



**Maine State Government
Dept. of Administrative & Financial Services
Office of Information Technology (OIT)**

Enterprise Name Resolution Procedure

1.0 Purpose

The Office of Information Technology has established a Domain Naming Policy for *Domain Name System (DNS)* use in the State of Maine environment. State agencies will use this procedure as a guide in naming enterprise information technology assets.

This procedure is intended to ensure that the method of name resolution utilized is DNS and to create the complementary enforcement mechanism.

2.0 Definitions

2.1 Domain Name System (DNS): Identified as the international standard for name resolution across networks of any size and within any routed, networked environment based on its scalability, reliability and fault tolerance.

3.0 Applicability

3.1 This procedure applies to all information technology assets, both hardware and software, including:

- 3.1.1 Information technology assets that are owned by the Executive Branch and Semi-autonomous State Agencies irrespective of where such assets are located or hosted, and;
- 3.1.2 Information technology assets from other Maine State Government branches that are reliant upon the State wide-area network and its support systems for their operation.

4.0 Responsibilities

4.1 The Chief Information Officer is responsible for the enforcement of this procedure.

4.2 All persons and parties engaged in information technology work for the State of Maine are responsible for complying with the defined and approved enterprise name resolution procedure. These roles include:

- 4.2.1 Enterprise DNS Administrator - Responsible for the Architecture and Maintenance of the States DNS infrastructure.
- 4.2.2 Server Administrators - Responsible for properly configuring servers and other devices pursuant to the Enterprise Name Resolution Procedure.
- 4.2.3 Client Technologies -Responsible for the proper building and configuration of client desktops and laptops pursuant to the Enterprise Name Resolution Procedure.

5.0 Directives

- 5.1 It is acknowledged that there are currently I.T. assets in the State's environment that are unable to utilize DNS to perform name resolution, but it is recognized that the vast majority of devices on the network have no problem using DNS.
- 5.2 Any system, application, or environment that needs to refer to networked assets should utilize DNS to perform name resolution.
- 5.2.1 This includes not only systems currently using DNS, but those currently utilizing WINS (NetBIOS), or Host Files, which could utilize DNS but are not currently doing so.
- 5.3 DNS has been established as the only officially supported method of name resolution provided from the enterprise, and all systems requiring name resolution services are required to utilize DNS.
- 5.4 Wherein DNS is the only supported name resolution protocol, the use of FQDN's (Fully Qualified Domain Names) will be critical.
- 5.4.1 All servers, appliances and PC's or laptops on the State WAN are required to have a properly registered FQDN to assist in DNS queries for that device.
- 5.4.2 All queries performed via DNS to locate such devices must use the FQDN format of "machine-name.xxx.xxx.xxx.xxx.xxx" (i.e. – "computer.som.w2k.state.me.us").
- 5.4.3 All computer or device names registered in DNS must follow the naming standard format already established in the State of Maine's Device Naming Standard.
- 5.4.4 No hard coded dotted number quad; all references should be to names.
- 5.5 It will be specifically mentioned that there are devices on the network that do not need DNS name resolution, and as such should not actually have DNS records associated with them. Only devices that will need to be located via their DNS names should have records in the DNS database
- 5.5.1 Examples of devices requiring DNS records are servers and PC's, appliances, etc.
- 5.5.2 Examples of devices not necessarily requiring DNS records are: infrastructure devices (such as environmental monitoring equipment), badge readers, web-cams, etc.
- 5.6 All systems that could be using DNS but are not currently doing so must be converted to use our Enterprise DNS solution.

6.0 Document Information

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Latest Revision Date: April 4, 2019 – To update Document Information.

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Approved By: Chief Information Officer, OIT

Legal Citation: [Title 5, Chapter 163: Office of Information Technology](#)¹.

Waiver Process: See the [Waiver Policy](#)².

¹ <http://legislature.maine.gov/statutes/5/title5ch163sec0.html>

² <http://www.maine.gov/oit/policies/waiver.pdf>