Delivery, Functional Integration, Authoritative Reference, and Resource Optimization).

GP 5: FEA BRM Alignment	
GP	The VA BRM must remain closely aligned with the FEA BRM per statute. ¹⁴
Applicability	VA BRM—General.
Rationale	Close alignment of the VA BRM with the FEA BRM improves the use of the FEA for intra- and interagency collaboration through use of common mission and support services taxonomy. Due to the specific nature of the VA business and its BRM, not all its functions are covered within the FEA BRM. These cases are viewed as gaps and will be discussed within the appropriate FEA governance forums to determine if they should become part of the FEA BRM.
Implications	Misalignment with the FEA BRM hinders VA’s ability to identify Cross-Agency Priorities (CAP) and investments that could be leveraged.

¹¹ Ibid., 6.

¹² *Federal Enterprise Architecture Framework Version 2*, Federal CIO Council, January 29, 2013, https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/egov_docs/fea_v2.pdf.

¹³ Ibid.

¹⁴ Ibid., 6.

GP 6: Element Categorization	
GP	All VA BRM elements must be aligned with one of VA's categories of work: Services for Veterans and the Public, Support Services, or Government Resource Management. ¹⁵
Applicability	VA BRM—General.
Rationale	The VA BRM is constructed such that each capability and its decomposed functions fit within one and only one VA BRM category that is consistent with the FEA BRM.
Implications	Introducing VA BRM elements that do not fit within the VA BRM categories adversely impacts FEA BRM alignment (see GP 5) and makes it difficult to perform the standard reporting as requested by OMB and the Government Accountability Office (GAO).

GP 7: Organizational References	
GP	The VA BRM must not reflect VA structure but rather describe and categorize the <i>work</i> of the Department. ¹⁶
Applicability	VA BRM—General.
Rationale	Department structures can be fluid, whereas the VA BRM must be very stable to enable VA to achieve the desired benefits from its use.
Implications	A BRM that is defined along structural lines will not enable the Department to perform analyses to identify efficiencies that can be achieved and resourcing options available throughout the Department. Defining the VA BRM based on the work of the Department enables identification of opportunities for standardization and implementation of enterprise-shared services.

GP 8: System-Agnostic	
GP	VA BRM elements must reflect business-related information and be system-agnostic. For example, system names must not be included in any element name or description. ¹⁷
Applicability	VA BRM—General.
Rationale	System environments, much like Departmental structures, can be fluid, whereas the VA BRM must be very stable to enable VA to achieve the desired benefits from its use.
Implications	Avoidance of system/Department-related information mitigates the risk of the VA BRM becoming misaligned with VA systems and Administrations and Staff Offices changes.

GP 9: Uniqueness of Elements	
GP	VA BRM elements must be unique; each element shall be placed within only one category and at only one level within the model. ¹⁸
Applicability	VA BRM—General.
Rationale	Uniqueness of elements enables use of the VA BRM to discern more easily how a capability is being achieved and show where resourcing gaps and overlaps may exist.

¹⁵ "Business Function Framework (BFF) Guiding Principles" (Microsoft® Excel workbook), Department of Veterans Affairs: Veterans Health Administration, Office of Informatics and Analytics, Strategic Investment Management April 2013. http://vaww.vha.esp.va.gov/sites/BA/Active%20Documents/Business%20Function%20Framework_Supplemental%20Guide.xlsx.

¹⁶ BFF Guiding Principles, and VA BRM, 4.

¹⁷ BFF Guiding Principles.

¹⁸ Ibid.

GP 9: Uniqueness of Elements	
Implications	Usability of the model is hindered when same or similar functions exist under different categories or capabilities. For example, when combined with the Functional Organization Model, the unique elements of the VA BRM will help VA stakeholders articulate commonalities and gaps from both capability and business perspectives that, in turn, improve the ability to identify opportunities for collaborative planning and investment decision-making.

Architecture Style Guideline 1: Element Descriptions	
ASG	Element descriptions must be clear, unique, concise, and meaningful statements of “what” VA does. ¹⁹
Applicability	VA BRM—General.
Rationale	The VA BRM enables VA to separate function from design: function is the “what,” and design is the “how.” This follows leading practices, as outlined by TOGAF and the Business Architecture Working Group of the Object Management Group (OMG), where business processes define how a Department executes its functions and are used to align strategic objectives and tactical demands. VA BRM element descriptions should contain sufficient detail to unambiguously describe the business conducted by VA.
Implications	Lack of clear element descriptions leads to ambiguity, redundancies, and poor integration across VA architectures.

Architecture Style Guideline 2: Function Types	
ASG	The VA BRM will not decompose a capability into types of the same function; functions defined at Level 4 and below will not decompose into types of the same business function. ²⁰
Applicability	VA BRM—General.
Rationale	VA BRM functions are generic in nature and do not include enumerated types of functions. Adoption of enumerated types of functions results in duplication of activities.
Implications	Not allowing enumerated types improves the ability of the VA BRM to be used to identify areas of duplication and redundancy by rendering a single instance of a function to which items such as Organization, System, and Program can be mapped.

Architecture Style Guideline 3: Verb Usage in Element Names	
ASG	Each VA BRM element name will begin with a verb. See the Architecture Style Guideline 6 portion of this table. ²¹
Applicability	VA BRM—General.
Rationale	Functions are activities or actions that are performed as part of VA business, and, as such, are named beginning with a verb.
Implications	Not adopting this convention leads to a lack of consistency and precision across the VA BRM.

Architecture Style Guideline 4: Parent-to-Child Relationships	
ASG	All lower-level elements must represent a decomposition of higher-level elements. ²²
Applicability	VA BRM—General.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

Architecture Style Guideline 4: Parent-to-Child Relationships	
Name	
Rationale	Each child element is an extension of its parent, and, as such, must correspond to the parent element.
Implications	Introducing elements that do not represent a decomposition of their parent element does not align to standard modeling conventions such as those outlined in the Integrated DEFinition (IDEF) Function Modeling Method (IDEF0) standard.

Architecture Style Guideline 5: Parent Element Decomposition	
ASG	Every parent element must contain at least two child elements and should contain no more than nine child elements whenever reasonably possible. ²³
Applicability	VA BRM—General.
Implications	No actual decomposition has occurred if a parent has less than two child elements. The upper limit of nine child elements under a parent element should enable users to view and understand the child elements and the underlying logic of the decomposition.
Implications	Introducing child elements that do not represent a strict decomposition of the parent element does not align to standard function modeling conventions such as IDEF0.

Architecture Style Guideline 6: Combined Definitions of Child Elements	
ASG	The scope of the combined definitions of the children of a given VA BRM element shall comprise 100% of the definition of that element. ²⁴
Applicability	VA BRM—General.
Rationale	The scope of the parent element is intended to comprise the scope of the children into which it is decomposed. This directly supports Architecture Style Guideline 5.
Implications	If the “roll-up” of children of a given element is not equivalent to the parent element definition, it implies either insufficient definitions of VA BRM parent elements or inaccurate placement of child elements. Both scenarios negate the uniqueness of VA BRM elements and adversely affect the use of the VA BRM in planning and investment decision-making.

Based on Architecture Style Guideline 3: Verb Usage in Element Names, each BRM element name must begin with one of the action verbs in Table 6-2. This list of verbs offers a clear reference for the verbs that serve as the beginning of the name for each VA BRM element. The list will be updated as new verb element names are introduced to the VA BRM.

Table 6-2: BRM Element Action Verb Definitions

Term	Definition
Acquire	Buy or come into possession or ownership of a service or asset
Administer	Manage, direct, or exercise operational responsibility for implementation, use, or operational procedure—e.g., a computer system, software application, or process
Conduct	Direct, handle, or guide the course of action—e.g., to <i>conduct</i> a meeting
Coordinate	Bring different elements of a complex activity or Department into a relationship that will ensure efficiency or effectiveness; to set in order or achieve

²³ Ibid.

²⁴ IEEE Standards Association, “IEEE Standard 1320.1 IEEE Standard for Functional Modeling Language—Syntax and Semantics for IDEF0, Active Standard, Reaffirmed 2004,” 2004, <https://standards.ieee.org/findstds/standard/1320.1-1998.html>.

Term	Definition
Create	Cause something to come into being
Develop	Create content or capability
Manage	Handle, direct, govern, or control resources for some purpose
Monitor	Observe and oversee an activity; can include tracking and reporting
Perform	Execute a specific task in the most narrow sense
Provide	Supply or make something available for use
Track	Follow the course or pathway of something

6.2.2 BRM Modeling Objects and Definitions

~~Figure 6-1~~~~Figure 6-1~~, based on the VA BRM, depicts a conceptual example of a BRM.²⁵ ~~Table 6-3~~~~Table 6-3~~ provides a legend for the numbered callouts.

²⁵ Base diagram from “VA Enterprise Capability Model,” developed in IBM® Rational® System Architect. The upper-left-corner legend block identifies this diagram as containing a “decomposition of the VA capabilities and functions for the VBA, VHA, NCA, and Corporate Systems.” See “VA EA Business Domain,” Department of Veterans Affairs, Office of Enterprise Architecture, http://www.ea.oit.va.gov/EAOT/VA_EA/VAEA_BusinessArchitecture.asp.

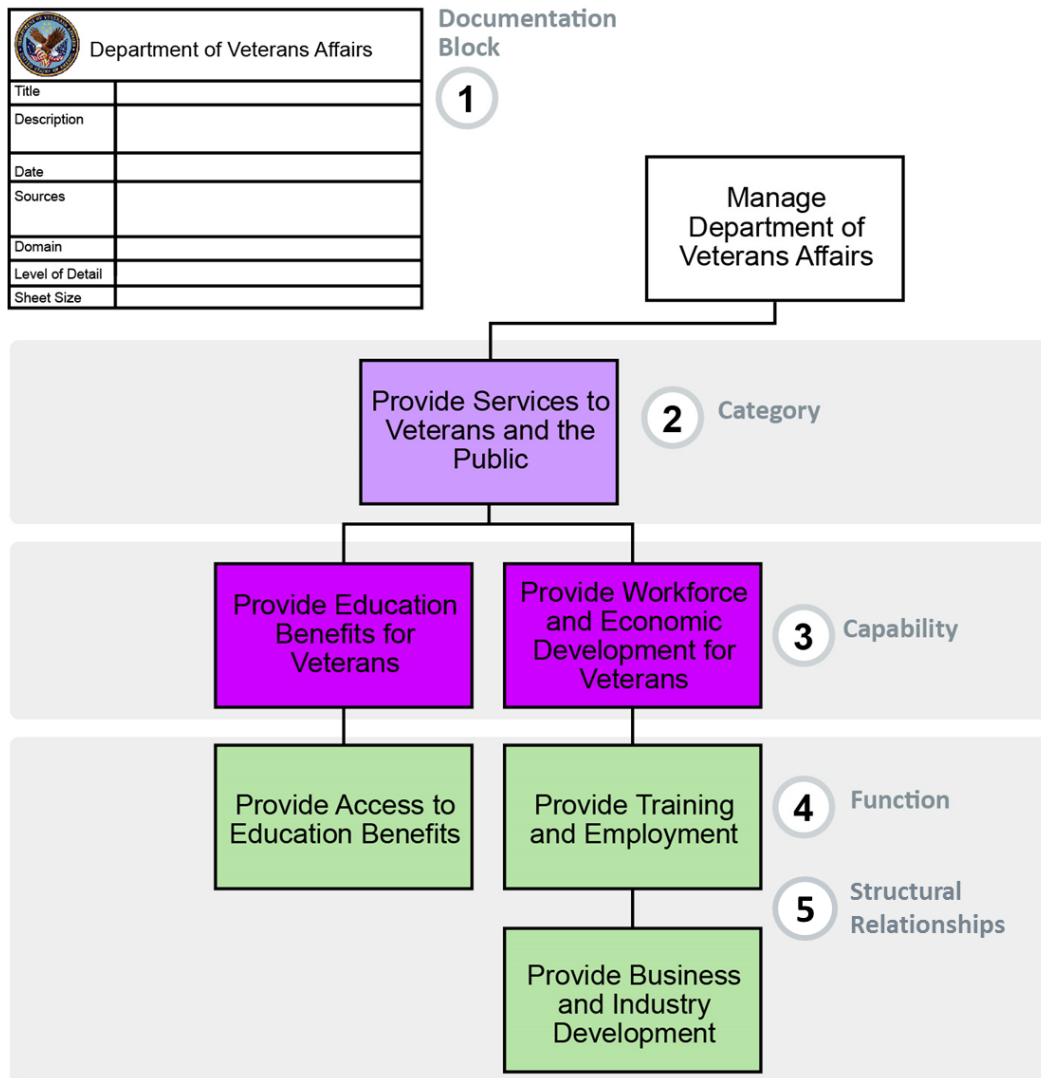


Figure 6-1: VA BRM Example

Table 6-3: Legend for Figure 6-1: VA BRM Example~~Figure 6-1: VA BRM Example~~

Callout #	Description
1	A Documentation Block is located in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
2	A category is a higher-order grouping of capabilities that describes a particular type of work conducted at the enterprise level.
3	A capability is an Administration or Staff Office's desired or existing ability to contribute to an objective or outcome outlined by VA. Capabilities typically require a combination of people, process, policy, and technology elements.
4	A function is a task, action, or activity that is accomplished to achieve a desired outcome.
5	A structural relationship links previously defined objects in two adjacent levels of the BRM together.

6.3 BRM Relationship to Other Models

The BRM relationships to other models are provided in Table 6-4. Additional relationships from the VA BRM GPs are described after the table.


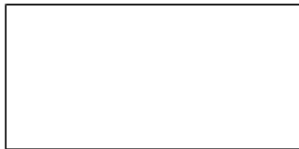
Table 6-4: BRM Relationships to Other Models


Model	Relationship
CG	The BRM helps define the scope of the CG.
BPM	The BRM provides the functions that are used in the BPM business processes.
DD	All terms and acronyms in the BRM must be defined in the DD.
SIM	The BRM business functions are supported by systems depicted in the SIM.

6.4 BRM Modeling Conventions

Table 6-5 defines and depicts BRM modeling conventions.

Table 6-5: Conventions Used in the BRM

Element	Symbol	Format
Documentation Block		Position: Upper left corner Border: Solid black Fill: None Text: Color: Black — Font: Arial — Size: Default
Business Categories, Capabilities, Business Function		Position: N/A Border: Solid black Fill: Color-coded as shown in Figure 6-2 RGB codes are as follows: <ul style="list-style-type: none"> • VA level—239/239/239 • Category—210/201/222 • Capability—167/150/190 • Business Function: <ul style="list-style-type: none"> – VBA—182/227/166 – VHA—176/213/255 – NCA—255/213/213 Text: Color: Black — Font: Arial — Size: Default

Element	Symbol	Format
Relationships (Parent/Child)		Position: N/A Border/Line: Solid black Fill: N/A Text: Color: Black — Font: N/A — Size: N/A

~~Figure 6-2~~ ~~Figure 6-2~~ shows the color conventions used for the BRM hierarchy. The colors in this legend correspond to the colors in the BRM hierarchy in ~~Figure 6-1: VA BRM Example~~ ~~Figure 6-1: VA BRM Example~~:

- The top row shows the VA Department-level business functions, including the VA Department, which consists of Categories; one is depicted. Categories consist of Capabilities; one is pictured.
- The middle row (Federation) shows the Federation of the VA Administration and Staff Office functions.
- The bottom Segment Level row should be the darker color-coding of the same color range from the Federation level, and so corresponds to the middle row's lighter colors.

~~Figure 6-2~~ ~~Figure 6-2~~ illustrates the identified business functions as individual rectangles or rectangle hierarchies.

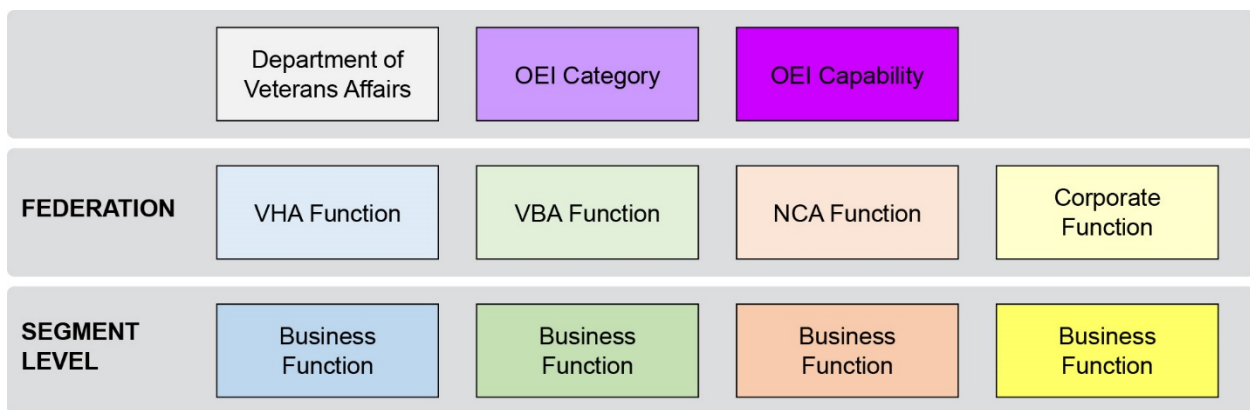


Figure 6-2: BRM Business Function Colors Legend

6.4.1 BRM Creation and Modification Guidelines

The following guidelines are used to create or modify the BRM:

- All business functions are defined, and definitions reflect the information transformation, creation, and consumption actions performed by the business functions. Each definition is clear, concise, uses active voice, and comprises complete, grammatically correct sentences.
- The business functions label begins with a RETURN so that the label does not touch the upper border of the business function box.

