COMMONWEALTH OF VIRGINIA

Information Technology Resource Management (ITRM)

ENTERPRISE ARCHITECTURE POLICY

Virginia Information Technologies Agency (VITA)

Reviews

- This publication was reviewed and approved by the ~~Policy, Practice and~~ _Enterprise_ Architecture Division within VITA.
- Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

Publication Version Control

Questions related to this publication should be directed to VITA's ~~Policy, Practice and~~ _Enterprise_ Architecture Division _(EA)_ ~~(PPA)~~. _(EA)_ ~~(PPA)~~ notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

The following table contains the history of revisions to this publication.

Version	Date	Revision Description
Original	07-20-2006	Base Document
200-01	08-24-2010	Revisions are primarily administrative in nature to make this document compliant with recent legislative changes and changes to the EA Standard. In the Appendix, the Enterprise Technical Architecture Change/Exception Request form has been changed to the Enterprise Architecture Change/Exception Request form. The form's scope and use has been broadened and the corresponding processes and instructions have been modified accordingly.
200-02	07-03-2012	Document revised to incorporate the Enterprise Information Architecture (EIA) provisions and reflect public comment relating to the EIA provisions.
_200-03_	_06-01-2016_	_Revision necessitated by changes in the Code of Virginia and organizational changes in VITA._

Identifying Changes in This Document

- See the latest entry in the revision table above
- Vertical lines in the left margin indicate the paragraph has changes or additions. Specific changes in wording are noted using italics and underlines; with italics only indicating new/added language and italics that is underlined indicating language that has changed.

  The following examples demonstrate how the reader may identify requirement and recommend practice updates and changes:

- **ITIM-R-01** **Example with No Change –** The text is the same. The text is the same. The text is the same.

- **ITIM-R-02** **Example with Revision –** The text is the same. _A wording change, update or clarification is made in this text._

- _**ITIM-R-03** **Example of New Text –** This language is new._

- ~~**ITIM-R-03** **Technology Standard Example of Deleted Standard –** This standard was rescinded on mm/dd/yyyy.~~

Preface

Publication Designation
ITRM Policy EA200-~~02~~03: Enterprise Architecture Policy

Subject
Enterprise Architecture

Effective Date
June 1, 2012

Supersedes
ITRM Policy EA200-01: August 24, 2010, Enterprise Architecture Policy

Scheduled Review:
This policy shall be reviewed every two years.

Value Statement
Enterprise Architecture aligns information technology with line-of-business goals. Agencies that embrace business driven architectures have a technology plan to guide their directions, choices, and investments. They also possess a framework allowing them to respond to business and IT trends.

Agencies with strong business-driven architectures leverage declining technology funds and optimize staff resources. Enterprise Architecture increases an agency's ability to provide consistent services, accessible information, scalable infrastructure, and flexible technology integration on demand. It helps bridge the gap between business and IT and creates a shared enterprise vision.

Authority
~~*Code of Virginia,* §2.2-225 (Powers and duties of the Secretary of Technology~~

Code of Virginia, §2.2-2007 (Powers of the CIO)

Code of Virginia § 2.2-2007.1. Additional duties of the CIO relating to information technology planning and budgeting)

Code of Virginia, § 2.2-2010 (Additional powers of VITA)

Scope
This policy is applicable to all Executive Branch state agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase or use of information technology resources in the Commonwealth of Virginia. This policy does not apply to research projects, research initiatives or instructional programs at public institutions of higher education.

Purpose
This policy establishes the Commonwealth's Enterprise Architecture as the primary source for providing information technology direction and technical requirements which govern the acquisition, use and management of information technology resources by executive branch agencies.

General Responsibilities

~~*Secretary of Technology (SOTECH)*~~ ~~Reviews and approves statewide technical and data policies, standards and guidelines for information technology and related systems recommended by the CIO.~~

Chief Information Officer of the Commonwealth (CIO)
Develops and approves ~~recommends to the Secretary of Technology~~ statewide technical and data policies, standards and guidelines for information technology and related systems.

Virginia Information Technologies Agency (VITA)
At the direction of the CIO, VITA leads efforts that draft, review and update technical and data policies, standards, and guidelines for information technology and related systems. VITA uses requirements in IT technical and data related policies and standards when establishing contracts; reviewing procurement requests, agency IT projects, budget requests and strategic plans; and when developing and managing IT related services.

Information Technology Advisory Council (ITAC)
ITAC advises the CIO and Secretary of Technology on the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

Executive Branch Agencies
Provide input and review during the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems. Comply with the requirements established by COV policies and standards. Apply for exceptions to requirements and standards when necessary.

Related ITRM Policies, Standards, and Guidelines
Current version of ITRM Standard EA225, Enterprise Architecture Standard

Table of Contents

Enterprise Architecture Background

Overview

The Commonwealth's Enterprise Architecture is a strategic asset used to manage and align the Commonwealth's business processes and Information Technology (IT) infrastructure/solutions with the State's overall strategy.

The Enterprise Architecture is also a comprehensive framework and repository which defines:

- the models that specify the current ("as-is") and target ("to-be") architecture environments,
- the information necessary to perform the Commonwealth's mission,
- the solutions and technologies necessary to perform that mission, and
- the processes necessary for implementing new technologies in response to the Commonwealth's changing business needs.

The Enterprise Architecture contains four components as shown in the model in Figure 1.

