

COMMONWEALTH OF VIRGINIA



Information Technology Resource Management (ITRM)

**ENTERPRISE ARCHITECTURE
VIRGINIA GOVERNMENT INTERNET
DOMAIN NAMING TOPIC REPORT
NETWORKING AND TELECOMMUNICATIONS
DOMAIN**

Virginia Information Technologies Agency (VITA)

Reviews

- This publication was reviewed and approved by the Manager of the Policy, Practice and Architecture Division.
- 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 the Director of VITA's Policy, Practice, and Architecture (PPA) Division. PPA notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

This following table contains a history of revisions to this publication.

Version	Date	Revision Description
0	07/07/2004	Original
1	07/31/2013	No substantive changes were made in the revision to the requirements that impact agencies. The revision changes the format to a topic report without a publication designation, the physical address of the VITA offices to Chester VA, and updates changes to names and hyperlinks.

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 are underlined indicating language that has changed.

Table of Contents

Introduction _____	1
Background _____	1
Definition of Key Terms _____	1
Glossary _____	1
Agency Exception Requests _____	1
ETA Internet Domain Name Structure Topic Report Scope and Purpose _____	3
Scope of this Report _____	3
Purpose of this Report _____	3
Domain-wide Principles _____	4
ETA Virginia Internet Domain Name Technical Topics _____	5
Domain Name Structure _____	5

Introduction

Background

As part of the comprehensive reforms to information technology service delivery under way since 2003, standardizing naming conventions continue to aid in the ongoing development of statewide electronic directories and in reducing overhead and administrative costs. These changes also aid in continually improving the Commonwealth's customer service and recognizing immediate and future business needs.

The domain name structure requirements are applicable to all Executive Branch state agencies except institutions of higher education (collectively referred to as "agency"). These agencies shall use the "virginia.gov" domain name and be in compliance with these requirements. Responsibility for the compliant use of the Virginia Government Internet Domain Naming Structure by the agency begins at the management level and flows down through the agency to the individual user. These requirements do not preclude state agencies from possessing other domain names for which they separately register and accept full responsibility.

Definition of Key Terms

This document presents architecture direction for agencies when planning or making changes or additions to their information technology through:

- Domain Name: A domain name locates an organization or other entity on the Internet. On the Web, the domain name is that part of the Uniform Resource Locator (URL) that tells a domain name server using the domain name system (DNS) whether and where to forward a request for a Web page. The domain name is mapped to an IP address (which represents a physical point on the Internet).
- Requirements – statements that provide mandatory Enterprise Architecture direction.

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 at <http://www.vita.virginia.gov/library/default.aspx?id=537>.

Agency Exception Requests

Agencies that want to deviate from the requirements and/or technology standards specified in COV ITRM Standards may request an exception using the *Enterprise Architecture Change/Exception Request Form*. All exceptions must be approved prior to the agency pursuing procurements, deployments, or development activities related to technologies that are not compliant with the standard. The instructions for completing and submitting an exception request are contained in the current version of *COV ITRM Enterprise Architecture Policy*. The Policy and exception request form is on the ITRM Policies, Standards and Guidelines web page at <http://www.vita.virginia.gov/library/default.aspx?id=537>.

To request an exception to all Security related ITRM Standards please refer to the *Process for Requesting Exceptions* section of the Information Security Policy - COV ITRM Policy SEC519 on the ITRM Policies, Standards and Guidelines web page at <http://www.vita.virginia.gov/library/default.aspx?id=537>.

ETA Internet Domain Name Structure Topic Report

Scope and Purpose

Scope of this Report

The Virginia Internet domain name structure is applicable to all Executive Branch state agencies (collectively referred to as "Agency"), but excludes institutions of higher education. Optionally, other entities may use the "virginia.gov" domain name. The heads of Executive Branch state agencies are responsible for compliance with the domain name structure. Although the domain name structure is offered as guidance only to local government entities, if they choose to use the "virginia.gov" domain they shall comply with the domain name structure requirements.

Purpose of this Report

The purpose is to define the requirements for using the "virginia.gov" domain naming structure and to prevent unauthorized use or misuse of the "virginia.gov" domain naming structure.

Domain-wide Principles

The Virginia Government Internet Domain Name Structure team identified the following domain-specific principle:

- NET-P-01** **Virginia Government Internet Domain Name Structure** – The domain name requirements identified below comprise the Virginia Government Internet Domain Name Structure. The heads of Executive Branch state agencies are responsible for compliance with the domain name requirements.

ETA Virginia Internet Domain Name Technical Topics

Domain Name Structure

The Virginia Government Internet domain naming structure identifies and implements standardized naming conventions to aid in developing statewide electronic directories and reducing overhead and administrative costs.

Domains and sub-domains of other domains are often referred to by level. The levels of a domain name are numbered from right to left. Using the sample domain name department.oaa¹.virginia.gov the levels are as follows:

- first-level: gov
- second-level: virginia
- third-level: oaa
- fourth-level: agency's discretion (web-site application name, activity name, department names, etc.)

The Virginia Government Internet Domain Name Structure team identified the following topic-specific requirements:

NET-R-15 Virginia.Gov Mandated Use – All executive branch agencies in the Commonwealth except for institutions of higher education shall use the “virginia.gov” domain name. This requirement does not preclude agencies from possessing other domain names for which they separately register and accept full responsibility.

NET-R-16 Domain Name Structure – Domain Names are to be composed of alphabetic characters and numbers. Upper/lower case is transparent. Hyphens (dashes) are allowed but may not be used at the beginning or end of a domain name. Within a domain name spaces, the underscore, and special characters are not permitted. Special characters include, but are not limited to: ! @ # \$ % ^ & * () ? ”

NET-R-17 Third Level Domain Names – Executive Branch Agencies – The name of an agency of the Commonwealth of Virginia will be at the third level and will consist of the official agency acronym/abbreviation.

Example:

- vita.virginia.gov
- doa.virginia.gov

NET-R-18 Fourth Level Domain Names – The fourth level of the “virginia.gov” domain will be used to further subdivide the entities established at the third level. Because many organizations exist at several levels of government, their location within this hierarchy will allow citizens to distinguish between them. Fourth level names are generally at the

¹ oaa = official agency acronym (e.g., VITA)

discretion of the requesting agency. The examples below are offered as a guideline to encourage a generally accepted and recognizable naming convention.

Examples of Departments or Activities of Executive Branch Agencies:

- license.dgif.virginia.gov
- eVA.dgs.virginia.gov