- The business functions box label falls within the Business Function box border when printed.
- The business functions box border is a solid black line.

7 Business Process Model (BPM)

A BPM provides a standardized way to model and map EA objects and associated processes, dependencies, integration, and communications critical to the efficient operation of VA. The sections below provide high-level descriptions of the elements used in process diagrams, workflows, sequencing diagrams, communication (message flow) association, and associated architectures. These show how BPM is used to visualize horizontal impacts and vertical hierarchical relationships within VA, as well as how the VA EA significantly affects information technology (IT) and functional segments of VA.

7.1 BPM Purpose

A BPM describes operational processes that are conducted in the course of providing a business capability. It describes the operational processes conducted by the business, the relationships between processes (sequential/parallel), input and output flows between processes, and input and output flows to and from processes outside the scope of the architecture.

BPM models are used to define, measure, improve, design, control, and validate existing processes and new processes for greater efficiency and effectiveness, or to enable transformation of business operations.

7.2 BPM Description

BPMs in the VA EA are constructed using the Business Process Model and Notation (BPMN) 2.0 standard managed by the OMG.²⁶ The BPMN specifications and basic modeling elements are available on the OMG website at <http://www.bpmn.org/>.

Figure 7-1 shows an example of a BPM. The example shows the key elements of a process diagram with two pools. The top pool has only one lane, while the bottom pool is divided into two lanes. The activity start button (green) is on the left, and the process flows from left to right in the diagram to the process stop button (red). Each swim lane represents a hierarchical role and provides a visualization of how the activities flow through hierarchical levels (lanes).

²⁶ "Object Management Group Business Process Model and Notation," Object Management Group, <http://www.bpmn.org/>.

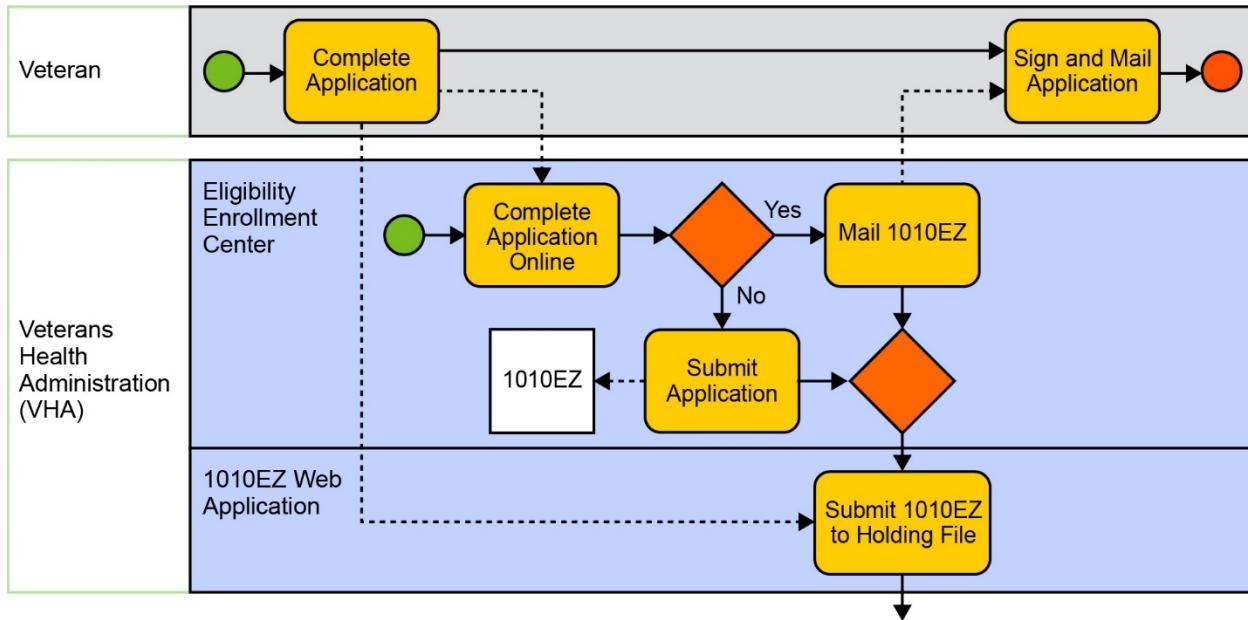


Figure 7-1: BPM (Using BPMN)








7.2.1 BPM Process Model Elements



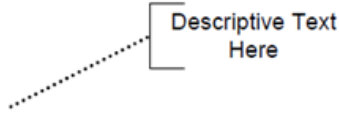
Table 7-1 describes the basic BPMN elements used in VA EA BPMs and is adapted from the OMG BPMN v2.0.²⁷

Table 7-1: Basic BPMN Modeling Elements

Element	Description	Notation
Activity	An Activity is a generic term for work that a company performs in a Process. An Activity can be atomic or non-atomic (compound). The types of Activities that are a part of a Process Model are Sub-Process and Task, which are rounded rectangles. Both standard Processes and Choreographies use Activities.	
Association	An Association is used to link information and Artifacts with BPMN graphical elements. Text Annotations and other Artifacts can be Associated with the graphical elements. An arrowhead on the Association indicates a direction of flow (e.g., data), when appropriate.	

²⁷ "Documents Associated with Business Process Model and Notation (BPMN) Version 2.0," Object Management Group, January 2011, <http://www.omg.org/spec/BPMN/2.0/>.

Element	Description	Notation
Data Object	Data Objects provide information about what Activities are required to be performed and/or what they produce. Data Objects can represent a singular object or a collection of objects. Data Input and Data Output provide the same information for Processes.	
Event	An Event is something that happens during the course of a Process or Choreography. These Events affect the flow of the model and usually have a cause (trigger) or an impact (result). Events are circles with open centers to allow internal markers to differentiate different triggers or results. Three types of Events exist, based on when they affect the flow: Start, Intermediate, and End.	
Gateway/ Decision Point	A Gateway is used to control the divergence and convergence of Sequence Flows in a Process and Choreography. Gateways determine branching, forking, merging, and joining of paths. Internal markers indicate the type of behavior control.	
Group (a dotted-line box around a group of objects within the same category)	A Group is a grouping of graphical elements that are within the same Category. This type of grouping does not affect the Sequence Flows within the Group. The Category name appears on the diagram as the group label. Categories can be used for documentation or analysis purposes. Groups are one way in which Categories of objects can be visually displayed on the diagram.	
Lane	A Lane is a sub-partition within a Process, sometimes within a Pool, and extends the entire length of the Process, either vertically or horizontally. Lanes are used to organize and categorize Activities.	
Message	A Message is used to depict the contents of a communication between two Participants (as defined by a business Partner Role or a business Partner Entity).	
Message Flow	A Message Flow is used to show the flow of Messages between two Participants that are prepared to send and receive them. In BPMN, two separate Pools in a Collaboration Diagram will represent the two Participants (e.g., Partner Entities and/or Partner Roles).	

Element	Description	Notation
Pool	A Pool is the graphical representation of a Participant in Collaboration. It also acts as a swim lane and a graphical container for partitioning a set of Activities from other Pools, usually in the context of business-to-business (B2B) situations. A Pool may have internal details in the form of the Process that will be executed. Alternatively, a Pool may have no internal details—i.e., it can be simply a black box.	
Sequence Flow	A Sequence Flow is used to show the order in which Activities will be performed in a Process and Choreography.	
Text Annotation (attached with an Association)	Text Annotations are a mechanism for a modeler to provide additional text information for the reader of a BPMN Diagram.	

7.3 BPM Relationship to Other Models

[Table 7-2](#) shows the BPM relationships to other models.



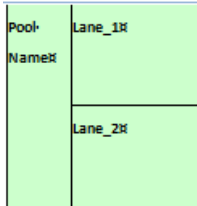

Table 7-2: BPM Relationships to Other Models



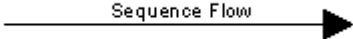


Model	Relationship
CG	The scope depicted in the BPM must agree with the scope of the CG.
BRM	BRM leaf-level functions are linked to process steps in the BPM.
SIM	Systems depicted in the SIM support business processes included in the BPM.
DD	All BPM terms and acronyms must be defined in the DD.

7.4 BPM Conventions

Table 7-3 lists modeling conventions used to create a BPM.

Table 7-3: Conventions Used in the BPM

Element	Symbol	Format
Document Block		Position: Upper left corner Border: Solid black Fill: None Text: Color: Black — Font: Arial — Size: Default
Pool		Position: N/A Border: Light green Fill: None Text: Color: Black — Font: Arial — Size: Default
Lane		Position: N/A Border: Solid black Fill: Light green Text: Color: Black — Font: Arial — Size: Default
Element Primitives		Position: N/A Border: Solid black Fill: Light brown Text: Color: Black — Font: Arial — Size: Default

Element	Symbol	Format
Gateway Primitives		Position: N/A Border: Solid black Fill: Light brown Text: Color: Black — Font: Arial — Size: Default
Process Step		Position: N/A Border: Solid black Fill: Gold: RGB 255/204/0 Text: Color: Black — Font: Arial — Size: Variable
Sequence Flow		Position: N/A Border: Solid black Fill: None Text: Color: Black — Font: Arial — Size: Default
Message Flow		Position: N/A Border: Dashed black Fill: None Text: Color: Black — Font: Arial — Size: Pen 7 pt.
Data Object		Position: N/A Border: Solid black Fill: White Text: Color: Black — Font: Arial — Size: 10 pt.

7.4.1 BPM Creation and Modification Guidelines

The following are guidelines used to create or modify the BPM:

- A Documentation Block is in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
- Diagram Names contain at least one verb and one noun appearing in verb-noun order.
- Diagrams that depict a sub-process should be named for the sub-process. However, in the case of reusable sub-processes, this scenario is not always possible.

- Each BPM Diagram includes a description to provide a clear, understandable narrative of what the Diagram portrays. This information should be included in the Diagram Properties.
- The Diagram description is clear, concise, and unambiguous. The description includes, at a minimum, a summary of the main Process Thread, a reference to the Events and their relationship to other diagrams, a reference to the Gateways, the decisions made, and a summary of the major Business Rules that affect the diagram.
- Participants, Data Objects, and Process Steps have labels containing name and/or other attributes placed inside the shape. Event, Gateways Sequence Flow, and Message Flow labels are placed above the shape as much as possible. However, labels may be placed below or to the right or left of the object to enhance readability of the diagram.
- Although extensible, BPM diagrams still have the basic look and feel for any viewer to easily understand a diagram created by any process architect. Do not alter the footprints of the basic flow elements (Events, Process Steps, and Gateways).

7.4.2 BPM Diagram Object Construction Standards

Objects in the BPM diagrams have a concise and intuitive name according to the following standards:

- All BPM object names are in title case. Nouns must be singular, unless the plural form is required to describe the object correctly. Use only approved acronyms.
- Activities are clearly named and defined. The Activity name contains at least one verb in the present tense and one noun in this order—e.g., “Analyze (verb) Record (noun).”
- Events are clearly defined and labeled. Event names consist of at least one noun and either one verb or adjective in this order—e.g., “Record Analyzed” or “Booking Successful.” Event names are as specific as possible, avoiding generic names such as “End,” “Stop,” or “Start.” Do not use verb-noun names for Events—e.g., “Send Notification” is not a proper name for an Event.
- Data Objects are clearly named and defined. The name must have at least one noun that accurately describes the Data Object. A data object state attribute may be used to indicate the impact that a process has on the data object—e.g., a “meeting time” data attribute can change from having a “Proposed” state attribute value to a “Confirmed” state.
- Decision Gateways are clearly named and defined with a combination of nouns and verbs conveying a question or query, and must end with a question mark.

Example: The question “Adjustment required?” with the answers “Adjustment not required” and “Adjustment required” is not acceptable, because the question and answers may also refer to other unrelated adjustments elsewhere in the architecture. A more specific question incorporating context is “Adjustment to cost model required?” with the acceptable answers being “Adjustment to cost model required” and “Adjustment to cost model not required.”

- Gateway Control Types are displayed consistently.
- Participant (Pools) and Role (Lanes) names are composed of nouns and, where appropriate, adjectives, and are clearly defined.
- Groups may be used to cluster related objects. A name is assigned to the Group and defined using appropriate nouns and verbs.
- All Object names are less than 80 characters in length.
- Special characters are not used in object names, with the exception of “?” in gateways.
- All object names (title case) are written in initial uppercase (i.e., Uppercase). Incidental words within the object name such as “with,” “at,” “in,” “and,” “no,” “not,” “a,” “an,” “to,” or “the” are written in **all** lowercase letters.
- Object names are spelled correctly.
- Do not use future tense.

8 Enterprise Conceptual Data Model (ECDM)

The ECDM is the high-level enterprise view of Information Classes (Entities) that describes information and data that VA must collect and store to carry out its mission and business operations. Information Classes are exclusive to a single Data Subject Area. Enterprise Data Subject Areas are used to distinguish and set boundaries around areas of interest from a data/information perspective for business operations. This section includes the purpose and description of Information Class/Entity-level data and how the entities are related and integrated with other EA information.

8.1 ECDM Purpose

The main purpose of the ECDM is to provide categorization and definitions of data used across the Department. ECDM is a high-level illustration of VA information that describes general groups of data required to support business operations. The ECDM facilitates the improvement of the quality and depth of information available for business operations and supports federation of existing information assets across VA for analysis and decision-making purposes. It provides a framework for defining the scope of targeted data requirements, establishes a data dictionary for entity definitions, and supports high-level business process analysis.

8.2 ECDM Description

The ECDM depicts data objects that are significant to a VA Information Class (also referred to as an “Entity”).

An entity is represented in the ECDM as a rectangle and labeled with a singular noun, or an adjective and noun. Relationships are shown as a line connecting the related entities.

The level of detail in an ECDM varies with the purpose of the architecture. For example, not all attributes and relationships may be shown or identified, because a conceptual view is often used very early in a project effort.

Figure 8-1 depicts an ECDM with relationships and relationship cardinality identified, although entity attributes remain undefined. Table 8-1 provides a legend for the numbered callouts.

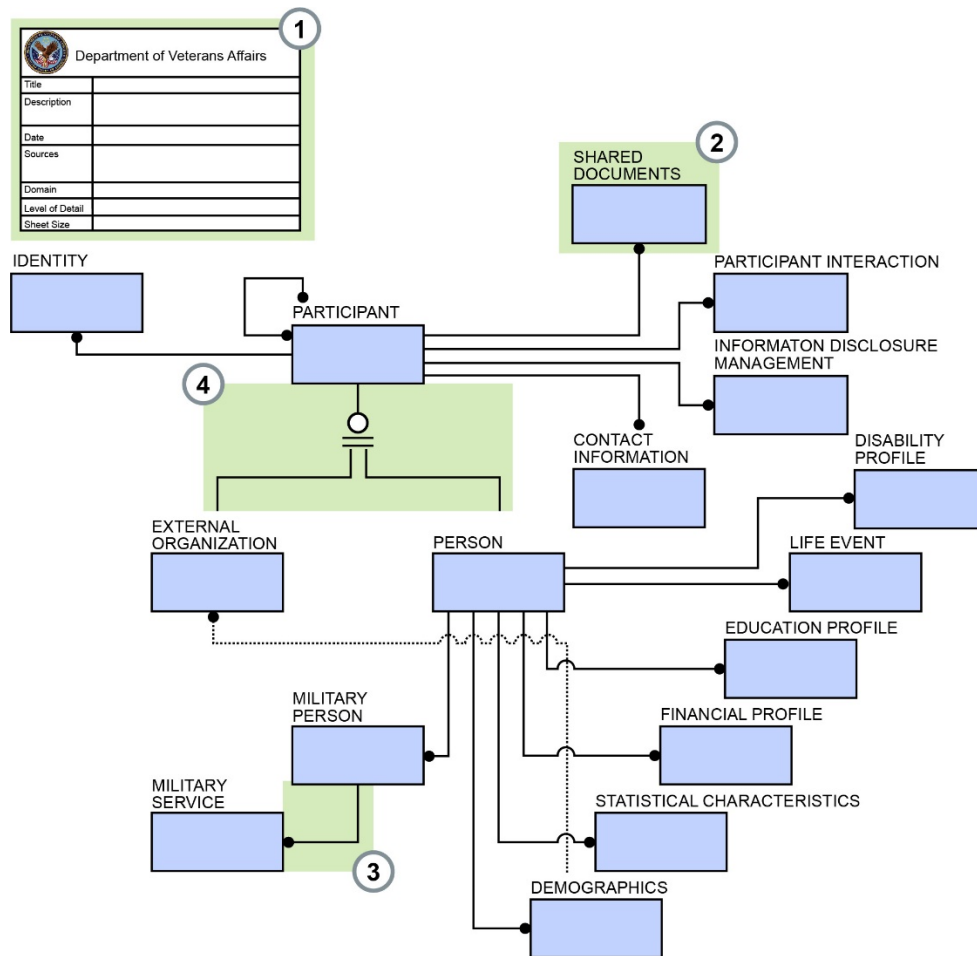


Figure 8-1: ECDM Example

Table 8-1: Legend for **Figure 8-1: ECDM Example**

Callout #	Description
1	A Documentation Block is located in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
2	An entity refers to a unique person, place, thing, event, or idea about which the business wants to maintain information. Each entity represents a set of things having common characteristics and usually is related to other entities.
3	A Relationship is a connection or association between two entities based on a structural business rule. A Relationship instance is the meaningful association or connection between two entity instances. For each entity instance at one end, the relationship shows the minimum and maximum number of instances possible for the entity at the other end.
4	A Supertype/Subtype is a relationship between two entities where the dependent entity inherits characteristics from the independent entity.