Figure 1
Commonwealth of Virginia Enterprise Architecture Model
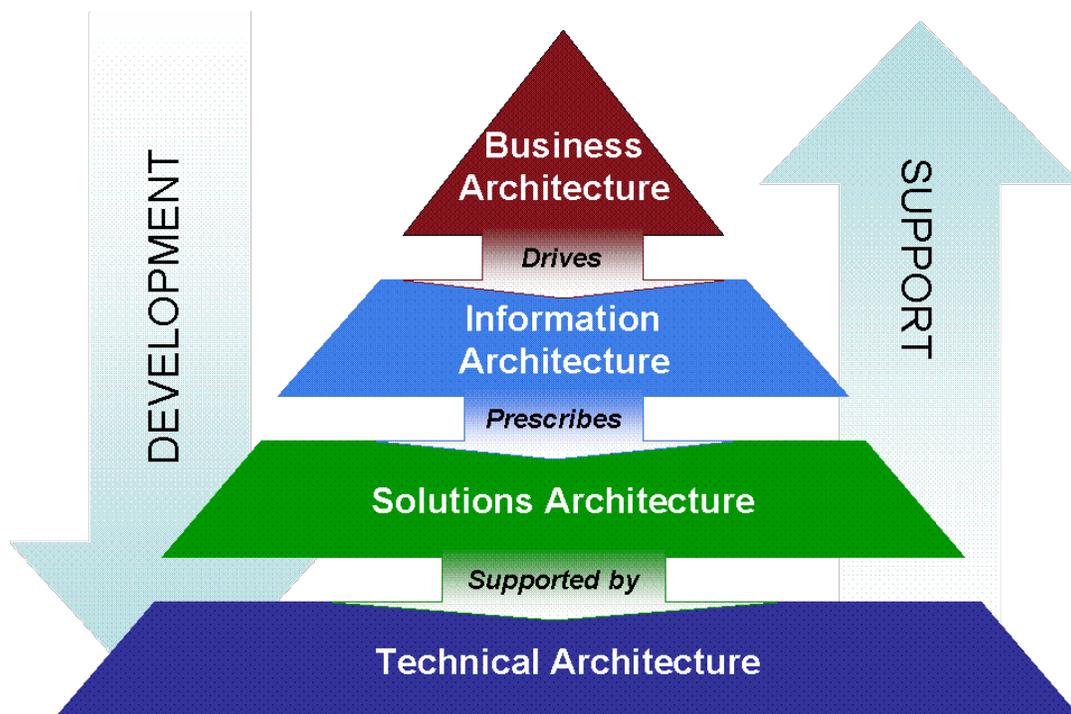
The Business Architecture drives the Information Architecture which prescribes the Solutions Architecture that is supported by the Technical (technology) Architecture.

Enterprise Information Architecture

The Enterprise Information Architecture (EIA) promotes the governance, management and sharing of the Commonwealth's data assets. The EIA has been structured based on a maturity-model framework, shown in Figure 2. Maturity models describe the levels of evolutionary progress in systems change. Lower maturity levels represent the system's early stages of development; higher maturity levels serve as targets for the desired future state. Qualitative, descriptive measures characterize each stage along the maturity-model curve.

The EIA Maturity Model features three stages beginning with the Informal Level, through the Emerging Level and toward the desired future state at the Enterprise Level. Each stage has been described around the Commonwealth's EIA primary functional areas, with qualitative benchmarks to mark progress within each area.

The Informal Level of the EIA Maturity Model is characterized by an array of data silos with no meaningful governance or integration. The Emerging Level features the first steps toward systemic, integrated data management. Finally, the desired future state at the Enterprise Level consists of a fully developed, Commonwealth-wide enterprise information architecture.

Figure 2. Enterprise Information Architecture (EIA) Maturity Model

|	*Level of Maturity*	*Characteristics*
1	*Informal Level*	▪ *Data Governance –Data management functions reactive and distributed across Agency data silos; very little governance, more of an "ownership" approach to data; poorly defined roles for data stewards; no meaningful data strategy; no valuation model for data inventory or data management functions.* ▪ *Data Asset Management – Very little, if any, metadata or data documentation in Agency source systems.* ▪ *Data Standards – Low levels of standardization; data maintained in redundant silos with diverging semantics; minimal data integration or integrity.* ▪ *Data Sharing – High degree of Agency resistance to data sharing; no business involvement in data management to drive trust or data-sharing agreements.*
2	*Emerging Level*	▪ *Data Governance – Data "ownership" begins to give way to clearer roles for data stewards; increased executive awareness of information assets; governance limited to ad hoc activities; no clearly defined data strategy at the enterprise level; some valuation and cost recognition of data.* ▪ *Data Asset Management – Documentation and metadata emerge as new systems come online; still no documentation for existing or legacy systems.* ▪ *Data Standards – Standardization begins in specific domains but still lacking full semantic interoperability; first steps toward master data management; standards tend to be internal (Agency) in nature.* ▪ *Data Sharing – Contention remains against enterprise data-sharing, but point-to-point agreements emerge at the Agency and program level.*
3	*Enterprise Level*	▪ *Data Governance – Governance driven by relationships among data stewards at the enterprise, Agency and program level; central data governance organization with executive sponsorship; enterprise data strategy and well-defined Policies, Standards and Guidelines (PSGs); feedback loops in place to support continuous improvement; data governance staff, data stewards and business leaders monitor and promote strategies to enhance the value chain of information architecture and assets.* ▪ *Data Asset Management – Enterprise data-asset management program; metadata taxonomy, subject areas and information classes in central repository; data assets mapped to enterprise data standards.* ▪ *Data Standards – Semantic interoperability across domains based on adopted standards; emphasis away from internal standards and toward external standards maintained by national/international Standard Development Organizations; standards reinforce strategies for data quality and integrity; compliance monitoring and tracking; central standards repository.* ▪ *Data Sharing – Enterprise data-sharing built on a solid trust framework and legal agreements; security, privacy, consent and authorization addressed based on applicable law; Commonwealth interoperability with other states and national information exchanges.*

