

Information Technology Policy

Commonwealth External and Internal Domain Name Services (DNS)

ITP Number ITP-NET005	Effective Date March 1, 2006
Category Network	Supersedes None
Contact RA-ITCentral@pa.gov	Scheduled Review September 2018

1. Purpose

The purpose of this Information Technology Policy (ITP) is to establish an enterprise-wide policy for external and internal Domain Name Services (DNS) design standards. This policy will ensure DNS uniformity across all commonwealth agencies and to ensure efficient name resolution within the commonwealth network.

2. Scope

This Information Technology Policy (ITP) applies to all departments, boards, commissions and councils under the Governor's jurisdiction. Agencies not under the Governor's jurisdiction are strongly encouraged to follow this ITP.

3. Policy

The Office of Administration/Office for Information Technology (OA/OIT) has the responsibility and authority to centrally manage DNS names for the commonwealth external and internal domains. OA/OIT may decline unacceptable DNS service requests if the requests do not adhere to this policy. OA/OIT will work with the requester to resolve declined requests. A service ticket is to be used to request all DNS services. The following are DNS service examples:

- Request assistance to migrate non-Commonwealth domains (.com, .net, .org, etc.) to pa.gov.
- Request a DNS zone or record
- Modify or delete a DNS zone or record
- DNS troubleshooting

Agencies are use the following DNS design standards for both external and internal.

External DNS Design Standards

- Agencies must use the PA.GOV domain
 - The legacy STATE.PA.US domain name may remain in place but cannot be used for new domain name requests. Modernization efforts should be made to migrate STATE.PA.US domains to PA.GOV where feasible.
- A COPPAR waiver request for this ITP must be submitted and approved for any domain name other than PA.GOV *prior* to an agency purchasing the domain. Refer to Section 8 for exemption guidance.

Internal DNS Design Standards

- All internal server systems are to resolve DNS to their local commonwealth domain controller. Acceptable server standards are detailed in ITP-PLT005 *Server Operating System Policy*.

- If an agency has an in-house DNS solution, those servers must forward to their local commonwealth domain controllers.
- All commonwealth domain controllers must forward to the commonwealth internal DNS servers for resolution not in the PA.LCL domain.
- Commonwealth internal DNS servers must forward non-internal or internet requests to commonwealth external DNS servers.

4. Responsibilities

Office of Administration/Office for Information Technology (OA/OIT):

- Create, modify, and delete DNS records/zones;
- Delegate zones as necessary to other authorities;
- Troubleshoot DNS resolution;
- Maintain the DNS infrastructure;
- Resolve all DNS queries not resolved by commonwealth domain controllers;
- Block DNS resolution for domains that are considered cybersecurity threats.

Commonwealth Agencies:

- Advance commonwealth branding initiatives by requesting DNS records under the PA.GOV domain;
- Submit changes for DNS changes at least five (5) business days in advance.

5. Related ITPs/Other References

Commonwealth policies, including Executive Orders, Management Directives, and IT Policies are published on the Office of Administration's public portal:

<http://www.oa.pa.gov/Policies/Pages/default.aspx>

- Management Directive 205.34 *Commonwealth of Pennsylvania Information Technology Acceptable Use Policy*
- ITP-PLT005 *Server Operating System Policy*
- ITP-SEC000 *Information Security Policy*
- NIST SP 800-81-2 *Secure Domain Name System (DNS) Deployment Guide*

6. Authority

Executive Order 2016-06, Enterprise Information Technology Governance

7. Publication Version Control

It is the user's responsibility to ensure they have the latest version of this publication, which appears on <https://itcentral.pa.gov> for Commonwealth personnel and on the Office of Administration public portal: <http://www.oa.pa.gov/Policies/Pages/default.aspx>. Questions regarding this publication are to be directed to RA-ITCentral@pa.gov.

8. Exemption from This Policy

In the event an agency chooses to seek an exemption, for reasons such as the need to comply with requirements for a federally mandated system, a request for waiver may be submitted via the Commonwealth of PA Procurement and Architectural Review (COPPAR) process. Requests are to be entered into the COPPAR Tool located at <http://copper.oa.pa.gov/>. Agency CIO approval is required.

This chart contains a history of this publication's revisions:

Version	Date	Purpose of Revision
Original	03/01/2006	Base Document
Revision	04/16/2009	Added PA.GOV
Revision	06/22/2009	Updated Policy and Exemption sections
Revision	01/21/2011	Updated to include specific policy for external and internal and DNS Supplement documents have been rescinded
Revision	09/13/2017	ITP Reformat Clarified OA/OIT authority on DNS management Removed <i>state.pa.us</i> as acceptable domain except for legacy sites Added References and Responsibilities section