8.3 ECDM Relationship to Other Models

Table 8-2 lists the relationships of the ECDM to other architecture models.


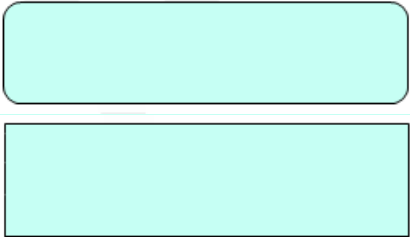

Table 8-2: ECDM Relationships to Other Models

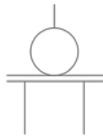
Model	Relationship
CG	The ECDM describes data supporting the operations depicted in the CG.
SIM	The ECDM describes data exchanged in system interfaces shown in the SIM.
BRM	The ECDM describes data specified in the various levels of the BRM.
BPM	The ECDM describes data referred to in a data object in the BPM.
ELDM	ECDM provides the basic entities and their relationships that are described in more detail in the ELDM.
DD	All terms in the ECDM must be defined in the DD.

8.4 ECDM Conventions

Table 8-3 lists modeling conventions used to create an ECDM followed by guidelines for creating or modifying the model.

Table 8-3: Conventions Used in the ECDM

Element	Symbol	Format
Document Block	Text Box 	Position: Upper left corner Border: Solid black Fill: None Text: Color: Black — Font: Arial — Size: 16 pt.
Entity	Rounded Rectangle (Dependent Entity) or Rectangle (Independent Entity) where the tool allows this convention 	Position: N/A Border: Solid black Fill: RGB value: 198/255/244 Text: Color: Black — Font: Arial — Size: Default
Relationship		Position: N/A Border: N/A Fill: N/A Text: Color: Black — Font: N/A — Size: Default

Element	Symbol	Format
Supertype/Subtype		Position: N/A Border: N/A Fill: N/A Text: Color: Black — Font: N/A — Size: Default

8.4.1 ECDM Creation and Modification Guidelines

The following guidelines are used to create or modify the ECDM:

- The Entities are grouped by relationships to minimize crossing relationship lines and make the diagram more readable and understandable.
- The Title of the diagram must:
 - Be an exact match of the Diagram Name.
 - Be centered on the top of the diagram and in title case. (Determine center placement by printing single-page-printable diagrams on 8.5" x 11" paper, and then folding the sheet in half side-to-side (i.e., match left edge to right edge).
 - Not be underlined or bolded.
 - Be in Arial font with appropriate font size so the title is in proportion to all other diagrams when single-page-printable diagrams are printed on 8.5" x 11" paper.

9 Enterprise Logical Data Model (ELDM)

The ELDM represents an abstract business view of an EA business domain of information that is described in business language and defined and developed independent of software, hardware, frequency of use, or performance considerations. It is based on the structure identified in the ECDM but contains much more detail—specifically, entity identifiers, attributes, and relationships. A sample ELDM diagram is included in the following sections. The ELDM implements and extends the ECDM by fully attributing all entities and shows a detailed representation of the Department’s data.

9.1 ELDM Purpose

The ELDM is used to define, describe, and analyze the data needed to support business processes. Using business language, the ELDM documents the VA enterprise data types and the structural business process rules (relationships) that govern the data.

9.2 ELDM Description

The ELDM describes business data types, or classes, and structural business rules using entities and relationships, and provides details of the logical progression toward systems and solutions that enable data integration and interoperability.

An entity in the ELDM is an abstraction of something (a person, an object, a geographic location) about which the business needs to store information. Entities identify data types and are described with a set of attributes that lists and defines characteristics of the data. One or more of the attributes uniquely identifies an entity. Entities are represented in a model as a rectangle with square corners, and related entities are joined with a connecting line and labeled to identify the nature of the relationship. For example, employees of a company usually have several phone numbers. The relationship between employees and phone numbers could be labeled “contacted with,” and read as, “Each employee is *contacted with* phone numbers.” Rectangles with rounded corners may be used to depict dependent entities, if so desired; the modeling tool has this feature.

An important characteristic of the relationship between entities is the *cardinality* of the relationship, which describes the number of instances of an entity in relation to another entity. Cardinality values include one-to-one, one-to-many, many-to-one, and many-to-many. In the example shown in Figure 9-1: ELDM Example, an employee may have more than one phone number, so the relationship cardinality is one-to-many and can be read as “Each employee is contacted by one or more phone numbers.” Many-to-many relationships are indeterminate and resolved into associative entities in the ELDM.

Another characteristic of relationships is the relationship *optionality*. Optionality indicates if the relationship between two entities is one that is required to exist or optional. Continuing the example above, employees of the Department may be required to have a contact phone number, in which case the optionality of the relationship is described as mandatory.

The VA ELDM will also have independent entities, each with an identifier, a complete set of defined attributes, an entity identifier, and all entity relationships fully defined and indicated through cardinality and optionality. The ELDM is independent of any system, platform, or database technology.

Currently, the modeling notation used is in Entity-Relationship Diagram (ERD) format, a data modeling notation for development of semantic data models, which represents the structure and semantics of information within an environment or system.

Figure 9-1 illustrates an enterprise-level Logical Data Model (LDM) with entities, entity identifiers, attributes, relationships, and relationship cardinality included. Entity, attribute, and relationship definitions are usually provided in a separate document or available from a tool.

[Table 9-1](#)~~Table 9-1~~ provides a legend for the numbered callouts in Figure 9-1.

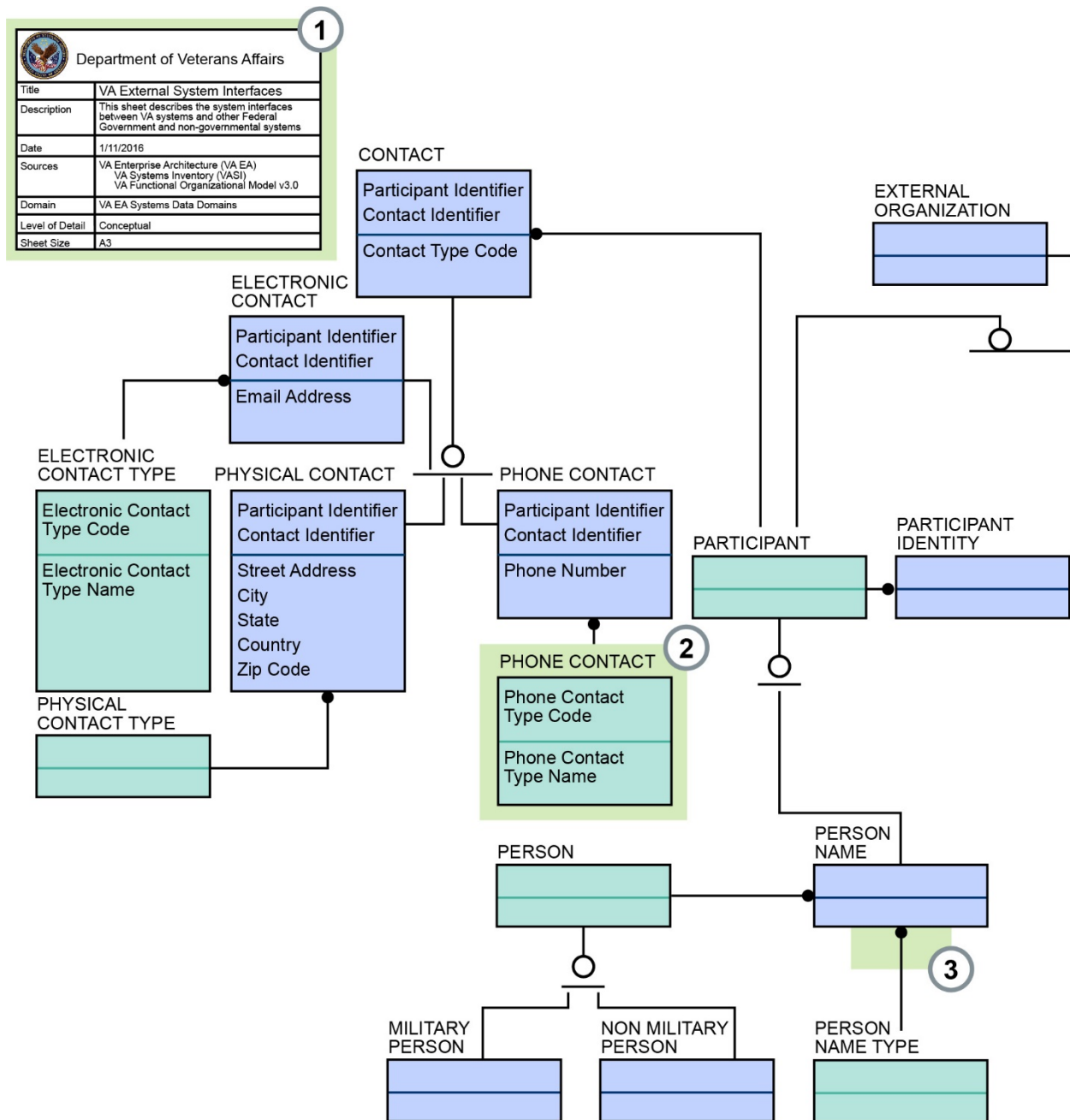


Figure 9-1: ELDM Example

Table 9-1: Legend for Figure 9-1: ELDM Example

Callout #	Description
1	A Documentation Block is located in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
2	An Entity is labeled with its name; the identifier is listed above the horizontal line, and attributes are listed below the horizontal line.

Callout #	Description
3	The relationships between two entities—cardinality (many-to-one) and optionality (mandatory)—are depicted.

9.3 ELDM Relationship to Other Models

[Table 9-2](#) shows the ELDM relationships to other models.

Table 9-2: ELDM Relationships to Other Models

Model	Relationship
CG	The ELDM describes data supporting the operations depicted in the CG.
ECDM	The ELDM provides attributes, cardinality, and key relationships to the basic entities and relationships in the ECDM.
BRM	The ELDM describes data specified in the various levels of the BRM.
BPM	The ELDM describes data referred to in a data object in the BPM.
DD	All object terms and acronyms from ELDM are defined in the DD.

9.3.1 ELDM Creation and Modification Guidelines

The following guidelines are used to create or modify the ELDM:

- The Entities are grouped by relationships to minimize crossing relationship lines and make the diagram more readable and understandable.
- The Title of the diagram must:
 - Be an exact match of the Diagram Name.
 - Be centered on the top of the diagram and in title case. (Determine center placement by printing single-page-printable diagrams on 8.5" x 11" paper, and then folding the sheet in half side-to-side (i.e., match left edge to right edge).
 - Not be underlined or bolded.
 - Be in Arial font with appropriate font size so the title is in proportion to all other diagrams when single-page-printable diagrams are printed on 8.5" x 11" paper.

10 Systems Interface Model (SIM)

The SIM depicts systems, the organization that operates them, and the interfaces that exchange data. This model depicts system nodes, systems, and top-level services resident at these nodes that support VA operations and business processes. It also identifies interfaces that cross organizational or agency boundaries to external nodes (non-VA systems).

10.1 SIM Purpose

The SIM provides the basis for graphically categorizing systems and their components and is used to facilitate the identification of gaps and redundancies and also of opportunities for sharing, reuse, and consolidation.

The term *system* in this section represents both systems and services.

10.2 SIM Description

The SIM comprises a set of diagrams developed with a specific context in mind—e.g., a Departmental or system focus. Initial versions of the SIM may show critical interfaces only. More mature versions provide details used to identify system requirements and system interoperability.

A VA System Node represents one or more systems that work together within a segment to support the automated portion of the business requirements described in the business functions. Systems are discrete sets of IT, data, and related resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information in support of a specific business process.²⁸ A family of systems is a set of independent systems that can be arranged or interconnected in various ways to provide or depict different stakeholder capabilities and/or functions. An external system represents a system that is not in the VA EA but interfaces with systems within the VA EA.

Each SIM is constructed from the point of view of a focus system node and includes the node's systems and their supporting system interfaces. Each peripheral system node includes systems that have an interface to the focus node only. The system interfaces on each model depict both internodal (external node) and intranodal (internal node) exchanges of information with the focus node providing support of business functions.

Figure 10-1 is an example of a SIM. Table 10-1 provides a legend for the numbered callouts.

²⁸ "Federal Enterprise Architecture Framework Version 2," Department of Veterans Affairs, January 29, 2013, 41, https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/egov_docs/fea_v2.pdf.

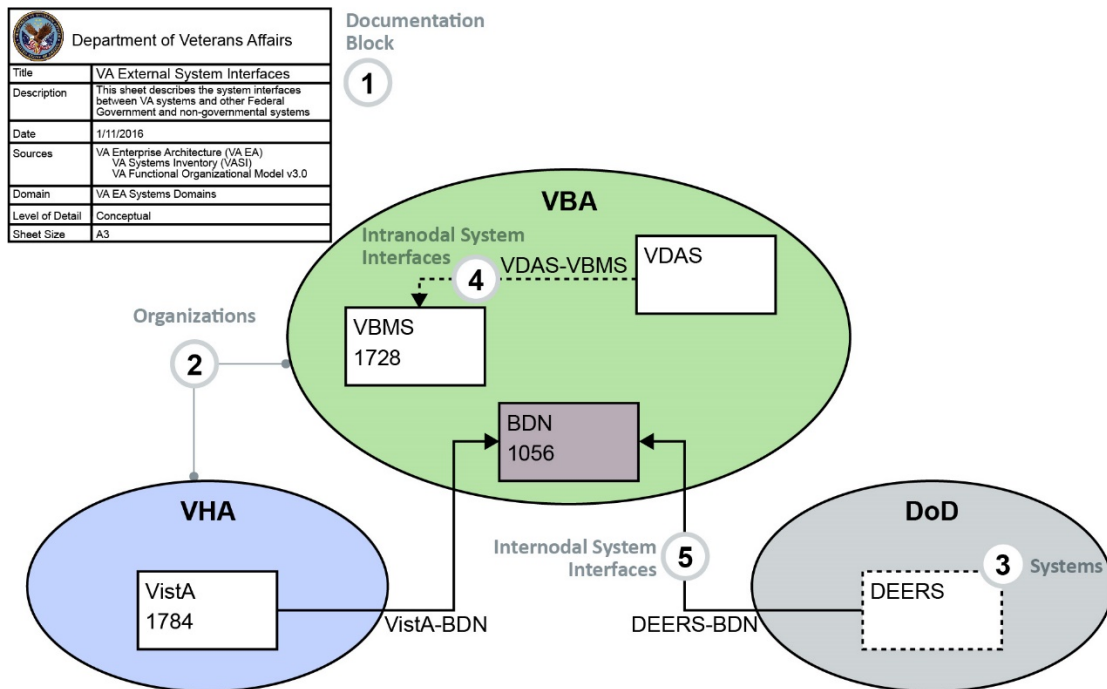


Figure 10-1: SIM Example

Table 10-1: Legend to Figure 10-1: SIM Example

Callout #	Description
1	A Documentation Block is located in the upper left corner of the diagram. It contains a title, description, date of creation or update, sources, domain, level of detail, and sheet size of the model.
2	System Nodes are organizational entities. They are contained in the large oval shapes in the diagram and named after the organization. The SIM diagram name represents the focus system node that is the primary system of interest in the model.
3	Systems are the rectangles contained within each system node. They represent the VA stakeholder enterprise systems and external systems, including federally mandated systems.
4	System Interfaces are depicted in the diagram as lines between systems. They are a simplified, abstract representation of communications between systems. Intranodal System Interfaces pass communications within a system node.
5	Internodal System Interfaces pass communications between systems across system nodes.

