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# *Commonwealth of Virginia*

## Enterprise Technical Architecture (ETA)

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

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[Virginia Information Technologies Agency \(VITA\)](#)

## Revision History

Legacy IT Solutions Topic Report: Version History		
Revision	Date	Description
1.0	10-31-2019	Initial

## Review Process

This report was posted on VITA's Online Review and Comment Application (ORCA) for 30 days. All agencies, stakeholders, and the public were encouraged to provide their comments through ORCA. All comments were carefully evaluated and the individual commenters were notified of the action taken.

## 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:
  - CIO approved IBC (Investment Business Case) and IBC Addendum for projects and supporting Business Requirements for Existing Technologies (BreTs) within agency IT Strategic Plans.
  - 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*.

**Glossary**

As appropriate, terms and definitions used in this document can be found in the COV ITRM IT Glossary. The COV ITRM IT Glossary may be referenced on the ITRM Policies, Standards and Guidelines web page on the VITA website at.

<https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/psgs/pdf/comp-ITRMGlossary-v3.1.a-2018.pdf>

## 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 cloud-based IT solution hosting services in support of Executive Order #19: 2018.

## Legacy IT Solutions

<b>Commonwealth Legacy IT Solutions Vision and Strategy</b>
<p>Legacy IT solutions utilize programming languages or data access methods that the COV considers <i>Prohibited</i> technologies.</p> <p><u><i>Prohibited</i> languages</u> – Ada, ALGOL, APL, Assembler (BAL), BASIC, C, Clipper (xBase), COBOL, Delphi, Fortran, Natural, LISP, Mapper, Paradox, Pascal, PL/1, Rexx, RPG X</p> <p><u><i>Prohibited</i> database and other data access methods</u> – Adabas, IMS, VSAM, ISAM, xBase, Paradox, all Network and Hierarchical databases, all data access methods and versions without security patching</p>
<b><i>Vision</i></b>
<p><i>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.</i></p>
<b><i>Strategy</i></b>
<p><b>Effective Dates:</b></p> <ul style="list-style-type: none"> <li>• <u>November 1, 2019</u>: the current IT solutions that utilize <i>Prohibited</i> technologies will be considered legacy IT solutions</li> <li>• <u>December 1, 2019</u>: agencies must identify their legacy IT solutions and the <i>Prohibited</i> technologies they use to VITA</li> <li>• <u>January 1, 2020</u>: agencies will have submitted Enterprise Architecture Exceptions for any intended use of legacy IT solutions beyond January 1, 2022</li> <li>• <u>January 1, 2024</u>: retired or replaced legacy IT solutions must be hosted on <i>Approved</i> cloud-based platforms.</li> </ul> <p><b>Agencies/customers will:</b></p> <ul style="list-style-type: none"> <li>• Create projects and procurements within Fiscal Year 2020-2022 IT Strategic Plans to replace current legacy IT solutions with new solutions hosted on <i>Approved</i> platforms consuming <i>Approved</i> technologies</li> <li>• Obtain approved Enterprise Architecture Exceptions by February 1, 2020 for any intended use beyond January 1, 2022 <ul style="list-style-type: none"> <li>○ These exceptions will be renewed each year indicating plans and progress for migration away from <i>Approved</i> technologies</li> </ul> </li> <li>• Complete projects and procurements prior to January 1, 2024</li> </ul>

- LIT-R-01: Agency Identification of Legacy IT solutions** – agencies must identify their legacy IT solutions and the *Prohibited* technologies they use to VITA by November 1, 2019.
- LIT-R-02: Legacy IT solutions** – 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: Continued use of legacy technologies** – 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: Agency business cases for legacy IT solution migration** – 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: Migration plan for IT solutions using *Prohibited* technologies** – 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: Add projects to agency IT Strategic Plans for *Prohibited* technologies** – 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: Add procurements to agency IT Strategic Plans for *Prohibited* technologies** – 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.