Commonwealth of Virginia
Enterprise Technical Architecture [ETA]

Legacy Information Technology (IT) Solutions (LIT) Topic Report

Legacy IT Solutions Topic Report Requirements: Version History

Revision	Date	Description
1.0	10-31-2019	Initial document

Review Process

This requirements document was posted on VITA's Online Review and Comment Application (ORCA). All agencies, stakeholders, and the public were encouraged to provide their comments through ORCA. All comments were evaluated and individual commenters were notified of action(s) taken.

Standards and Agency Exceptions

These standards are incorporated within the COV [Enterprise Architecture Standard (EA-225)](), and the requirements defined within this document are mandatory for Executive Branch agencies. Agencies deviating from these requirements must request an exception for each desired deviation, and receive an approved *Enterprise Architecture Exception* via Archer, prior to developing, procuring, or deploying such technology, or not complying with a requirement specified in this document.

Glossary

As appropriate, terms and definitions used in this document are in the COV ITRM IT Glossary. The COV ITRM IT Glossary is available on the ITRM Policies, Standards, and Guidelines web page at the VITA website: https://www.vita.virginia.gov/it-governance/glossary/cov-itrm-glossary/

Definition of Key Terms

All of the Legacy IT Solutions Topic ETA standards and requirements considered to be critical components for implementing the Commonwealth's ETA are included in this report.

The report presents two forms of technical architecture direction for agencies to consider when planning or when making changes or additions to their information technology:

- **Requirements** – mandatory enterprise technical architecture directions. All requirements are included within the ETA Standard.

- *Recommended Practices* - provided as guidance to agencies in improving cost efficiencies, business value, operations quality, reliability, availability, decision inputs, risk avoidance or other similar value factors. Recommended Practices are optional.

The following terminology and definitions are applicable to the use of technologies:

***Approved* technologies**

>These technologies have been evaluated, and where appropriate, support is in place. They are approved for current and future deployments.

>⬜ *Approved with Constraint:* Technologies that are approved for use, but have a very limited footprint within COV. IT governance is applied to any additional use by requiring an approved EA exception. If utilization of this technology expands, the constraint will be removed.

***Emerging* technologies**

>New versions of approved products/technologies that are not yet ready for deployment by COV. These versions have General Availability (GA), but either lack a hardening template, service pack, or adequate/full support. For an operating system, it may take a year for a fully managed service to be fully developed in support of an updated version of an approved technology. Availability

dates will be published as soon as they are available.

Divest technologies

Agencies shall not make any procurements or additional deployments of *Divest* technologies. There are two phases within *Divest:*

- *Plan:* During this phase, agencies must develop and submit their plan to migrate off of these technologies within their IT Strategic Plan.
- *Execution:* During this phase, agencies must execute their migration plans for these technologies. These migrations must be completed before the technologies become *Prohibited*. This may include:

   o CIO approved IBC (Investment Business Case) and IBC Addendum for projects and supporting Business Requirements for Existing Technologies (BreTs) within agency IT Strategic Plans. o Inclusion of any needed procurements to their agency IT Strategic Plan.

Prohibited technologies

Agencies are not allowed to use *Prohibited* technologies without an approved EA Exception. These technologies are no longer supported by the commonwealth and they represent substantial risk. Any use of *Prohibited* technologies must be mitigated by:

- Migration plans included within agency's IT Strategic Plan.
- CIO approved IBC (Investment Business Case) and IBC Addendum for projects and supporting BreTs within agency IT Strategic Plans.
- Inclusion of any needed procurements to their agency IT Strategic Plan.
- Execution of the migration plans including any required reporting.

Agency Exception Requests

Agencies that desire to deviate from the requirements or the technology component standards specified in this report must request an exception for each desired deviation and receive an approved *Enterprise Architecture Exception* via Archer prior to developing, procuring, or deploying such technology or not complying with a requirement specified in this report. The instructions for completing and submitting an exception request are contained within the *Commonwealth Enterprise Architecture Policy*.