10.3 SIM Relationship to Other Models

[Table 10-2](#) shows the SIM relationships to seven other models.

Table 10-2: SIM Relationships to Other Models




Model	Relationship
CG	The scope of the SIM is defined by the scope depicted in the CG.
BRM	The SIM identifies systems that support business functions described in the BRM.

Model	Relationship
BPM	The SIM identifies systems that support business processes described in the BPM.
ECDM and ELDM	The SIM depicts systems interfaces that exchange data described in the ECDM and ELDM.
Enterprise Technical Architecture (ETA) ²⁹	The SIM depicts systems and interfaces that are supported by infrastructure described in the ETA.
FOM	Nodes depicted in the SIM must support Administrations and Staff Offices appearing in the FOM.
DD	All terms in the SIM must be defined in the DD.




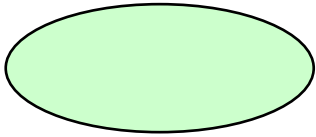
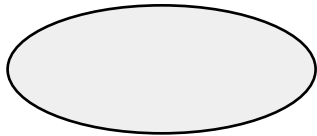
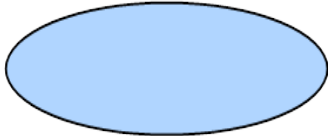
10.4 SIM Conventions


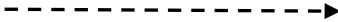
The SIM modeling conventions in Table 10-3 are used to create or modify a System.

Table 10-3: Conventions Used in the SIM

Element	Symbol	Format
Document Block	Text Box 	Position: Upper left corner Border: Solid black Fill: None Text: Color: Black — Font: Arial 10 pt. — Size: Default
System/Application	Rectangle 	Position: N/A Border: Solid black Fill: White Text: Color: Black — Font: Arial 10 pt. — Size: Default
Enterprise-Level System	Rectangle 	Position: N/A Border: Solid black Fill: Yellow boxes. Custom color settings are RGB 255/255/153. Text: Color: Black — Font: Arial 10 pt. — Size: Default

²⁹ The ETA is the set of architecture content addressing VA IT infrastructure. It primarily contains hardware and software rules, standards, and configurations necessary for the development, deployment, and maintenance of systems, networks, and applications. Collectively, these rules and standards seek to ensure interoperability of VA's IT environment, and that new applications seamlessly serve Veterans' needs and operate safely and effectively. The ETA content is designed to educate visitors to the site about the direction of the ETA's evolution and inform collaboration and feedback. See "Design, Engineering, and Architecture (DE&A) Compliance," Department of Veterans Affairs, Office of VA Enterprise Architecture, http://www.ea.oit.va.gov/EA_OIT/VA_EA/ETACompliance.asp.

Element	Symbol	Format
Non-VA System	Rectangle 	Position: N/A Border: Dashed black Fill: White boxes Text: Color: Black — Font: Arial 10 pt. — Size: Default
System of Systems	Rectangle Text Box 	Position: N/A Border: Solid black Fill: Teal. Custom color settings are RGB 49/133/155. Text: Color: Black — Font: Arial 10 pt. — Size: Default
Enterprise-Level Service	Rectangle Text Box 	Position: N/A Border: Solid black Fill: Lavender. Custom color settings are RGB 210/201/222. Text: Color: Black — Font: Arial 10 pt. — Size: Default
Central System Node	Elliptical 	Position: N/A Border: Solid black Fill: Light green fill. Custom color settings are RGB 204/255/204. Text: Color: Black — Font: N/A — Size: N/A
External System Node	Elliptical 	Position: N/A Border: Solid black Fill: Light grey fill. Custom color settings are RGB 239/239/239. Text: Color: Black — Font: N/A — Size: N/A
External System Node (Internal to VA)	Elliptical 	Position: N/A Border: Solid black Fill: Light blue fill. Custom color settings are RGB 255/255/191. Text: Color: Black — Font: Arial — Size: Default

Element	Symbol	Format
System Interface		Position: N/A Border: Solid black fill Fill: N/A Width: 1.25 pt. Text: Color: Black — Font: N/A — Size: N/A
Service Interface		Position: N/A Border: Dashed black Fill: N/A Width: 1.25 pt. Text: Color: Black — Font: N/A — Size: N/A

10.4.1 SIM Creation and Modification Guidelines

The following guidelines are used to create or modify the SIM:

- Each system rectangle should include the VASI ID Number if one has been assigned.
- System Interface labels are placed, where possible, above the horizontal line and closest to either the arrowhead or a 90-degree angle.
- System Interface line intersections are permissible but are minimized to the greatest extent possible.
- The SIM diagram does not have a border.
- System names are used to create system interface names. The naming convention for system interfaces is *sending system acronym - receiving system acronym* (e.g., VistA - BDN).
- Each system interface name uses acronyms of depicted systems, is singular, and contains no special characters. The two system acronyms are connected by a space, hyphen, and another space (-).

11 Data Dictionary (DD)

The DD establishes the terms and descriptions used in the VA EA. This section of the ASG sets forth its purpose, description, attributes, relationship to other models, and conventions.

11.1 DD Purpose

The DD is a table containing terms and definitions used in the VA EA. It is a reference that accompanies the other models in the VA EA and enables clear understanding of the various models with minimal reference to outside sources.

11.2 DD Description

The DD consists of a table that defines all terms used in the VA EA.

Table 11-1 depicts a sample of DD entries.

Table 11-1: DD Example—BPM Processes

Term	Description	Source
Architecture Content	Data within the VA EA either stored in VEAR or published on the Intranet/Internet website that is under configuration control and available to business customers for planning and decision-making. It may be core data that can be mapped to the VEAR Metamodel or aggregates of core data that comprise a VA EA Product.	<ul style="list-style-type: none"> • Content: VA-wide • Metamodel: OEA
Category	Three different categories within the VA BRM are identified as follows: <ul style="list-style-type: none"> • Category 1—Provide services for Veterans and the public. • Category 2—Support delivery of services. • Category 3—Manage government resources. Category is a grouping of capabilities within the VA BRM. 	OEI
Domain	Topical information about VA that spans the following six areas referred to as domains: strategic, business, data and information, system and application, network and infrastructure, and security. The inherent value of EA is contained in providing insight into the complex relationships across the domains and how that insight helps to inform planning and decision-making that leads to realization of the VA vision.	OEA

Cases may exist where more than one Administration in VA uses the same term in different ways. In these cases, the DD includes the definition for each specific instance and incorporates a note to provide for disambiguation by clarifying and narrowing the meaning of defined terms.

11.3 DD Relationship to Other Models

The DD has a single, global relationship to each of the other models, as [Table 11-2](#) shows.

Table 11-2: DD Relationship to Other Models

Model	Relationship
All models	All object terms and acronyms from all models are required to be defined in the DD.

11.4 DD Conventions

The DD is created using a three-column format (see Table 11-1) and contains Term, Description, and Source.

11.4.1 DD Creation and Modification Guidelines

No model guidelines exist for the creation and modification of the DD.

12 VA EA Website Style Guide

12.1 Introduction

The WSG is intended to assist the people who write, develop, and update content on the VA EA Intranet and Internet websites by:

- Facilitating the production of clear and easily understandable content
- Helping writers simplify VA EA technical language for the non-technical VA audience
- Creating useful and usable content
- Assisting contributors in submitting content that adheres to writing and style criteria

The WSG focuses on writing basics and web page structure. It does not address general grammar topics.

This WSG contains three guides for specific audiences and purposes:

- Section 12.3: Website Writing Style Guide—for content providers to the VA EA Intranet and Internet websites
- Section 12.4: Web Page Structure and Presentation Standards—to provide guidance on consistent look-and-feel for the VA EA Intranet and Internet websites
- Section 12.5: VA EA Pulse Style Guide—for content providers working on the VA EA Pulse page on the VA Intranet

Content submission and updates for VA EA communication platforms occur using a specific, approved process; for details, see the VA EA Architecture Development Methodology. Information on the VA EA Program's forms and methods of communication is included in the VA EA Program Communications Plan. The VA Enterprise Architecture Service Support (EASS) Operations Plan offers tracking and analytics information for the VA EA Intranet site. The VEAMS Administrator's Guide provides information on using the VEAMS commercial off-the-shelf (COTS) tools to maintain and update the VA EA Intranet and Internet web pages.

12.2 Audience

The WSG is intended as an authoritative guidance document for the VA EA Intranet and Internet websites.

12.3 Website Writing Style Guide

Good communication is essential to explaining the VA EA's role in VA's enterprise transformation story. Translating the language of enterprise architecture into information that meets the needs of diverse stakeholders and users is an ongoing challenge for staff who post content to VA's most important channels—its Intranet and Internet websites. This Website Writing Style Guide assists the VA EA Team to ensure style consistency and foster clear and accurate communications across all VA EA communication platforms.

Portions of the WSG were adapted from the “VA EA Web Writing Guide,” available on the VA EA Intranet at <http://vaww.ea.oit.va.gov/va-ea-web-writing-guide/>.

12.3.1 Principles of Plain Language

The Plain Writing Act of 2010 (Public Law 111–274, 124 Stat. 286 [2010]) requires that all federal agencies write “clear Government communication that the public can understand and use.”

Using plain language is essential when writing for the web. Users must be able to locate the information they need, understand it, and use it to meet their informational needs.

The following tips focus on helping writers adhere to the principles of plain language as they write about technically complex ideas for the VA EA Intranet website:

1. Write useful and usable content.

During the content creation process, it may be helpful to ask two questions: “What is the purpose of the content?” and “Does the content help the user solve a problem?”

2. Plan a logical structure.

Organize your thoughts into a clear structure. Use the VA EA Intranet Templates (see Appendix D: VA EA Intranet Templates) when applicable to establish the framework for the content. A clear and coherent structure will help the reader to engage more easily and read until the end of the page.

3. Explain the context.

Context is important. The reader may know nothing about the topic or related pages on the site. Clearly explain the context so the page can stand on its own. Do not assume the reader has knowledge of the topic or has visited related pages on the site.

4. Use easy to understand words.

Complex or unfamiliar terms stop people from reading further. Strive to make the text clear. When readers land on the page, they need to be able to understand a complex idea, product, use, or term.

The next section continues to define these elements using examples from the VA EA Intranet.

12.3.2 Writing for the VA EA Website

Writing style for the web is different from the writing style for a report. Web readers are searching for quick answers and want to know the most useful information first.

Readers ask themselves what benefit they can derive from the information and how quickly they can gain it. This is also known as the “What’s in it for me?” question.

Understanding website reading behavior is also important. What do readability studies reveal?

- Readers scan the page with a dominant reading pattern that looks somewhat like an “F.”
- Users do not read web content unless the text is clear, the words and sentences are simple, and the information is easy to understand.

How does this apply to writing for the VA EA website? At the start of the writing process:

1. Be clear about what you want to achieve from your writing.
2. What are the essential points of your message? List them.
3. Organize the points into a clear structure considering both your audience and purpose.
4. Ask, “What do I want the reader of this content to know?”

Remember: When writing for VA’s Internet (externally facing) site, reexamine content to ensure sensitive or private information is removed. Confirm all hyperlinks (links) point to publicly accessible web pages only.

Below are some essential guidelines for contributors to the VA EA websites:

1. Write for the audience.
VA EA’s web content is accessible to a wide range of readers, from EA subject matter experts to novices seeking to educate themselves on architecture topics. Strive to be clear. Answer the “What’s in it for me?” question early in the content so the reader will stay with the article.
2. Use the VA EA Intranet templates.
Three VA EA templates—General, Domain, and Domain Models & Reports—provide standardized guidance for content organization on specific designated VA EA Intranet pages. These templates are available in Appendix D: VA EA Intranet Templates for new Intranet pages or to integrate content into existing pages on the website.
3. Write in short sentences.
Research suggests that most people scan web pages rather than read word-for-word. Use short, meaningful sentences that do not ramble. A typical standard sentence length is no more than 20 words in each sentence. See the before and after examples below.

Before (one sentence with 41 words)	After (two shorter sentences)
The VA Enterprise Technical Architecture (ETA) Compliance Criteria contains architecture rules describing how VA’s IT environment must be designed and configured to ensure solution interoperability and help transition IT capabilities to the technology environment envisioned in the Enterprise Technology Strategic Plan.	The VA Enterprise Technical Architecture (ETA) Compliance Criteria contains architecture rules describing how VA’s IT environment must be designed and configured. The rules ensure solution interoperability and help transition IT capabilities to the technology environment envisioned in the Enterprise Technology Strategic Plan.

Before (one sentence with 44 words)	After (three shorter sentences)
VA currently has four categories of Mobility-related Enterprise Design Patterns that examine the current environment from a mobility perspective and identify relevant challenges related to the user experience, security, and standardization of staff access that must be considered by solution developers and platform providers.	VA currently has four categories of Mobility-related Enterprise Design Patterns. The categories examine the current environment from a mobility perspective. They also identify relevant challenges related to the user experience, security, and standardization of staff access that must be considered by solution developers and platform providers.

4. Use short paragraphs.

Be concise. Chunking—breaking text into smaller “chunks”—helps readers process, understand, and remember content better. Avoid long, rambling paragraphs. Readers are hunting for information, so keep web text as simple as possible. Use a maximum of three shorter sentences in a paragraph. See the before and after example below.

Before	After
In October 2012, a clinical reminder to assess homelessness vulnerability was launched to the field. Additionally, Homeless Management Information Service (HMIS) Repository enhancements were delivered in FY 2013 that improved data quality, streamlined the process for uploading documents, and created a more user-friendly process for uploading documents and managing passwords. The Veteran Re-Entry Search Service (VRSS) increment delivered in July 2013 added the capability of court systems to inquire about a Veteran’s status. Support to Veterans also includes mental health stabilization, substance abuse disorder treatment services, enhancement of independent living skills, vocational and employment services, and assistance with permanent housing searches and placements. Because of VA’s multifaceted efforts, Veteran homelessness has declined by 23 percent since 2009. The EVH initiative has an association with the CDI enterprise business initiative.	Due to VA’s multifaceted efforts, Veteran homelessness has declined by 23 percent since 2009. In October 2012, the VA launched a clinical reminder to the field to assess homelessness vulnerability. Subsequently, Homeless Management Information Service (HMIS) Repository enhancements were delivered in FY 2013 that improved data quality, streamlined the process for uploading documents, and created a more user-friendly process for uploading documents and managing passwords. In July 2013, another initiative—the Veteran Re-Entry Search Service (VRSS)—added the capability of court systems to inquire about a Veteran’s status. Support to Veterans also includes mental health stabilization, substance abuse disorder treatment services, independent living skills enhancements, vocational and employment services, and assistance with permanent housing searches and placements. The EVH program also benefits from an association with the CDI enterprise business initiative.

5. Remove the wall of words.

Add white space by chunking and shortening paragraphs. White space visually separates information and makes the page's content easier to read. See the before and after example below.

Before	After
In the current systems environment, systems are tightly linked with their infrastructures, limiting flexibility and driving up development and sustainment costs. The Enterprise Technology Strategic Plan (ETSP) and the CIO's new IT strategic framework and OI&T Transformation MyVA Breakthrough priority initiative emphasize a commitment to use Enterprise Shared Services (ESS) to more effectively, efficiently and securely deliver interoperable services across internal and external organizations and program boundaries. The Enterprise Service-Oriented Architecture (SOA) Enterprise Design Pattern establishes the framework, guiding principles, and constraints for all projects to use a catalog of approved ESS for designing and building Veteran-centric solutions.	In the current systems environment, systems are tightly linked with their infrastructures, limiting flexibility and driving up development and sustainment costs. The Enterprise Technology Strategic Plan (ETSP) the CIO's new IT strategic framework, and the OI&T Transformation MyVA Breakthrough initiative emphasize a commitment to use Enterprise Shared Services (ESS). This approach will more effectively, efficiently, and securely deliver interoperable services across internal and external organizations and program boundaries. The Enterprise Service-Oriented Architecture (SOA) Enterprise Design Pattern establishes the framework, guiding principles, and constraints for all projects to use a catalog of approved ESS for designing and building Veteran-centric solutions.

6. Write in active voice.

In active voice, the subject performs the action of the verb in the sentence. In passive voice, the sentence leaves out the person or group that is executing the action. Use passive voice sparingly and when the subject of the sentence is unimportant or unknown. See the before and after examples below.