Note: The EIA Maturity Model was derived from the EWSolutions model in the NASCIO report cited below. The original version of the EWSolutions model has been redrafted to more fully describe the stages on the maturity curve for the Commonwealth. The EWSolutions model also has been modified from five levels to three levels. This modification was due to the fact that Commonwealth Agencies lack the statutory authority to achieve the higher levels of system maturity and integration described in the original EWSolutions model. Source: NASCIO. 2009. Data Governance Part II: Maturity Models – A Path to Progress. March.p. 9 Accessed at http://www.nascio.org/publications/documents/NASCIO-DataGovernancePTII.pdf on February 14, 2012.

Enterprise Solutions Architecture

An Enterprise Solutions Architecture (ESA) is the collection of information systems (applications and components, purchased or custom-developed) supporting or related to the business functions defined in the Enterprise Business Architecture (EBA) and the Enterprise Business Model. For further details on ESA please click on this link to the Commonwealth's Enterprise Definitions: http://www.vita.virginia.gov/oversight/default.aspx?id=351

Enterprise Technical Architecture

The Enterprise Technical Architecture (ETA) shown in Figure 3 consists of eight technical domains that provide direction, recommendations and requirements for supporting the Solutions Architecture and for implementing the ETA. The ETA guides the development and support of an organization's information systems and technology infrastructure.

Figure 3
ETA Relationship to the Enterprise Architecture

Enterprise Architecture Model

The Enterprise Technical Architecture (ETA) consists of eight technical domains that provide direction, recommendations, and requirements for supporting the Enterprise Solutions Architecture and for implementing the ETA.
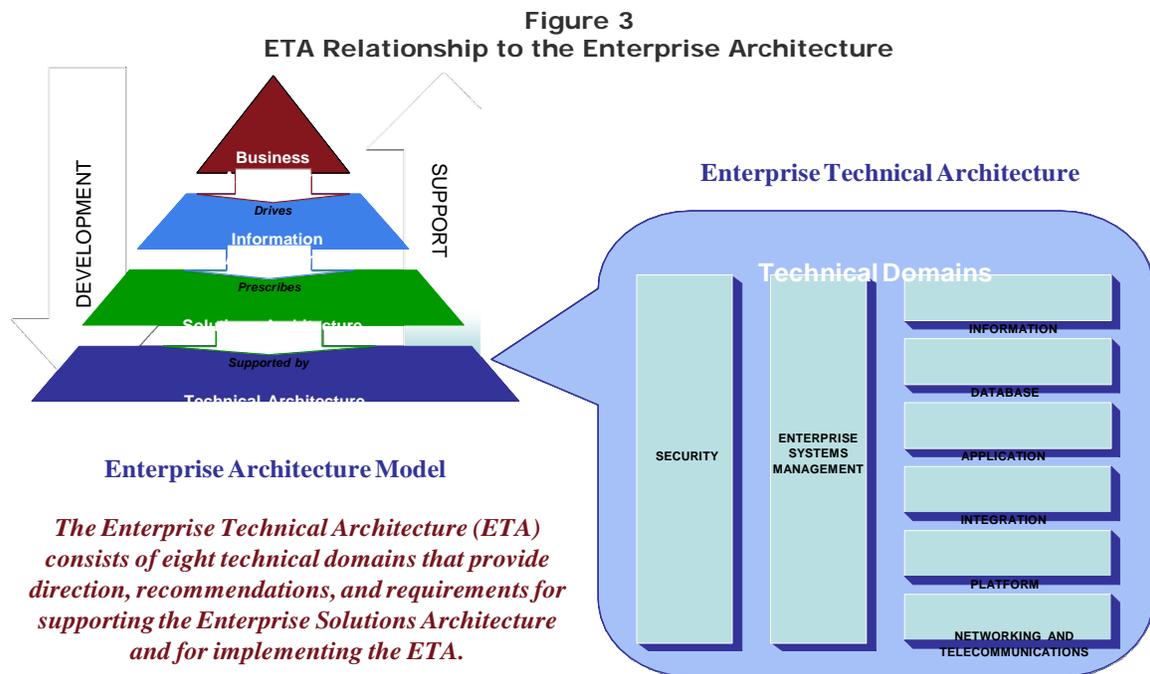
Each of the domains is a critical piece of the overall ETA. The Network and Telecommunications, and the Platform Domains address the infrastructure base and provide the foundation for the distributed computing. The Enterprise Systems Management, Database, Applications, and Information Domains address the business functionality and management of the technical architecture. The Integration Domain addresses the interfacing of disparate platforms, systems, databases and applications in a distributed environment. The Security Domain addresses approaches for establishing, maintaining, and enhancing information security across the ETA.

Glossary

As appropriate, terms and definitions used in this document can be found in the COV ITRM IT Glossary and is available at: http://www.vita.virginia.gov/library/default.aspx?id=537.