Contents

Introduction

The purpose of this topic report is to provide direction on how the commonwealth will migrate from legacy IT solutions to *Approved* IT solutions and technologies including cloudbased IT solution hosting services in support of Executive Order #19: 2018.

Commonwealth Legacy IT Solutions Vision and Strategy
Legacy IT solutions utilize programming languages or data access methods that the COV considers *Prohibited* technologies. _Prohibited_ languages – Ada, ALGOL, APL, Assembler (BAL), BASIC, C, Clipper (xBase), COBOL, Delphi, Fortran, Natural, LISP, Mapper, Paradox, Pascal, PL/1, Rexx, RPG X _Prohibited_ database and other data access methods – Adabas, IMS, VSAM, ISAM, xBase, Paradox, all Network and Hierarchical databases, all data access methods and versions without security patching
Vision
All current legacy IT solutions shall be identified and assessed, then replaced, retired or migrated to Approved IT technologies consuming cloud-based hosting platform services.
Strategy
Effective Dates: • <u>November 1, 2019</u>: the current IT solutions that utilize *Prohibited* technologies will be considered legacy IT solutions • <u>December 1, 2019</u>: agencies must identify their legacy IT solutions and the *Prohibited* technologies they use to VITA • <u>January 1, 2020</u>: agencies will have submitted Enterprise Architecture Exceptions for any intended use of legacy IT solutions beyond January 1, 2022 • <u>January 1, 2024</u>: retired or replaced legacy IT solutions must be hosted on *Approved* cloud-based platforms. **Agencies/customers will:** • Create projects and procurements within Fiscal Year 2020-2022 IT Strategic Plans to replace current legacy IT solutions with new solutions hosted on *Approved* platforms consuming *Approved* technologies • Obtain approved Enterprise Architecture Exceptions by February 1, 2020 for any intended use beyond January 1, 2022 o These exceptions will be renewed each year indicating plans and progress for migration away from *Approved* technologies • Complete projects and procurements prior to January 1, 2024

Purpose

The intent of these requirements is to guide the purchase, design, implementation, and on-going operation of COV IT services and utilized technologies. For further information on the perspectives, please reference the most recent version of the Enterprise Technical Architecture (ETA) Requirements document.

[additional text on the purpose of this document]

Authority
- [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, §2.2-2009(A)](). Additional duties of the CIO relating to security of government information
- [Code of Virginia, §2.2-2012(A)](). Additional powers and duties related to the procurement of information technology

Scope
This standard is applicable to all Executive Branch state agencies (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology resources in the Commonwealth of Virginia. This standard does not apply to research projects, research initiatives, or instructional programs at public institutions of higher education.
In addition to the requirements below all COV IT technology solutions comply with the standards found on the VITA [Policies Standards & Guidelines]() page.

LIT-R-01:   agencies must identify their legacy IT solutions and the *Prohibited* technologies they use to VITA by November 1, 2019.

LIT-R-02:   agencies shall migrate off of all IT solutions that utilize *Prohibited* technology by January 1, 2024. Any intended use of legacy IT solutions beyond this date requires an approved Enterprise Architecture (EA) exception. Agencies shall submit these EA exception requests by January 1, 2020.

LIT-R-03:   any intended use of *Prohibited* technologies requires an approved Enterprise Architecture (EA) exception. Agencies shall submit these EA exception requests by January 1, 2020.

LIT-R-04:   agencies shall develop business cases to determine the cost and impact of migrating their Legacy IT solutions to *Approved* technologies hosted on cloud-based platforms.

LIT-R-05:   agencies shall include a migration or replacement plan within their IT Strategic Plan for all Legacy IT solutions that do not have an approved EA exception.

LIT-R-06:   agencies shall add CIO approved IBC (Investment Business Case) and IBC Addendum for projects and supporting BreTs to their agency IT Strategic Plans in support of the migration of their Legacy IT solutions do not have approved EA exceptions.

LIT-R-07:   agencies shall add any needed procurements to their agency IT Strategic Plan in support of the migration or replacement of their Legacy IT solutions that do not have approved EA exceptions.