Before (passive)	After (active)
In 2005, a decision was made to centralize IT staff into one organization and to manage all IT under a single IT appropriation.	In 2005, VA decided to centralize IT staff into one organization and to manage all IT under a single IT appropriation.
These mission capabilities are captured as strategic imperatives and strategic options are identified to close capability gaps.	Planners capture these mission capabilities as strategic imperatives, and then identify strategic options to close capability gaps.

7. Use bulleted lists.

Lists are easier to scan than paragraphs. When appropriate, use short lists to help readers remember the content:

- When possible, structure each individual list the same way—either all fragments or all complete sentences.
- Begin each bullet point of a list with a capital letter.
- Each bullet point should be consistent—either end with a period or no period at all.

Use easy-to-scan bullet points to enable readers to easily digest information when they glance at the page. Change paragraphs into bullet points to reduce wordiness when applicable. See the before and after example below.

Before	After
Since the 1996 Clinger Cohen Act, CIOs have been responsible for advising Agency heads on budget, program, and implementation issues concerning information and IT systems. Subsequent statutes such as the Federal Information Technology Acquisition Reform Act (FITARA) and OMB guidance such as Circular A-130 and the OMB memorandum M-11-29 provide additional CIO-related responsibilities and authorities. CIOs are no longer just policymakers who maintain IT infrastructure; rather they are responsible for ensuring that IT solutions support and enable mission and business effectiveness.	<p>Since the 1996 Clinger Cohen Act, CIOs have been responsible for advising Agency heads on budget, program, and implementation issues concerning information and IT systems. Subsequent statutes provided additional CIO-related responsibilities and authorities. For example:</p> <ul style="list-style-type: none"> • Federal Information Technology Acquisition Reform Act (FITARA) • Circular A-130 (OMB guidance) • M-11-29 (OMB Memorandum) <p>CIOs are no longer just policymakers who maintain IT infrastructure; rather they are responsible for ensuring that IT solutions support and enable mission and business effectiveness.</p>

8. Test links.

Provide accurate links with your content. Broken links or outdated material will send frustrated readers away from the content. Always ensure the links work before you submit content for all websites.

Use correct image formats. For details, see Section 12.4.5.6: Graphics.

9. Proofread.

Proofread to look for unnecessary words, errors in content and grammar, typos, and misspellings. After you proofread, it may be helpful to ask someone else to review your work for grammatical errors.

12.4 Web Page Structure and Presentation Standards

This section is intended to ensure that the web pages developed for the VA Intranet and Internet share a consistent look-and-feel.

12.4.1 Preferred Web Browser

Microsoft® Internet Explorer® version 11³⁰ is the preferred browser for visiting the VA EA Intranet and VA Internet.

12.4.2 Intranet Web Page Structure

The main content body is developed by web page owners. Content primarily is descriptive text written for users and supported by graphics and artifacts. Content does not contain menu selections but can contain links, inline citations, or other selectable content.

Figure 12-1 shows a sample VA EA Intranet web page. Each web page on the VA EA Intranet website has five main page elements, or panels; these are called out in this figure. [Table 12-1](#) provides the legend for the numbered callouts in Figure 12-1.

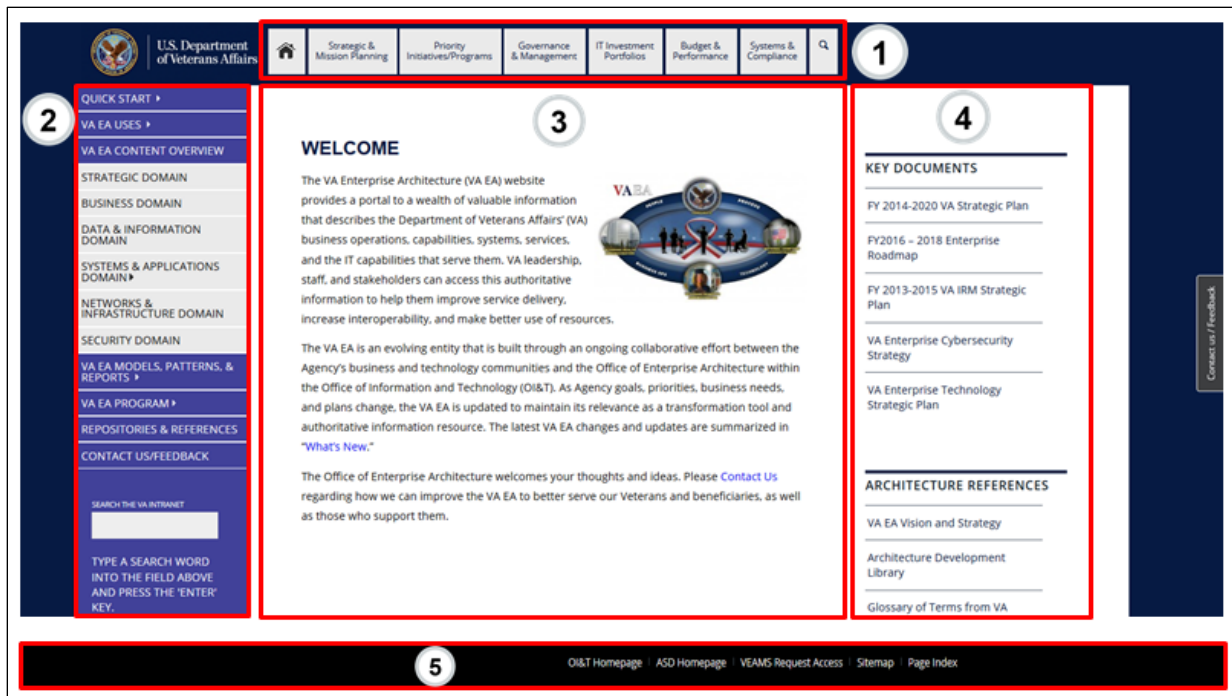


Figure 12-1: VA EA Intranet Page Panels

³⁰ Microsoft and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Table 12-1: VA EA Intranet Homepage Panels

Callout #	Web Page Panel	Description/Content
1	Header	The header, located at the top of every web page, contains VA's logo on a dark blue backdrop with a light grey navigation menu. The menu on the header contains a link to the homepage, Strategic Planning pages, VA Transformation pages, and a search tool. The expanding menu used in the header is referred to as a <i>mega menu</i> .
2	Left Sidebar	The left sidebar contains a menu for users to navigate to pages related to specific topics such as EA program information, EA content, Enterprise Shared Services (ESS)/Service Oriented Architecture (SOA) pages, and references to governance documents. To enable navigating to lower-level pages in the hierarchical menu structure, the left sidebar expands with nested links.
3	Body/Main Content Panel	The body of the web page contains page-specific content. Page content consists primarily of text and can include graphics, links, architecture artifacts, and web tools for users. The body is located in the middle of the web page surrounded by the other four page panels.
4	Right Sidebar	The right sidebar contains a page-specific menu with links to additional related content, including VA Intranet pages, documents (e.g., PDF and Microsoft Excel ³¹ files), and external (Internet) pages.
5	Footer	The footer is located at the bottom of every VA Intranet web page and contains links to the Office of Information and Technology (OI&T) and Architecture, Strategy, and Design (ASD) Intranet homepages, VEAMS access request, page index, and sitemap information. Surveys being conducted are added here. The footer is the same on every web page in the site.

12.4.2.1 Menus

Menus are the primary way that users navigate the VA Intranet website. When pages are created or removed from a website, the designated VA EA team adds or deletes links to those pages on the site menus. All menus share a consistent format across the VA EA Intranet website.

The VA Intranet website employs four types of menus:

- Header menu:

Figure 12-2 shows the VA EA Intranet mega menu, which is a basic part of the Automattic WordPress Enfold theme.³² A mega menu can hold a large amount of content to facilitate the aggregation of related types of content. Links in the mega menu are organized by content area. The mega menu is hidden when not in use, unlike the always visible left and right menus, which reserves screen real estate for other content when a user does not have the mega menu open. Web page owners can request changes to the mega menu for their pages.

³¹ Microsoft and Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

³² WordPress is a registered trademark of Automattic Inc. in the United States.

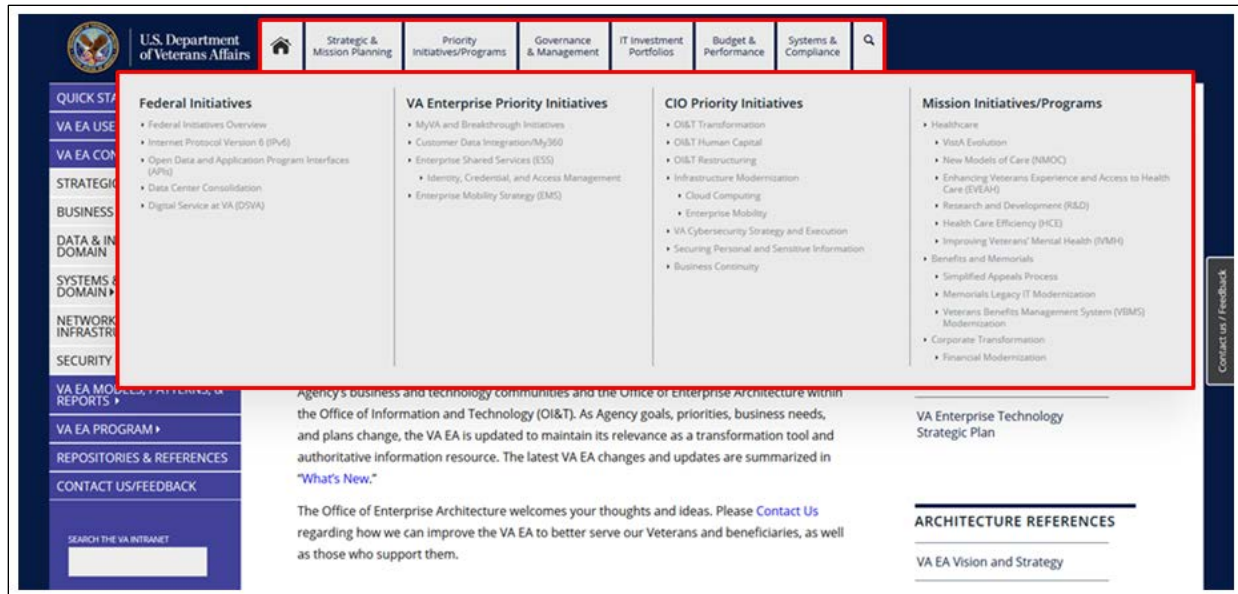


Figure 12-2: Header Mega Menu on VA EA Intranet Website

- Left menu:

Figure 12-3 depicts the left navigational menu in the left sidebar. The left menu is organized hierarchically and can contain submenus. Web page owners can request changes to the left menu for their pages.

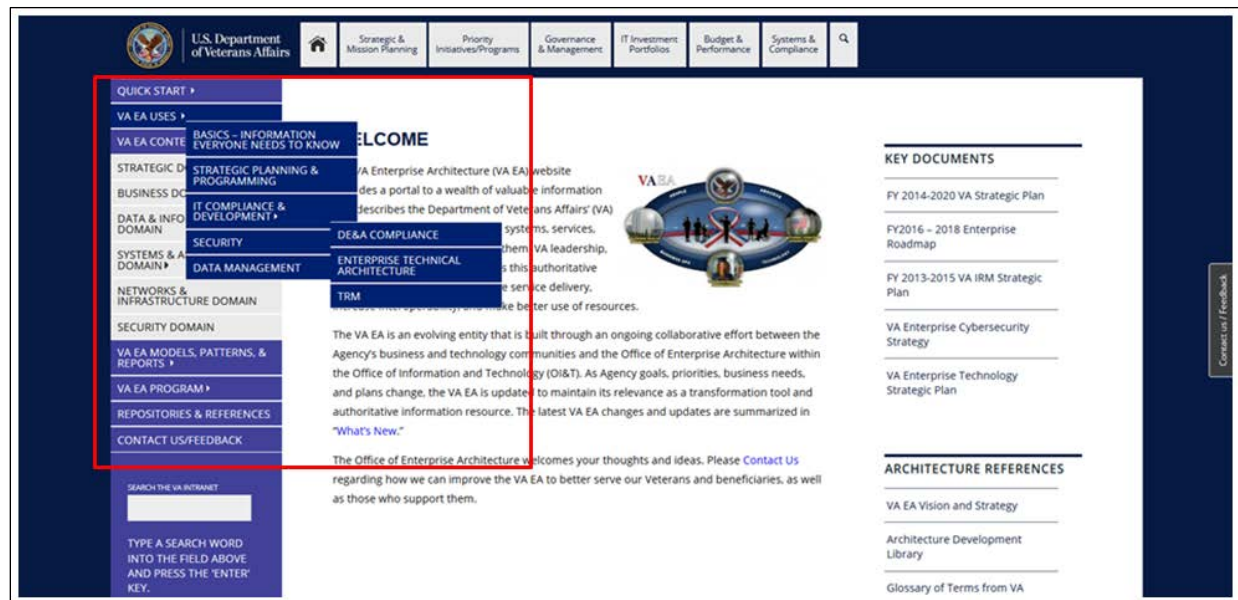


Figure 12-3: Left Menus on VA EA Intranet Website

- Right menu:

The right menu is page-specific—i.e., a plugin enables the display of different menu items on different pages. This menu can contain links to specific places on a web page (called anchors) and links to related Intranet and Internet pages, and documents.

Figure 12-4 shows an example of a page-specific right menu. Web page owners can request changes to the right menu for their pages.

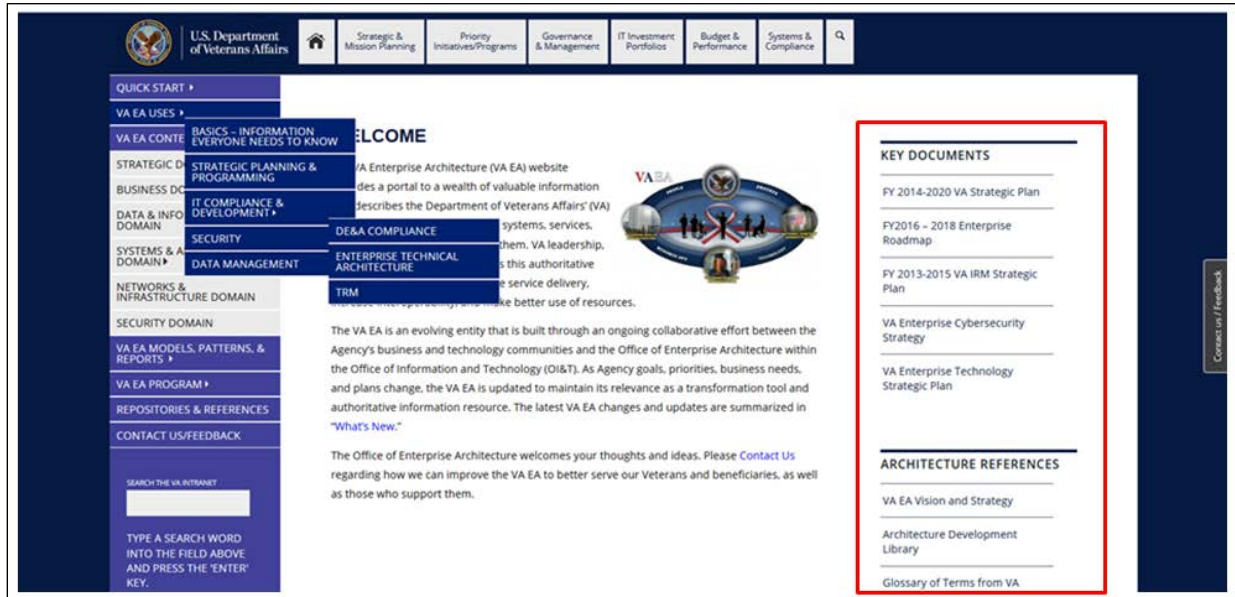


Figure 12-4: Right Menu on VA EA Intranet Website

- Footer menu:

The site footer has links to OI&T and ASD homepages, the VEAMS Access Request, a site map, and a page index. The footer has a black background with white text and is located at the bottom of every VA EA Intranet web page. Figure 12-5 shows the VA Intranet website's footer menu.

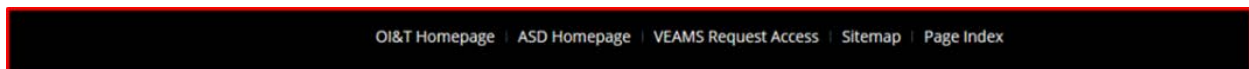


Figure 12-5: Footer Menu on VA Intranet Website

12.4.3 Internet Web Page Structure

VA determines the basic look-and-feel of the VA EA Internet website. To provide a consistent experience for users, VA restricts the areas that can be modified on web pages. VA Internet content owners can request changes to the body of their web pages to meet their specific business needs. They can also request that content be added or removed from the right menu for their pages. However, no changes are allowed to the left menu, header, and footer.