Enterprise Architecture Policy Statements

Achieving the "to be" enterprise architecture requires collaboration, cooperation, and coordination among agency business stakeholders, systems developers, partners, and technology infrastructure providers.

Future Enterprise Architecture Vision

The Enterprise Architecture component reports and the corresponding EA Standard provide guidance and technical direction for the Commonwealth for achieving the envisioned "to be" enterprise architecture. Executive branch agencies shall comply with the direction provided by the EA in developing and implementing technology solutions and the corresponding information technology infrastructure required to support the business needs of the Commonwealth.

To ensure that the EA remains relevant and current, and that the state progresses towards implementing the "to be" EA, state agencies, local governments, institutions of higher education, and other interested parties or stakeholders will collaborate, and work with the VITA Policy, Practice, and Architecture Division to identify:
- emerging technologies that should be included in the EA,
- emerging technologies that should be considered strategic technologies in the Commonwealth,
- technologies that should be considered obsolete/rejected or transitional/contained,
- requirements and recommended practices that should be added to the EA,
- changes/enhancements to existing requirements and recommended practices, and
- products/tools that support the standards/requirements in the EA.

It is the intent of the Enterprise Architecture to standardize and simplify the many technologies and products used in the Commonwealth today. This will require a reduction in the number of technologies and products used to develop and support production systems in the Commonwealth to those identified in the EA. The Commonwealth will accomplish this through the ongoing development and implementation of its EA and related standards.

The Commonwealth will use the process defined in the Appendices to govern changes and exceptions to the EA and to ensure that all recommendations and requests for changes or exceptions are logged, reviewed, evaluated, considered and responded to in a timely manner.

Enterprise Information Architecture Domain

Information continues to be a critical resource for the Commonwealth. Agencies gather and process data to create information needed to support their missions, whether those missions relate to disaster recovery, environmental protection, citizen security or other direct services. The EIA provides a governance framework, information model, shared vocabulary and methodology supporting each agency's ability to efficiently discover, access, share and utilize the Commonwealth's data assets.

The EIA has been designed to provide a common framework for the cost-effective exchange of information across organizational lines while ensuring security, privacy and appropriate use of that information. The EIA enables agency leaders to manage the Commonwealth's data assets as a means of better serving the citizens of Virginia. EIA supports a great

agency capacity and efficiency for using data assets to accomplish the Commonwealth's core strategies.

The EIA provides technical direction and benchmarks for the Commonwealth to achieve the future state described at the Enterprise Level of the EIA Maturity Model. Commonwealth agencies shall comply with the direction established in the EIA in the design, development, implementation and integration of data-management solutions.

Applications Domain - Systems Development

This policy recognizes that the ultimate responsibility for the management, control, development, maintenance, enhancement and use of information systems rests with the individual state agency. Accordingly, it is the policy of the Commonwealth that all state agencies must adopt written standards for the development, maintenance and enhancement of all information systems. The purpose of written standards is to ensure that quality, effective and maintainable information systems are developed by state agencies.

Applications Domain – Open Source Software

Within the Commonwealth, "open source software" is treated the same as any other type of software. All software including "open source" that is used for development and support of Commonwealth and/or agency "mission critical applications" must be at a version/release level that has vendor or equivalent quality level support available. This support should include security hot fixes and updates.

 "Open source software[1]" refers to computer software and the availability of its source code as open source under an open source license to study, change, and improve its design.

Open source software generally allows anybody to make a new version of the software, port it to new operating systems and processor architectures, share it with others or market it. The aim of open source is to let the product be more understandable, modifiable, duplicable, or simply accessible, while it is still marketable.

Open source doesn't just mean access to the source code. The distribution terms of open source software must comply with the following criteria: (as recommended by the Open Source Initiative (OSI) http://opensource.org/docs/definition.php)

1. **Free Redistribution**

   The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license shall not require a royalty or other fee for such sale.

2. **Source Code**

   The program must include source code, and must allow distribution in source code as well as compiled form. Where some form of a product is not distributed with source code, there must be a well-publicized means of obtaining the source code for no more than a reasonable reproduction cost—preferably, downloading via the Internet without charge. The source code must be the preferred form in which a programmer would

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[1] *The Open Source Definition*, Open Source Initiative: http://opensource.org/docs/osd

modify the program. Deliberately obfuscated source code is not allowed. Intermediate forms such as the output of a preprocessor or translator are not allowed.

3. **Derived Works**

   The license must allow modifications and derived works, and must allow them to be distributed under the same terms as the license of the original software.

4. **Integrity of The Author's Source Code**

   The license may restrict source-code from being distributed in modified form *only* if the license allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time. The license must explicitly permit distribution of software built from modified source code. The license may require derived works to carry a different name or version number from the original software.

5. **No Discrimination Against Persons or Groups**

   The license must not discriminate against any person or group of persons.

6. **No Discrimination Against Fields of Endeavor**

   The license must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research.

7. **Distribution of License**

   The rights attached to the program must apply to all to whom the program is redistributed without the need for execution of an additional license by those parties.

8. **License Must Not Be Specific to a Product**

   The rights attached to the program must not depend on the program's being part of a particular software distribution. If the program is extracted from that distribution and used or distributed within the terms of the program's license, all parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the original software distribution.

9. **License Must Not Restrict Other Software**

   The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be open source software.

10. **License Must Be Technology-Neutral**

    No provision of the license may be predicated on any individual technology or style of interface.