The VA EA Internet website, accessible by the general public, contains a subset of information provided to authorized VA users on the VA Intranet website.

Figure 12-6 is a screen capture of the VA EA Internet homepage. Each web page on the VA EA Internet website has five main web page panels; these are called out on this figure.

Table 12-2 provides the legend to the numbered callouts in Figure 12-6.

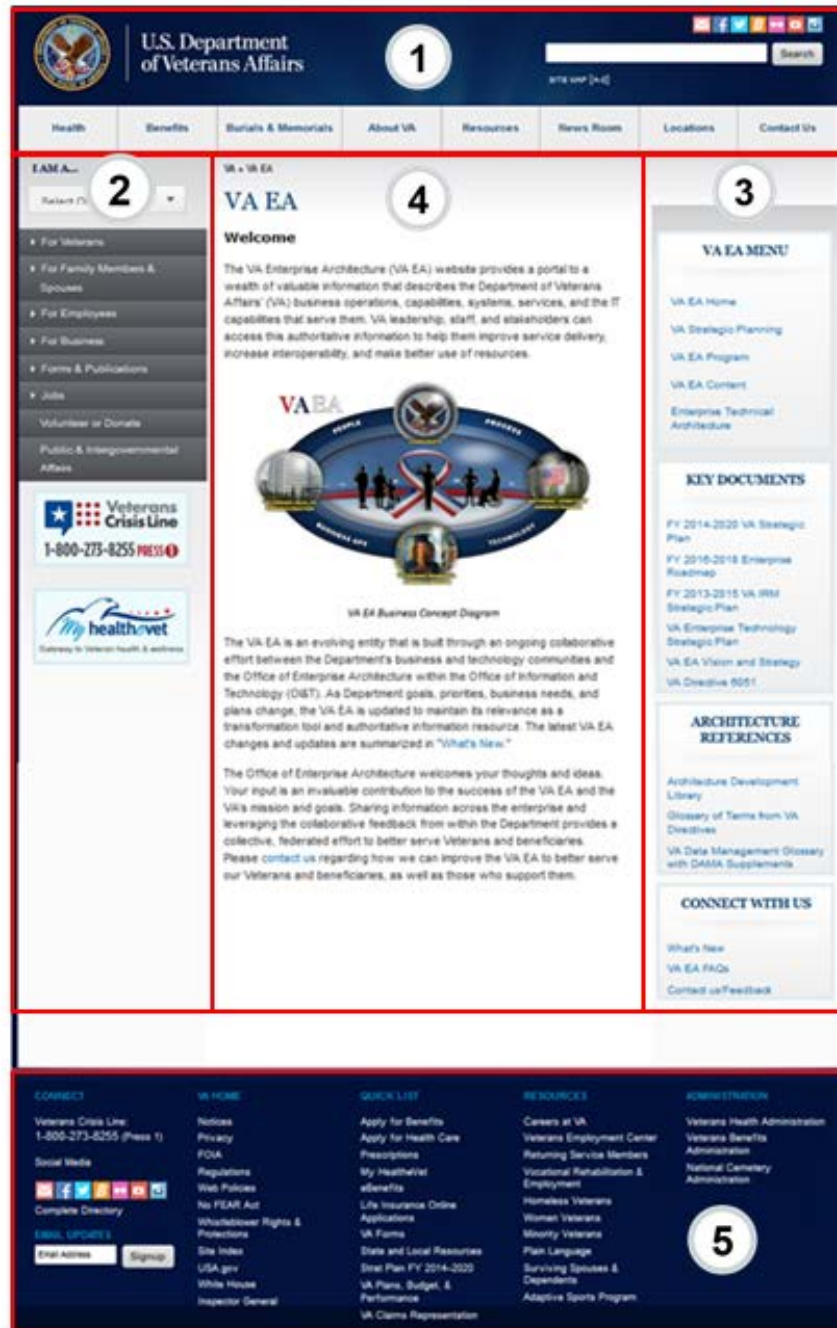


Figure 12-6: VA EA Internet Homepage

Table 12-2: VA EA Internet Page Panels

Callout #	Web Page Panel	Description/Content
1	Header	A header is located at the top of every web page. The header contains VA's logo, a dark blue background, and the va.gov navigation menu. The grey page top menu is static and consistent on all VA websites. Its menu options are Health, Benefits, Burials & Memorials, About VA, Resources, News Room, Locations, and Contact Us.
2	Left Sidebar	The left sidebar contains a navigation menu for VA program information. This menu is controlled for the entire Department and cannot be customized for VA EA content.
3	Right Sidebar	The page-specific right sidebar contains a top Resources Menu followed by submenus with page-specific links. The submenus can contain links to other pages or related documents. The VA EA website uses static and page-specific right menus; most are page specific. The static Resources menu appears on every page.
4	Body/Main Content Panel	The body/main content panel consists primarily of text; it can include graphics, links, architecture artifacts, and web tools for users. The body is located in the middle of the web page, surrounded by the other four page elements.
5	Footer	The footer, located at the bottom of every VA web page, is the same on every web page. It contains links to the va.gov sitemap, VA sites, and resources; the VA crisis hotline phone number; an email sign-up option; and several social media links.

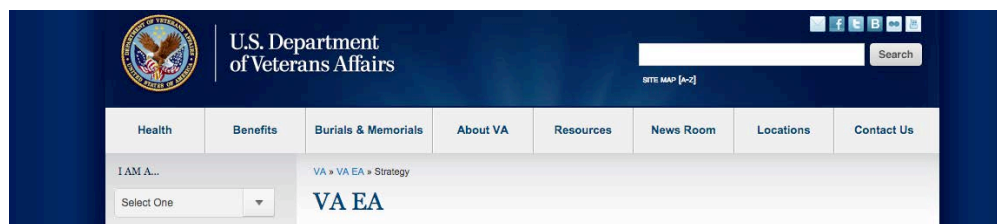
- **Menu:**

Menus are the primary way that users navigate the VA Internet website. When web page owners request web pages to be created, changed, or removed, the designated VA EA team adds, updates, or removes relevant links from page menus.

The VA Internet website employs four types of menus:

- **Header menu:**

Figure 12-7 shows the VA header menu, which appears on every VA website. The header contains VA's logo, a search bar that enables the user to search across all VA websites, a request for VA website update notification email, various social media links, and a standard search entry field. Below the search field is a link to the VA Internet website site map.

**Figure 12-7: Header Menu and Area on VA Internet Website**

- Left menu:

Figure 12-8 shows the left navigational menu. This menu includes many different resources that users can access, organized by user type.

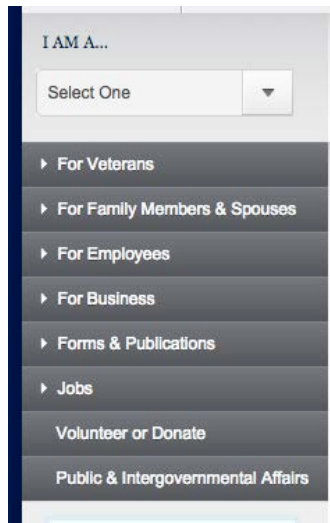


Figure 12-8: Left Menu on VA Internet Website

- Right menu:

Right menus link to documents and other internal and external web pages. The designated VA EA team manages the links on the VA EA Internet site's right menus, which are the only customizable menus on the VA EA Internet site. The Resources portion of the right menu is static and always displays at the top of the right menu on each VA EA Internet page. All sections below the Resources section are page specific. Figure 12-8 shows several right menus on the VA EA Internet website.



Figure 12-9: Right Menu Examples on VA EA Internet Website

– Footer menu:

The footer at the bottom of every VA EA Internet site page has a dark blue background and white text, and contains many links to various VA sites, social media entities, and other helpful resources. Figure 12-10 provides a screen capture of the footer menu.



Figure 12-10: Footer Menu on VA Internet Website

12.4.4 Section 508

Under the Section 508 Standards of the Rehabilitation Act of 1973, part of the Federal Acquisition Regulation, all federal agencies must provide comparable access to electronic information for people with disabilities as they do for those without disabilities.

To provide a comparable user experience for all website visitors, all web pages on the VA Internet and Intranet sites must provide an alternative means of access to information for those with disabilities. This includes but is not limited to the following:

- Removing background images and watermarks from documents
- Providing images that are crisp and legible
- Including links to correct web destinations
- Removing tracked changes from uploaded documents
- Including alt tags for all images and URLs

To view several requirements checklists, go to the VA Section 508 Checklists at <http://vaww.infoshare.va.gov/sites/OHRM/Section508/default.aspx>.

To learn more about Section 508 Standards, go to the U.S. Access Board's "About the Section 508 Standards" page at <https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards>.

12.4.5 Intranet Presentation Standards



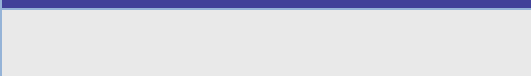
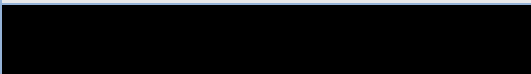


To provide a consistent experience for users each time they visit, VA restricts the areas that can be modified on its Intranet websites. Web page owners on the VA EA Intranet website can request changes to the body, right and left menus, mega menu, and links on their web pages to meet their specific business needs. Only the designated VA EA team can make style changes to areas other than the body.

For information on customizable features, refer to the VEAMS Administrator's Guide.

12.4.5.1 Color Scheme

Headers, menus, and text follow specific color schemes implemented across the VA EA Intranet website. All colors are assigned a six-character hexadecimal or “hex” code. [Table 12-3](#) ~~Table 12-3~~ shows the assigned color for each web page element with its hex code and a color sample.

Table 12-3: Theme Colors

Elements	Hex Color Code	Visual Representations
Main Header, Page Titles, Aspects of Right Menu, Hover on Left Menu, Mega Menu Titles	#061A43	
Left Menu, Mega Menu Search (active)	#414199	
Mega Menus (both hover and active), Search Text Box Background	#E8E8E8	
Footer Background	#FFFFFF	
Links (hover)	#1E73BE	
Links (default)	#0000EE	

12.4.5.2 Fonts

Arial is the font face (Cascading Style Sheet [CSS] term for font name) used for the VA EA Intranet site. [Table 12-4](#) ~~Table 12-4~~ contains the font guidelines for all draft web pages submitted for inclusion on the website. It shows font face, font size, line height, and other display attributes for page titles and the body/main content and a sample of how each appears on the website.

Table 12-4: Font Guidelines

Element	Developer Code	User Example
Page Title	<pre>All page titles use the class “titles” from the main stylesheet: .titles { line-height: 1.3em; text-transform: uppercase; margin-left: -60px; color: #061a43; font-size: 20pt; text-align: left; font-weight: 700; font-family: sans- serif; min-width: 500px; }</pre>	WELCOME

Element	Developer Code	User Example
Body/Main Content	Font size: 16px; Font-family: Arial; Line-height: 175%;	The VA Enterprise Architecture (VA EA) website provides a portal to a wealth of valuable information

12.4.5.3 Links

Links are presentation elements that direct users to other web pages or documents. On the VA EA Intranet site, they appear in blue underlined text.

Figure 12-11 contains two callouts:

- Callout 1 shows an example of a link with descriptive alt text—a page text alternative that assistive technology tools such as screen readers use to help readers. When users activate accessibility options on their workstations, alt text can be read aloud. When VA EA Intranet web page content with links is submitted, alt text must also be submitted for each link to meet Section 508 compliance. For information on Section 508, see Section 12.4.4: Section 508.
- Callout 2 shows the Uniform Resource Locator (URL) of the link's destination displayed at the bottom of the web browser when a user's mouse hovers over the link. This is a function of the web browser used to visit the page.

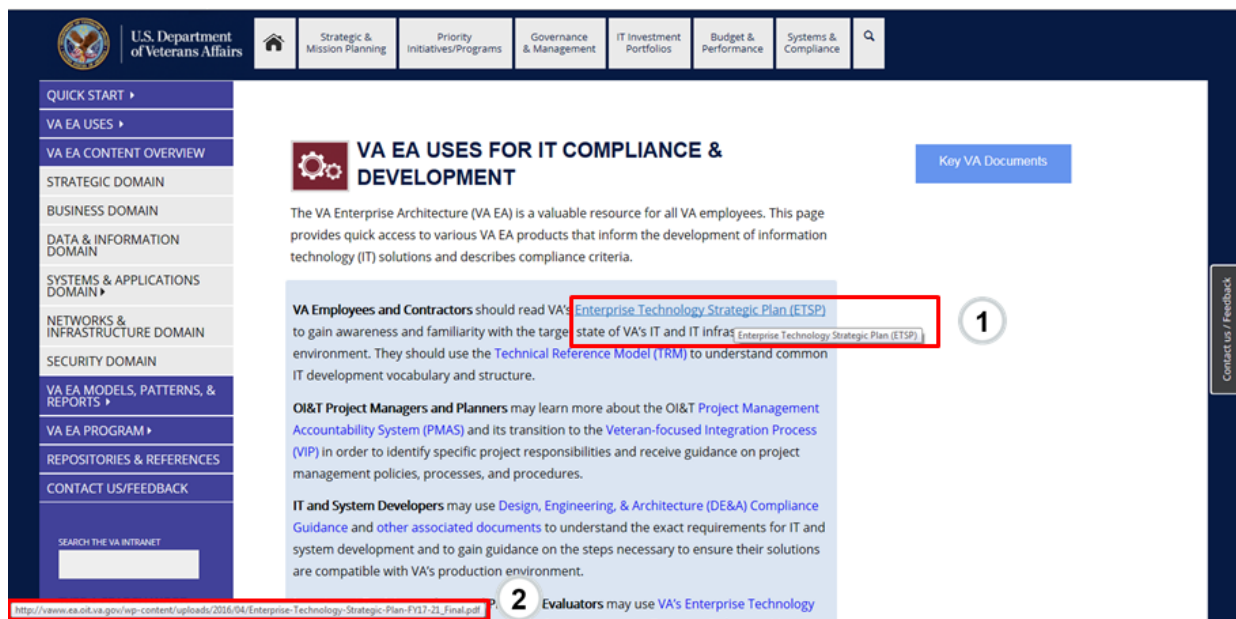


Figure 12-11: Links on VA EA Intranet Website

12.4.5.4 Hovers

Hovers appear as text boxes when the user's cursor moves over text containing associated, additional information. Hovers appear similar to alt text but have a dark blue-colored background from the WordPress Enfold theme. In this theme, the maximum number of characters in a hover is 512.

Figure 12-12 shows an example hover in a graphic on the VA EA Intranet website.

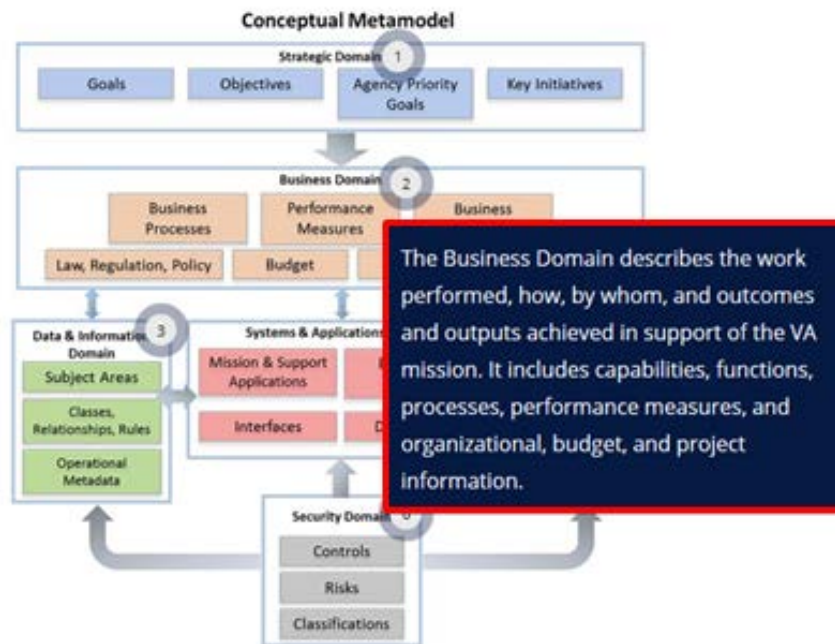


Figure 12-12: Graphic with Hover on VA EA Intranet Website

12.4.5.5 Tables

Tables are used to show information in rows and columns. The WordPress theme controls table styles. Table and row font size and weight information is listed below:

- Table headers are font size 13 pixels, with a font-weight of 700 (bold).
- Table rows are font size 13 pixels, with a font-weight of 400 (not bold).