Appendix A - EA Change/Exception Request Process

The Enterprise Architecture (EA) Change/Exception Request Process defines the roles and processes that will be used to review, debate, discuss, and make decisions concerning requests for additions, changes, and exceptions to the Commonwealth's Enterprise Architecture.

Roles of the key players in the EA Change/Exception Request Review Process are: •

- Secretary of Technology – final authority for approving changes to Enterprise Architecture policy and standards.
- CIO - final authority for approving exceptions and change requests related to the EA.
- Chief Enterprise Architect – Responsible for reviewing all proposed changes and all requests for exceptions to the EA standard requirements, and as appropriate, making recommendations to the CIO to approve/reject requested exception/changes. This role resides with the Director of VITA's Policy, Practice, and Architecture Division. When there is a difference in opinion and/or recommendations between subject matter experts/business owners and the assigned enterprise architects that cannot be resolved, the Chief Enterprise Architecture can escalate the issue and/or concern to the CIO/Secretary of Technology for resolution.
- Enterprise Architect – assigned the responsibility by the Chief Enterprise Architect to ensure appropriate research and recommendations are developed in a timely manner for each assigned Change/Exception Request.
- EA Teams – responsible for researching and reviewing new or emerging technologies and requested changes/additions to the various domains and topics related to the Enterprise Technical Architecture or to other EA component architectures and for developing revised reports and EA requirements and technology standards for review and comment.
- Subject Matter Experts (SME) – IT and business experts on various subjects and topics from agencies, partners, and VITA that support the process as needed.

Agencies and other stakeholders can initiate potential changes to the Enterprise Architecture by:

- requesting an exception(s) for one of more EA requirements or technology/data standards,
- proposing architecture changes (add new requirements or technology/data standards or change existing requirements or technology/data standards), or
- requesting a topic, technology, or data standard area be researched and/or evaluated

The EA Change/Exception Request Form can be found in Appendix B followed by the corresponding instructions in Appendix C. An electronic copy of the form can be downloaded from: http://www.vita.virginia.gov/library/default.aspx?id=537

All requests for EA exceptions or proposed changes must be submitted electronically using the EA Change/Exception Request Form. The completed form should be emailed to the Commonwealth's Chief Enterprise Architect at: ea@vita.Virginia.gov. Requestors should attach any additional project or research materials or documentation that supports their request.

Processing Change/Exception Requests

When an agency or other stakeholder initiates an EA Change/Exception Request that can cause a potential change to the EA, the Chief Enterprise Architect uses the following processes to ensure all such received requests are logged, evaluated and responded to in a timely manner:

Receive Architecture Change /Exception

The Chief Enterprise Architect will ensure all change/exception requests received are logged and assigned to an Enterprise Architect within 3 business days after receipt. The assigned Enterprise Architect will notify the submitting organization that their request has been received and is being worked on within 2 business days of receiving the assignment.

Research, Review, and Respond to EA Change/Exception Request

Exception Requests

Exception requests come in two forms; those that ask for a temporary exception for some period of time or until an event occurs; or those that seek a permanent exception to one or more EA requirements or technology standards.

The assigned Enterprise Architect is responsible for conducting appropriate research, consulting with subject matter experts, developing recommendations and forwarding those recommendations to SMEs for review within 7 business days after the request was assigned.

SMEs will review the request and Enterprise Architect's recommendations and provide comments and/or recommendations on the request to the Chief Enterprise Architecture within 5 workdays of receiving the request from the assigned Enterprise Architect.

If the assigned Enterprise Architect and SMEs recommendations are different or they identify one or more issues with the request and the Chief Enterprise Architect cannot facilitate a consensus, the Chief Enterprise Architect can escalate the request to the CIO/Secretary of Technology for resolution.

The Chief Enterprise Architect, after reviewing the recommendations of the assigned Enterprise Architect and SMEs, and as needed, consulting with additional subject matter experts, will recommend a course of action on the request to the CIO within three business days of receiving all appropriate recommendations.

It is VITA's intent that all research, reviews, and recommendations required for the CIO to make an informed decision be completed and provided to the CIO within four weeks of receipt of the request for exception.

The Chief Information Officer of the Commonwealth will take one of the following actions related to an exception request:

- Approved
- Denied
- Returned – the CIO may return the request to the original sender or one of the

individuals/groups (assigned Enterprise Architect, SMEs, or Chief Enterprise Architect) that provided recommendations with a request for additional information, including possible development of new or revised recommendations.

If the exception request is approved by the CIO and the analysis or recommendations cause a change to an ITRM Policy, Standard or Guideline, then the corresponding policy, standard or guideline shall be revised using the normal approved revision process defined in the current version of the COV ITRM Standard GOV 101. The CIO's approval decision shall also be provided immediately to the requesting agency so that they may proceed with the exception in a timely manner.

Change Requests and Other Requests

This includes all other types of requests other than exceptions. The assigned Enterprise Architect will work with the appropriate EA team(s) and/or business owners for research and subject matter experts to develop a solution/recommendation that addresses the request. Depending on the type of request, the assigned Enterprise Architect/EA team/business owner recommendation is due to the Chief Enterprise Architect as follows:

- Approve emerging technology for pilot – no later than 3 weeks (15 workdays) after date assigned to the Enterprise Architect.
- Alternative technology proposal and/or change language/definition in an policies, standards or guidelines – no later than 5 weeks (25 workdays) after date assigned to the Enterprise Architect.
- Alternative data standard proposal and or change language/definition in an existing data standard – no later than 5 weeks (25 workdays) after date assigned to the Enterprise Architect

Requests to change language/definitions in an EA report or requests for research/review of a topic or technology will be handled by the Chief Enterprise Architect based on recommendations received from the assigned Enterprise Architect. These types of requests do not require CIO approval, but require the requested language change, topic or technology be added to the potential workload of the *EA* PPA Division.