12.4.5.6 Graphics

Graphics uploaded to the VA EA Intranet are required to have a 960 x 720-pixel aspect ratio or higher. When a graphic is minimized to fit in the body content, this pixel aspect ratio ensures ideal optimization and clarity. Pictures, photos, and other graphical depictions must be in the Joint Photographic Experts Group (JPEG) or Portable Network Graphics (PNG) compression format. Submit Images and graphics in web content using the guidelines below:

- Ensure that all images and other graphical depictions are in JPEG/.jpg or PNG/.png file format.

- Provide details and descriptions related to images (including alt text), graphics, and their functions.

Graphics with hotspots—i.e., areas on graphics that, when selected by users, activate a function through image mapping—require the web page owner to provide the text preceding the graphic that explains to readers how to view the hotspots the graphic contains. The designated VA EA team creates the interactive image. The instructional text at the top of Figure 12-13 (in the red rectangle) is an example of the standard lead-in text required for hotspot graphics.



Figure 12-13: Graphic with Hotspots and Lead-in Text

12.4.6 Internet Presentation Standards

All pages on the VA Internet website use the same stylesheets to present a standard look-and-feel. Content for Internet submission is limited to text and graphics. For information on customizable features, refer to the VEAMS Administrator's Guide.

12.4.6.1 Fonts

For most of the main content of the Internet website, the font face is Arial or Helvetica (sans serif fonts), and the font size is between 13 and 14 pixels (between 9.76 and 10.5 points).

12.4.6.2 Links

On the VA EA Internet site, links are blue and underlined.

Figure 12-14 highlights examples of a link and its associated alt text and URL:

- Callout 1 shows a link. When a mouse hovers over a link, the link text turns dark red. When web page owners include links in its content submission, alt text that describes each link must also be included for Section 508 compliance. For information on Section 508, see Section 12.4.4: Section 508.
- Callout 2 shows the alt text for a link. When a user's mouse hovers over the link, the alt text appears next to the cursor. On computers with accessibility options activated, this text can be read aloud.
- Callout 3 depicts how the URL of the link's destination displays at the bottom of the web browser when a user's mouse hovers over the link. This is a function of the web browser used to visit the page.

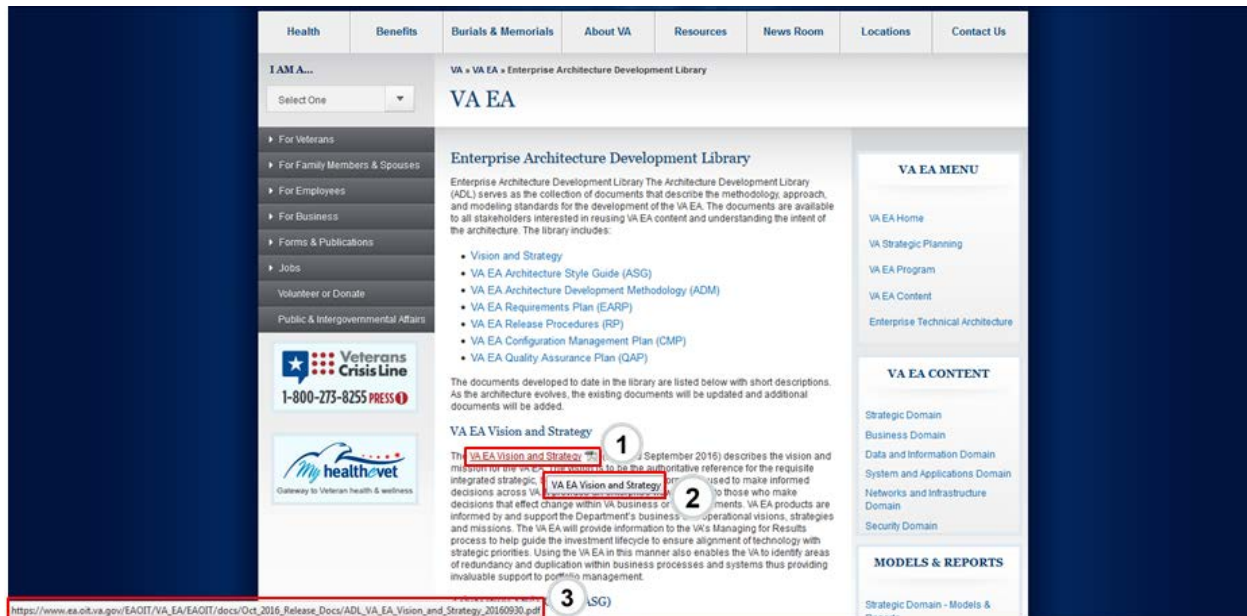


Figure 12-14: Links on VA EA Internet Website

12.4.6.3 Graphics

Graphics uploaded to the VA EA Internet site must be sized at 960 x 720-pixel aspect ratio or higher. When a graphic is minimized to fit in the body content, this pixel aspect ratio ensures ideal optimization and clarity. Pictures, photos, and other graphical depictions should be in the JPEG or PNG compression format.

12.5 VA EA Pulse Style Guide

This VA EA Pulse Style Guide informs the development and structure of the VA EA Pulse page. OEA launched its VA EA Pulse page to increase outreach to a broader range of potential stakeholders and drive users to VA EA resources and Intranet content. VA Pulse is a collaborative online community that brings VA staff together to collaborate, network, and share information. Any current VA staff member with a valid va.gov email address can register to access VA Pulse.

12.5.1 VA EA Pulse Page Structure

Main VA EA Pulse page content is developed by the designated VA EA team with input and approval from various OEA staff and leadership. The VA EA Pulse page has four primary topic components:

- Did You Know (DYK)? Message—invites users to learn more about a VA EA subject area and directs them to the VA EA Intranet for more information.
- SME Interview—government personnel are interviewed on relevant EA topics based on questions developed by the designated VA EA team. SME responses are reviewed and approved by government staff before being placed on the VA EA Pulse page.
- Featured Product Article—a brief article highlighting EA products, services, and capabilities and referring users to more comprehensive content on the VA EA Intranet. Tags are attached to the article to increase audience views.
- “Knowledge Download in a Matter of Minutes”—provides training updates and a link to the VA EA Intranet Training page.

Figure 12-15 is a screen capture of a sample VA EA Pulse page.

VAPULSE U.S. Department of Veterans Affairs

HOME EXPLORE CREATE Search

Following in 1 stream Leave this group

VA Enterprise Architecture

Overview Activity Content People Reports Actions About Share Manage

Enterprise Architecture

VA EA FEATURED SME

About:
Bob Bile is the Enterprise Architect responsible for both the Data & Information and the Security Architecture Domains of the VA EA. Within the Data Domain, he identifies and captures data about VA metadata to better understand what the critical data is, where it is stored, and what data is redundant. In the Security Domain, he is focused on collecting and identifying cybersecurity standards so that application and system and infrastructure solutions are designed consistent with cybersecurity standards. Prior to joining VA EA in 2016, Bob led the EA program at the U.S. Department of Agriculture and also helped develop EA programs at the Department of the Army and in the private sector. He served 32 years with the U.S. Army Reserves and retired in 2016 as a Colonel in the U.S. Army Civil Affairs Corps.

[Read More](#)

VEAR: UNPACK THE TOOLS FOR AN EFFECTIVE EA

Part of the IT toolset of capabilities supporting VA Enterprise Architecture (EA) is the VA EA Management Suite (VEAMS). The VEAMS provides a framework and tools for the collection and presentation of necessary enterprise architecture data to facilitate informed decisions by VA decision-makers. Within this suite of tools there are a number of products, one of which is the VA Enterprise Architecture Repository (VEAR).

[Read More](#)

About the VA EA

The VA Enterprise Architecture (EA) provides an enterprise view of VA to those who make decisions that effect change within VA business or IT environments. It will be achieved via an ongoing, collaborative effort between VA's Administrations, staff offices, and Office of Information and Technology (O&T).

VA EA Intranet Links

- VA EA Homepage
- Quick Start
- VA EA Uses
- VA EA Content
- VABI
- Repositories & References
- Contact Us

Resources

- VA EA Vision and Strategy
- VA Enterprise Technology Strategic Plan (ETSP)
- FY2016 - 2018 Enterprise Roadmap

Related Channels

- Follow Technology Strategies
- Follow Data Governance Council
- Follow Dr. Tibbitts
- Follow ASD
- Follow VHA Business Architecture

Figure 12-15: Sample VA EA Pulse Page

12.5.2 Content Schedule

Content is rotated weekly to the top of the VA EA Pulse page. Table 12-5 shows an example rotation method schedule where the newest content (**DYK**) secures the top page position in Week 1, and then moves down the page to the bottom position in Week 2. Then, in Week 3, it moves up one position and continues to move up one position each week until it rotates to the top again in Week 5.

Table 12-5: Example VA EA Pulse Content Rotation

Week 1	Week 2	Week 3	Week 4	Week 5
DYK	SME Interview	VA EA Featured Product	Training Update	DYK
SME Interview	EA Featured Product	Training Update	DYK	SME Interview
VA EA Featured Product	Training Update	DYK	SME Interview	VA EA Featured Product
Training Update	DYK	SME Interview	VA EA Featured Product	Training Update

12.5.3 VA EA Pulse Presentation Standards



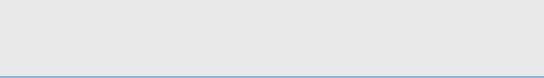

The VA EA Pulse page is customized using built-in page widgets to highlight important information for VA EA Pulse users. Updates to the VA EA Pulse page occur weekly. When updates are completed, they remain in draft form until approved by the government lead.

The Related Channels section of the VA EA Pulse page encourages outreach and connections to other organizations.

12.5.3.1 Design and Development

The VA Enterprise Architecture page on VA Pulse is customized to align with the VA EA Intranet color schemes. ~~Table 12-6~~ shows the assigned six-character hex codes on the VA Pulse page.

Table 12-6: VA Pulse Color Scheme

Element	Hex Color Code	Visual Representation
Homepage Content Area Title Background	#061A43	
Homepage Content Area Title	#FFFFFF	
Homepage Content Area Background	#EEEEEE	
Homepage VA EA Featured SME Background	#FFFFFF	

The source code for all custom VA Pulse pages is located in the following folder on the VA network:

<V:\Information & Technology\Office of Enterprise Architecture\Developer Source Code\Did You Know Email Temp>

The Web Content Manager must provide access to all server folders containing developer notes and documentation.

For more information on VA Pulse, go to the following VA Pulse pages:

- Pulse 101 at <https://www.vapulse.net/community/pulse-central/pulse-101>
- Training Center at <https://www.vapulse.net/community/pulse-central/training-sessions>

The login credentials for VA Pulse are below:

- Username: ea@va.gov
- Password: VACOea!123

Appendix A Acronyms and Abbreviations

Acronym	Definition
AB	Architecture Board
ADM	Architecture Development Methodology
ASD	Architecture, Strategy, and Design
ASG	Architecture Style Guide
B2B	Business-to-Business
BDN	Benefits Delivery Network
BFF	Business Function Framework
BPM	Business Process Model
BPMN	Business Process Model and Notation
BRM	Business Reference Model
CAF	Common Approach to Federal Enterprise Architecture
CAP	Cross-Agency Priorities
CDM	Conceptual Data Model
CG	Concept Graphic
CM	Configuration Management
CONOPS	Concept of Operations
COTS	Commercial off-the-Shelf
DD	Data Dictionary
DEERS	Defense Enrollment Eligibility Reporting System
DoDAF	Department of Defense Architecture Framework
DYK	Did You Know
EA	Enterprise Architecture
EASS	Enterprise Architecture Service Support
ECDM	Enterprise Conceptual Data Model
eCIS	Enterprise Contact Information System
ELDM	Enterprise Logical Data Model
ERD	Entity-Relationship Diagram
ESS	Enterprise Shared Services
ETA	Enterprise Technical Architecture
FEA	Federal Enterprise Architecture
FOM	Functional Organization Manual
GAO	Government Accountability Office
GP	Guiding Principles
ID	Identifier
IDEF	Integrated DEFinition
IDEF0	Integrated DEFinition Function Modeling Method
IT	Information Technology
JPEG	Joint Photographic Experts Group
LDM	Logical Data Model
MVI	Master Veteran Index
NCA	National Cemetery Administration
OEA	Office of Enterprise Architecture
OEI	Office of Enterprise Integration
OI&T	Office of Information and Technology
OMB	Office of Management and Budget

Acronym	Definition
OMG	Object Management Group
OSI	Overview and Summary Information
PDF	Portable Document Format
PKMCS	Process and Knowledge Management and Communications Service
PNG	Portable Network Graphics
RGB	Red/Green/Blue
SIM	Systems Interface Model
SME	Subject Matter Expert
SOA	Service-Oriented Architecture
SVG	Scalable Vector Graphics
TOGAF	The Open Group Architecture Framework
URL	Uniform Resource Locator
VA	Department of Veterans Affairs
VACO	VA Central Office
VASI	VA Systems Inventory
VBA	Veterans Benefits Administration
VBMS	Veterans Benefits Management System
VDAS	Veteran Data Access Service
VEAMS	VA Enterprise Architecture Management Suite
VEAR	VA Enterprise Architecture Repository
VHA	Veterans Health Administration
VistA	Veterans Health Information Systems and Technology Architecture
WSG	Website Style Guide

Appendix B Terms and Definitions

Term	Definition
Acronym	The initials of a standard phrase used in the VA EA.
Action Assertion Business Rule	<p>These rules concern some dynamic aspects of the business and specify constraints on the results that actions produce. There are three types of action assertions:</p> <ul style="list-style-type: none"> • Condition: This is a guard or the “if” portion of an “if-then” statement. If the condition is true, it may signal the need to enforce or test additional action assertions. • Integrity Constraint: These must always be true (e.g., a declarative statement). • Authorization: This restricts certain actions to certain human roles or users.
Activity Box	An enclosed rectangular box used in process modeling to describe sequences of business activities from start to finish, and represent operational functions that are performed within a business process in a specified sequence in the conduct of business within VA.
Artifact	A graphical object that shows additional information about a process that is not directly related to the Sequence Flow or Message Flow. There are three artifacts: Data Objects, Annotations, and Groups.
Association/Group	An Association used to link information with other grouped or related BPMN (graphical) elements. It is indicated by a dotted line and may not have direction.
Attribute	<p>A property or characteristic that is common to some or all instances of an Entity:</p> <ul style="list-style-type: none"> • Attributes that identify Entities are key Attributes. • Attributes that describe an Entity are non-key Attributes. • Attributes are associated to one and only one Entity or Subject Area.
Availability	Timely, reliable access to data and information services for authorized users.
Box Name	The verb or verb phrase placed inside a BPMN box to describe the modeled function.
Box Number	The number (0 to 9) placed inside the lower right corner of a BPMN box. It serves as a unique identifier for the box on a diagram.
Branch	A junction (fork or join) of two or more arrow segments.
Branching Point	Gateways within a Business Process where the flow of control can take one or more alternative paths. Synonymous with Decision Point and expressed as a diamond shape.
Business Capability	The expression or articulation of the capacity, materials, and expertise VA needs to perform core functions, execute a specific course of action, and deliver value to its customers and stakeholders. Enterprise Architects use Business Capabilities to illustrate the overarching needs of the business, better strategize IT solutions that meet business needs, determine if something is or is not a capability, and differentiate capabilities one from another.
Content	A VA EA Model, Report, Diagram, or Data described in the ASG.
Data Element	Implementation of an attribute; synonymous with data item and field. It allows a common format or small set of values to be assigned to more than one attribute or derived data (such as an aggregation) that is not an Attribute. A data element is the smallest unit of named data that has meaning to a knowledge worker.