For alternative technology proposal requests and approve emerging technology for pilot requests, the request will be forwarded to appropriate SMEs for review and recommendation development at the same time the request is assigned to the Enterprise Architect. The SME recommendation should be provided to the assigned Enterprise Architect and to the Chief Enterprise Architect.

For alternative data standard related proposal requests, the request will be forwarded to the designated VITA manager responsible for coordinating data owner/SME reviews and recommendations development at the same time the request is assigned to the Enterprise Architect. The designated VITA manager shall provide SME recommendations to the assigned Enterprise Architect and to the Chief Enterprise Architect.

As appropriate and after reviewing input recommendation(s) and as needed, consulting with subject matter experts, the Chief Enterprise Architect will recommend a course of action to the CIO within three business days of receiving the recommendation(s).

For those requests referred to the CIO for action, the Chief Information Officer of the Commonwealth will take one of the following actions related to the request:

- Approved
- Denied
- Returned – the CIO may return the request to the original sender or one of the individuals/groups (assigned Enterprise Architect, ETA Domain Team, or Chief Enterprise Architect) that provided recommendations with a request for additional information, including possible development of a new or revised recommendation.

If the change request is approved by the CIO and the analysis or recommendations cause a change to an ITRM Policy, Standard or Guideline, the corresponding policy, standard or guideline shall be revised using the normal approved revision process defined in the current version of the COV ITRM GOV 102 Standard.

Communicate and Document Review Decisions

Final decision results of all received EA change/exception requests will be documented and posted on the VITA Website under the Enterprise Architecture Library. This provides a record of the evolution of the decision process and history for the Commonwealth's Enterprise Architecture.

EA change/exception requests are logged as part of the receiving process and their corresponding outcomes shall also be documented and published regardless of whether a request was accepted or rejected.

The assigned Enterprise Architect will:

- Update the EA Change/Exception Request log on the VITA Website with pertinent information that documents the outcome of a request within 3 business days after the request has been evaluated and finalized.
- Ensure that all appropriate EA teams, standards teams and enterprise architects have any outcomes and approved recommendations that may impact their areas of responsibility.
- Communicate the final outcome and recommendations related to a request to all appropriate stakeholders within 2 business days after the request has been finalized.

A complete, up-to-date log of all EA change/exception requests can be viewed on the VITA Website at: http://www.vita.virginia.gov/library/default.aspx?id=537#EntArch.

Appendix B – EA Change/Exception Request Form

Commonwealth of Virginia

EA Change/Exception Request Form

Email this form to: ea@vita.virginia.gov

1.	**Requesting Agency Contact Information**	
a.	Requesting Agency:	
b.	Request Date:	
c.	Agency Contact Person:	
d.	Contact Person's Title:	
e.	Contact Person's Phone #(s):	
f.	Contact Person's E-Mail:	

2.	**Identify Specific Provision(s) of EA Related to this Request**	
a.	Document Type:	☐ Policy ☐ Standard ☐ Guideline ☐ EA Report ☐ Data Standard
b.	Document Name:	
c.	Requirement/Table #:	
d.	Date Action on Request Needed by:	

3.	**Type of Request**		
a.	☐	Temporary Exception Until:	
b.	☐	Permanent Exception	
c.	☐	Include Proposed Technology Alternative in	☐ Transitional ☐ Emerging ☐ Strategic
d.	☐	Approve Emerging Technology for pilot project	
e.	☐	Change language/definition in a Policy, Standard, Guideline, Data Standard or EA Report	
f.	☐	Research/review a selected EA related topic or technology	

g. Provide a short summary of the proposed addition, research, review, change or exception:

4.	**Impacted Project/Initiative Description**	
a.	Project/Initiative Title:	
b.	Project Manager:	
c.	Project Manager Phone:	
d.	Project Manager E-Mail:	
e.	Project Dates:	Start: End:
f.	Production "roll-out" required date:	

5.	**Justification for Exception Request**
a.	Briefly describe the business reason(s) for requesting the exception:
b.	Identify any government or industry standards supporting the proposed request:
c.	Briefly describe the technical reason(s) for requesting the exception:
d.	Briefly describe the proposed technology alternative:
e.	Provide a brief business case (cost benefits or effectiveness analysis) that supports the proposed technology alternative versus the provisions of the standard:

6. Impact Assessment
a. Briefly describe the impact on the agency's IT architecture, infrastructure and existing or planned systems should this exception request be approved.
b. Briefly, describe the financial impacts of using the proposed technology alternative. This should include Total Cost of Ownership (including upgrades, maintenance, support, training, etc.) over the estimated lifetime of proposed technology alternative.
c. Briefly, describe the agency's alternative(s) for initiative/project should this exception request be denied.
d. In the event, this exception request is approved, describe the time frames for transitioning away from the non-conforming standard or products granted in this exception request and implementing conforming standards and/or products.
e. Describe the impacts the proposed revision could have on those outside your agency (e.g. other agencies, vendors, local governments, businesses, citizens, etc.):

7.	**Enterprise Architecture Analysis**
a.	Analysis of Request:
b.	Recommended Action:
c.	Lead Enterprise Architect:
d.	Analysis Completion Date:

8.	**Subject Matter Expert (SME) Analysis**
a.	Review Comments/Analysis of Request:
b.	Recommended Action:
c.	SME:
d.	Completion Date:

9.	**Additional SME Analysis (as needed)**
a.	Review Comments/Analysis of Request:
b.	Recommended Action:
c.	SME:
d.	Completion Date:

10. Chief Enterprise Architect Recommendation	
a. Recommended Action:	
b. Chief Enterprise Architect:	
c. Recommendation Date:	

11. Chief Information Officer	
a. Action Taken:	☐Approved ☐Denied ☐Returned
b. Comments:	
c. Chief Information Officer:	
d. Chief Information Officer Signature:	
e. Date Signed:	

Email this form to: ea@vita.virginia.gov

Appendix C – Instructions for Completing Change/ Exception Request

Depending on the type of request, different sections of the Change/Exception Request form must be completed as shown in the following chart:

Process Type	Type of Request	Form Sections					
		1	2	3	4	5	6
Exception	Temporary exception	X	X	X	X	X	X
Exception	Permanent exception	X	X	X	X	X	X
Change	Alternative technology proposal	X	X	X			
Change	Change language/definition in an EA artifact	X	X	X			
Pilot	Approve emerging technology for pilot	X		X			
Research	Research/review topic or technology	X		X			

The line-by-line instructions for completing the Enterprise Architecture Change/Exception Request form are as follows:

1. **Requesting Agency Contact Information**

   a. Requesting Agency: Name of the agency or stakeholder organization submitting the request. EA requirements/standards are applicable to all agencies including the administrative functions (does not include instructional or research functions) of institutions of higher education, unless exempted by language contained in a specific requirement/standard.

   b. Request Date: Date request was prepared.

   c-f. Agency Contact Person: Name, Title, Phone number, and email address of the primary contact person at the requesting agency.

2. **Identify Specific Provision(s) of EA Related to this Request**

   a. Document Type: Indicate whether this change/exception request pertains to a Policy, Standard, Guideline, EA Report, or a Data Standard. EA Report includes any Commonwealth of Virginia EA component architecture, domain, or topic report.

   b. Document Name: Name of the existing Policy, Standard, Guideline, EA Report, or Data Standard document this change/exception request pertains to.

   c. Requirement/Table #: If this change/exception pertains to an existing requirement or product standard table, provide the number. E.g. an Information domain requirement number might be INF-R-04 or a Network product standard table number might be NET-S-02. Otherwise, provide other identifiers to locate the change/exception area in the specified document (page number, line number, paragraph #, data standard ID, etc.)

d. Date Action or Request Needed by: If there is a deadline or project milestone date by which action on this request must be taken, please enter it here.

3. Type of Request

a. Temporary Exception Until: If this is an exception request and of a temporary nature, check this box and enter the date after which the exception will no longer be required.

b. Permanent Exception: If this is a request for a permanent exception, check this box.

c. Include Proposed Technology Alternative in EA as: If this is a request to change an existing technology standards table by adding a proposed technology/product or moving a technology/product from one category to another, please indicate the proposed category for the technology/product alternative from the following:

> **Strategic:** This technology is considered a strategic component of the Commonwealth's Enterprise Architecture. Strategic technologies define the desired "to-be" state of the Commonwealth. The decision to deploy a Strategic technology is a business decision that is made by the agencies or vendors that provide the services needed to deploy, maintain and/or support that technology and the customer agencies. Input from the operational and customer reviews should also be included when creating implementation plans for new or updated Strategic technologies.

> **Emerging:** This technology requires additional evaluation in government and university settings. This technology may be used for evaluative or pilot testing deployments or in a higher education research environment. Any use, deployment or procurement of this technology beyond higher education research environments requires an approved Commonwealth Enterprise Architecture Exception. The results of an evaluation or pilot test deployment should be submitted to VITA's Policy, Practice and Architecture Division for consideration in the next review of the Enterprise Architecture for that technology.

> **Transitional/Contained:** This technology is not consistent with the Commonwealth's Enterprise Architecture strategic direction. Agencies may use this technology only as a transitional strategy for moving to a strategic technology. Agencies currently using this technology should migrate to a strategic technology as soon as practical. A migration or replacement plan should be included as part of the Agency's IT Strategic Plan. New deployments or procurements of this technology require an approved Commonwealth Enterprise Architecture Exception.

> **Obsolescent/Rejected:** This technology may be waning in use and support, and/or has been evaluated and found not to meet current Commonwealth Enterprise Architecture needs. Agencies shall not make any procurements or additional deployments of this technology. Agencies currently using this technology should plan for its replacement with strategic technology to avoid substantial risk. The migration or replacement plan must be included as part of the Agency's IT Strategic Plan.

d. Approve Emerging Technology for pilot project: Check here if the purpose of this request is for approval to utilize an Emerging Technology for a pilot project.

e. Ch an g e l an g u ag e/ d efi ni t i on in th e…: Check this box If the purpose of this request is to change language within an EA artifact other than a numbered Principle, Recommended Practice, Requirement, or Product Standard.

f. Research/review a selected EA related topic or technology: Check this box if the purpose of the this request to have the VITA Policy, Practice and Architecture Division research and/or review a specific topic or technology that could or should be included in the Commonwealth's EA.

g. Provide a short summary of the proposed addition, research, review, change or exception: Briefly describe the request and its purpose.