Term	Definition
Data Model	Identifies the Entities, Attributes, and Relationships (or Associations) with other data and includes the set of diagrams for each view along with the metadata defining each object in the model. A complete data model also may include state transition diagrams depicting each major entity lifecycle and value chain analysis linking the data model to processes, roles, Administrations and Staff Offices, goals, applications, and projects. A data model describes real-world objects and the relationships between the objects, independent of any associated process. It provides a graphic and textual description of data needed by VA to achieve its mission, vision, strategies, goals, and objectives, and assess and manage the Department.
Data Object	Additional information on a BPM that has no direct effect on the Sequence Flow or Message Flow but shows the data that may be passed, created, or consumed by the BPM Process. Data Objects are a mechanism to show how data is required or produced by Process Steps. A Data Object is considered an artifact because it does not have a direct effect on the Sequence or Message Flow of the process.
Decomposition	The partitioning of a modeled function into its component functions. Subdivision of a problem into its component parts to facilitate analysis and understanding of those components.
Default Flow	Sequence Flow, for Data-based Exclusive Decisions or Inclusive Decisions, which shall be used only if not all the other outgoing Conditional Flows are true at run time.
Diagram	A graphical notation for specifying business processes or procedures, supports text descriptions of the graphical relationships, and enhances understanding and ability to communicate these in a standard and consistent manner. A single unit of a Model that presents the details of a box.
Maintain	To keep in an existing state (as of repair, efficiency, or validity) and preserve from failure or decline by correcting problems or applying technical updates on a regular basis for it to continue to function.
Modify	To change existing VA EA content, item, document, or design to give a new orientation or serve a new end.
Relationship	An association between two or more Entities, or between instances of the same Entity, with or without dependencies.
Relationship Cardinality	Cardinality refers to the degrees of relationship, and the number of occurrences in one entity associated (or linked) to the number of occurrences of the same entity in another occurrence. There are three degrees of relationship: one-to-one, one-to-many, and many-to-many.
Relationship Name	A Relationship Name or label is a verb or verb phrase that reflects the meaning of the Relationship expressed between the two Entities shown in the diagram on which the name appears.
Segment Architecture	A VA architecture at the Administration or Staff Office level.
Title-case	Significant words have leading capital letters and lowercase trailing letters; minor words (e.g., conjunctions and prepositions) are in all lower case.
Update	To change something by including the most recent information; to make something more modern.

Appendix C References

An asterisk (*) preceding a reference below indicates that the source applies to Section 12.3: Website Writing Style Guide.

“2017—Functional Organization Manual v4.0.” Department of Veterans Affairs. 2017.

https://www.va.gov/ofcadmin/docs/VA_Functional_Organization_Manual_Version_4.pdf.

“About the Section 508 Standards.” U.S. Access Board. [https://www.access-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards)

[board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards).

“Business Function Framework (BFF) Guiding Principles.” Department of Veterans Affairs: Veterans Health Administration, Office of Informatics and Analytics, Strategic Investment Management. April 2013.

http://vaww.vha.esp.va.gov/sites/BA/Active%20Documents/Business%20Function%20Framework_Supplemental%20Guide.xlsx.

Department of Defense Deputy Chief Information Officer. “The DOD Architecture Framework (DODAF) Version 2.02.” Department of Defense. August 2010.

http://dodcio.defense.gov/Portals/0/Documents/DODAF/DoDAF_v2-02_web.pdf.

“Design, Engineering, and Architecture (DE&A) Compliance.” Department of Veterans Affairs, Office of Enterprise Architecture.

http://www.ea.oit.va.gov/EA/OIT/VA_EA/ETACompliance.asp.

“Documents Associated with Business Process Model and Notation (BPMN) Version 2.0.” Object Management Group. January 2011. <http://www.bpmn.org/>.

“FEA Business Reference Model version 3.1.” Office of Management and Budget. May 15, 2013.

https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/egov_docs/brm_v3-1-service_codes_and_definitions_rev1_20130615.pdf.

“Federal Enterprise Architecture Framework Version 2.” Federal CIO Council. January 29, 2013.

https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/egov_docs/fea_v2.pdf.

* “Federal Plain Language Guidelines.” Plain Language Action and Information Network.

Revision 1 May 2011. <http://www.plainlanguage.gov/howto/guidelines/FederalPLGuidelines/FederalPLGuidelines.pdf>.

* “Grammar Handbook: Writers Workshop: Writer Resources.” The Center for Writing Studies,

University of Illinois at Urbana-Champaign. <http://www.cws.illinois.edu/workshop/writers/>.

“Health Information Strategic Plan for Veterans Health Administration—Supporting VA Health Care, Fiscal Year 2014—2019, Version 2.4.” Department of Veterans Affairs, July 2014.

http://www.ea.oit.va.gov/EA/OIT/docs/May_2015-Release_Documents/VHA-Health-Information-Strategic-Plan-Version-2-4-July-2014.pdf.

- IEEE Standards Association. "IEEE Standard 1320.1 IEEE Standard for Functional Modeling Language—Syntax and Semantics for IDEF0, Active Standard, Reaffirmed 2004." 2004. <https://standards.ieee.org/findstds/standard/1320.1-1998.html>.
- IEEE Standards Association. "IEEE Standard 1320.2 IEEE Standard for Conceptual Modeling Language—Syntax and Semantics for IDEF1X97 (IDEFobject), Active Standard, Reaffirmed 2004." <http://standards.ieee.org/findstds/standard/1320.2-1998.html>.
- * Jarrett, Caroline, and Jane Matthews. "Editing that works: principles and resources for editing for the web." <http://www.editingthatworks.com/>.
- * Nielsen, Jakob. "F-Shaped Pattern for Reading Web Content." Nielsen Norman Group. April 17, 2006. <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/?lm=how-people-read-web-eyetracking-evidence&pt=report>.
- "Object Management Group Business Process Model and Notation." Object Management Group. <http://www.bpmn.org/>.
- * "Office of Information and Technology Style and Quality Assurance Guide." Department of Veterans Affairs, Office of Information and Technology. https://vaww.sde.portal.va.gov/docctr/Drop%20Off%20Documents/OIT_Style_and_Quality_Assurance_Guide.pdf.
- "Process and Knowledge Management and Communications Service (PKMCS) Architecture, Strategy and Design Web and SharePoint Operations Guide. Department of Veterans Affairs: VA Process Management, Knowledge Management, and Communications. February 5, 2014." Department of Veterans Affairs Office of Architecture, Strategy, and Design. <http://vaww.ea.oit.va.gov/wp-content/uploads/2017/03/ASD-Web-SP-Ops-Guide.pdf>.
- "The Common Approach to Federal Enterprise Architecture (CAF)." Office of Management and Budget. May 2, 2012. <http://www.immagic.com/eLibrary/ARCHIVES/GENERAL/WHITEHSE/W120502C.pdf>.
- "The Open Group Architecture Framework (TOGAF) Version 9.1 Enterprise Edition." The Open Group. December 2011. <https://www.opengroup.org/togaf/>.
- * "The Principles of Clear, Concise and Error-Free Writing for the Web." Write Content Solutions. <http://www.write.com/writing-guides/writing-for-the-web/the-principles-of-clear-concise-and-error-free-writing-for-the-web/>.
- * "U.S. Energy Information Administration (EIA) Writing Style Guide." U.S. Energy Information Administration Office of Communications. April 2015. <http://www.eia.gov/about/eiawritingstyleguide.pdf>.
- * "U.S. Government Printing Office Style Manual, 2008." U.S. Government Publishing Office. <https://www.gpo.gov/fdsys/pkg/GPO-STYLEMANUAL-2008/content-detail.html>.
- "VA Directive 6102, Internet/Intranet Services." July 15, 2008. Department of Veterans Affairs. https://www.va.gov/vapubs/viewPublication.asp?Pub_ID=409&FType=2.

VA EA Architecture Development Methodology. Department of Veterans Affairs, Office of VA Enterprise Architecture. April 18, 2016.

<https://vaww.vashare.oit.va.gov/sites/OneVaEa/Deliverables/Forms/AllItems.aspx?RootFolder=%2Fsites%2FOneVaEa%2FDeliverables%2FArchitecture%20Deliverables%2FMethodology%5FDeliverables%2F1003AE%5FVA%5FEA%5FArchitecture%5FDevelopment%5FMethodology&FolderCTID=0x012000524C3A7058DCC645A9CC3FFDF83D9D51&View=%7BB7AE806E%2D9263%2D4ED1%2D9EBA%2D7CFFE7E8490A%7D>.

“VA EA Business Reference Model.” Department of Veterans Affairs, Office of Enterprise Architecture.

https://www.ea.oit.va.gov//EAOIT/docs/May_2017_Release_Docs/20170424_BDMR_VA-BRM.pdf.

“VA BRM to FEA Services Report.” Department of Veterans Affairs, Office of Enterprise Architecture. April 2017.

https://www.ea.oit.va.gov/EAOIT/docs/May2017docs/20170424_BDMR_VA-BREM-FEA-Service.pdf.

“VA EA Business Architecture.” Department of Veterans Affairs, Office of Enterprise Architecture. http://www.ea.oit.va.gov/EAOIT/VA_EA/VAEA_BusinessArchitecture.asp.

VA EA Program Communications Plan, Version 1.1. Department of Veterans Affairs, Office of VA Enterprise Architecture. December 9, 2016.

<https://vaww.vashare.oit.va.gov/sites/OneVaEa/Deliverables/Forms/AllItems.aspx?RootFolder=%2Fsites%2FOneVaEa%2FDeliverables%2FCommunications%20and%20Training%20Deliverables%2F2005AC%20VA%20EA%20Program%20Communications%20Plan&FolderCTID=0x012000524C3A7058DCC645A9CC3FFDF83D9D51&View=%7BB7AE806E%2D9263%2D4ED1%2D9EBA%2D7CFFE7E8490A%7D>.

VA EA Service Support Operations Plan. Department of Veterans Affairs, Office of VA Enterprise Architecture. June 9, 2017.

<https://vaww.vashare.oit.va.gov/sites/OneVaEa/Deliverables/Forms/AllItems.aspx?RootFolder=%2Fsites%2FOneVaEa%2FDeliverables%2FCommunications%20and%20Training%20Deliverables%2F2005AF%5FEA%5FSupport%5FService%5FOperations%5FPlan&FolderCTID=0x012000524C3A7058DCC645A9CC3FFDF83D9D51&View=%7BB7AE806E%2D9263%2D4ED1%2D9EBA%2D7CFFE7E8490A%7D&InitialTabId=Ribbon%2EDocument&VisibilityContext=WSSTabPersistence>.

“VA Handbook 6102, Internet/Intranet Services.” July 15, 2008. Department of Veterans Affairs.

https://www.va.gov/vapubs/viewPublication.asp?Pub_ID=410&FType=2.

VEAMS Administrator’s Guide. Department of Veterans Affairs, Office of VA Enterprise Architecture. May 19, 2017.

<https://vaww.vashare.oit.va.gov/sites/OneVaEa/Deliverables/Forms/AllItems.aspx?RootFolder=%2Fsites%2FOneVaEa%2FDeliverables%2FTools%5FDeliverables%2F2004AD%5FVEAMS%5FAdministrator%27s%5FGuide%2F201703%5FMar%5F2017%5FRelease%5FVEAR%5F2%2E3&FolderCTID=0x012000524C3A7058DCC645A9CC3FFDF83D9D51&View=%7BB7AE806E%2D9263%2D4ED1%2D9EBA%2D7CFFE7E8490A%7D>.

[2D9263%2D4ED1%2D9EBA%2D7CFFE7E8490A%7D&InitialTabId=Ribbon%2EDocument&VisibilityContext=WSSTabPersistence.](#)

- * “Writing Principles | USAGov Bilingual Style Guide.” USAGov. <https://www.usa.gov/style-guide/style-guidance>.

Appendix D VA EA Intranet Templates

This section contains three templates for VA EA Intranet and Internet website content:

- VA EA General in Appendix D1
- VA EA Domain in Appendix D2
- VA EA Domain Models & Reports in Appendix D3: VA EA Domain Models & Reports Template

Use these templates to submit all new or updated content, information, models, and reports to the designated VA EA team. Send all submissions to the VA Central Office (VACO) EA inbox at ea@va.gov. Text enclosed within angle brackets (< >) describes what to include when submitting content or an explanation.

D1 VA EA General Template

<Title of tool/artifact/report/issue>

<Introduce the content you will be describing and explaining below. Why was it established or created? Give a brief overview of the tool/artifact/report/issue. To point interested readers to directives, sources, and other pages with more or related information, include links to these resources.>

Scope

<Insert subtitles if necessary.>

<Explain the scope of the tool/artifact/report/issue. What is it? What is it not? What does it contain? What does it describe?>

Usage

<Insert subtitles if necessary.>

<What is the purpose of the tool/artifact/report/issue? What is the benefit? What does it do? What are the relationships between other tools/artifacts/reports/issues? How does it improve the VA EA?>

Future Enhancements

<Insert subtitles if necessary.>

<What are future plans for the tool/artifact/report/issue? How will it be enhanced in the future? What are next steps? What are the focus areas for the tool/artifact/report/issue? What will it look like in its completed form?>

Related Links

<Add complete titles and links for all related pages within the VA EA.>

D2 VA EA Domain Template

VA EA <insert Domain Name> DOMAIN

Opening Paragraph

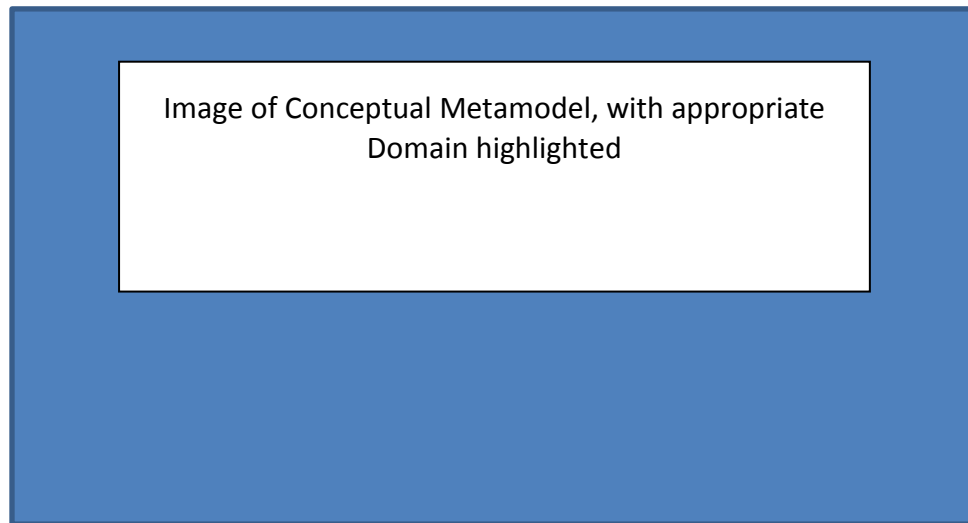
<Briefly describe how this domain and its content ties into VA's commitment to Veterans and the effort to transform VA into a modern, 21st century organization.>

Applicable Domain Pyramid Image

Domain Scope

<Describe in a paragraph or two the scope of the domain. What does this domain address? What does it describe? What does it include? Does it categorize or facilitate anything? Are there any locations where data from this domain is captured? Are any VA EA tools within the scope of the domain?>

<Figure below shows how the Conceptual Metamodel image appears.>



Conceptual Metamodel—<Insert Domain Name> Domain View

Relationships

<Describe the relationships within the domain. What other domains are closely related? Does this domain depend on other domains? Do other domains depend on this one? What tools or artifacts in other domains overlap or interact with this domain? What do these relationships establish? How do these connections benefit VA processes, efficiency, or performance measures? How do these relationships benefit VA overall? What is the To-Be goal for relationships within this domain?>

Future Enhancements

<Write a two or three sentence paragraphs about the long-range goals and expectations for development within this domain. What are the opportunities for the future within this domain?>

How will this domain be extended? Are there current efforts in place for the future enhancement of the domain? What are future enhancements dependent on? What is being focused on as this domain is developed? What are planned next steps for this domain? What are longer-range steps?>

Key EA Artifacts Currently Available

- <Insert & Hyperlink Key Artifact/Tool/Document/Guidance/etc.>— Write a short, two-to five-line description of this tool, artifact, document, or other item.>
- <Repeat as necessary.>

For additional products, visit the <Insert & Hyperlink Domain Name—Models & Reports page if applicable> page.

Related Resources

- <Insert & Hyperlink Relevant or Related VA EA pages>—<Are there any other relevant or related web pages on the VA EA website? Is there another page with helpful information around about this domain?>

D3 VA EA Domain Models & Reports Template

<DOMAIN Name>—MODELS & REPORTS

Introduction to <Domain Name> Models & Reports Page: <What does this Domain describe? To what areas of VA or the VA EA does this Domain provide information? Are elements of the Domain enabled by other parts of the VA EA? Who uses the information in this Domain? When combined with other information, what can the information in this Domain do? What does it enable? How can the information in this Domain be used? With what other Domains or reports do these reports/models correlate? Do these reports/models identify any solutions? How are they used to enable execution of VA's mission?>		
Title of Report/Model	<Description of Model/Report: What does this report do? What information does it provide? What is new, or updated about this report/model? What information is represented here? What relationships are represented between or within Domains?>	Link/Attachment to Report in all Forms (PDF, Excel, and SVG):
Title of Report/Model	<Description of Model/Report: What does this report do? What information does it provide? What is new, or updated about this report/model? What information is represented here? What relationships are represented between or within Domains?>	Link/Attachment to Report in all Forms (PDF, Excel, and SVG):

Introduction to <Domain Name> Models & Reports Page:		
Title of Report/Model	<Description of Model/Report: What does this report do? What information does it provide? What is new, or updated about this report/model? What information is represented here? What relationships are represented between or within Domains?>	Link/Attachment to Report in all Forms (PDF, Excel, and SVG):