4. Impacted Project/Initiative Description

 a. <u>Project/Initiative Title</u>: Name of the IT project which will be directly impacted by the approval or denial of this change/exception request.

 b. <u>Project Manager</u>: The project manager responsible for the project. This may or may not be the same as the contact person identified in section 1.

 c. <u>Project Manager Phone</u>: Work phone number of project manager.

 d. <u>Project Manager E-Mail</u>: E-mail address of the project manager.

 e. <u>Project Dates</u>: Enter the start and end dates of the project.

 f. <u>Production "roll-out" required date</u>: What is the date that impacted project/initiative is scheduled to go into production.

5. Justification for Exception Request

 a. <u>Briefly describe the business reason(s) for requesting the exception</u>: What is the business need or drivers which require the approval of this request? Has the business changed?

 b. <u>Briefly describe the technical reason(s) for requesting the exception</u>: Describe the current or proposed technology environment that will be impacted by the approval or disapproval of this request.

 c. <u>Identify any government or industry standards supporting the proposed request</u>: These might include organizations such as the American National Standards Institute (ANSI) standards, Internet Engineering Task Force (IETF) standards, World Wide Web Consortium (W3C), etc.

 d. <u>Briefly describe the proposed technology alternative</u>: Describe the technology being proposed and why it is required for your project.

 e. <u>Provide a brief business case (cost benefits or effectiveness analysis) that supports the proposed technology alternative versus the provisions of the standard</u>: For example, what is the ROI or TCO of both alternatives?

6. Impact Assessment

 a. <u>Briefly describe the impact on the agency's IT architecture, infrastructure and existing or planned systems should this exception request be approved</u>: What are the positive or negative implications to the agency's existing technologies and future planned systems should this change/exception request be approved. In other words, from a technical standpoint, why should this request be approved?

 b. <u>Briefly, describe the financial impacts of using the proposed technology alternative. This should include Total Cost of Ownership (including upgrades, maintenance, support, training, etc.) over the estimated lifetime of proposed technology alternative</u>: Every choice has a financial impact, either positive or negative. What are the financial impacts of this request?

 c. <u>Briefly, describe the agency's alternative(s) for initiative/project should this exception request be denied</u>: In the event that this change/exception request is not approved, what alternatives has the agency investigated?

 d. <u>In the event this exception request is approved, describe the time frames for transitioning away from the non-conforming standard or products granted in this exception request and implementing conforming standards and/or products</u>: If this request is for a temporary or permanent exception to approved technology

requirements and standards, when does the agency anticipate being able to replace it with a conforming technology.

    e.   Describe the impacts the proposed revision could have on those outside your agency (e.g. other agencies, vendors, local governments, businesses, citizens, etc.): If this request were to be approved, what would the impact be to similar business functions in other agencies?

7. Enterprise Architecture Analysis

    a.   Analysis of Request: The assigned Enterprise Architect describes the research conducted, related information collected, and the analysis/assessment of the request.

    b.   Recommended Action: Describe in detail why the request should or should not be approved.

    c.   Lead Enterprise Architect: Enter the name of the assigned Enterprise Architect.

    d.   Analysis Completion Date: Enter the date the analysis of the request was completed and presented to the Chief Enterprise Architect.

8. Subject Matter Expert (SME) Analysis

This section will be completed by subject matter experts (SME) that are asked to review and comment on the assigned Enterprise Architect's recommendations. Any additional analysis performed by the SME can be entered in this section. SMEs could include, but are not limited to partner IT experts, vendor experts, business owners, and data standards owners.

    a.   Review Comments/Analysis of Request: Enter review comments or describe any appropriate analysis, assessment and conclusions.

    b.   Recommended Action: Describe in detail any recommendation(s) related to why the request should or should not be approved.

    c.   SME: Enter the name of the SME person for this assessment and recommendation. If multiple SMEs involved, enter the name of the lead SME that should be contacted regarding the review comments/recommendations.

    d.   Completion Date: Enter the date the comments/analysis was completed.

9. Additional Subject Matter Expert (SME) Analysis (as needed)

This section can be used when additional SME input is needed related to a specific request.

    a.   Review Comments/Analysis of Request: Enter review comments or describe any appropriate analysis, assessment and conclusions.

    b.   Recommended Action: Describe in detail any recommendation(s) related to why the request should or should not be approved.

    c.   SME: Enter the name of the SME person for this assessment and recommendation. If multiple SMEs involved, enter the name of the lead SME that should be contacted regarding the review comments/recommendations.

    d.   Completion Date: Enter the date the comments/analysis was completed.

10. Chief Enterprise Architect Recommendation

    a.   Recommended action: Based on the assigned Enterprise Architect and SME analysis and recommendations, and appropriate consultations with other subject matter experts, the Chief Enterprise Architect will develop one or more

recommendations related to the request for review and consideration by the CIO.

    b.   <u>Name of the Chief Enterprise Architect:</u> Enter the name of the Chief Enterprise Architect.

    c.   <u>Recommendation Date</u>: Enter the date the recommendation(s) was completed.

11. Chief Information Officer

    a.   <u>Action Taken</u>: Check the box corresponding to the action taken by the CIO: Approved, Denied, or Returned for additional work.

    b.   <u>Comments</u>: Enter any comments by the CIO.

    c.   <u>Chief Information Officer</u>: Printed full name of the CIO.

    d.   <u>Chief Information Officer Signature</u>: This box contains the CIO's official signature.

    e.   <u>Date Signed</u>: Enter the date the document was signed by the CIO.