

Information Technology Policy

Network Router and Switch Technology Standards

Number

ITP-NET002

Effective Date

September 13, 2005

Category

Network

Supersedes

None

Contact

RA-ITCentral@pa.gov

Scheduled Review

February 2023

1. Purpose

This [Information Technology Policy \(ITP\)](#) establishes enterprise-wide standards for router and switch technologies and the proper utilization of those technologies in a production environment.

2. Scope

This ITP applies to all entities on or connected to the Commonwealth Enterprise Network including all offices, departments, boards, commissions, councils, or any other organization (hereinafter referred to as "agencies").

Third-party vendors, licensors, contractors or suppliers shall meet the policy requirements of this ITP that are applicable to the products and services provided to the Commonwealth as outlined in the Responsibilities Section.

3. Policy

Agencies shall leverage router and switch technology as detailed in this policy. All Commonwealth router and switch technology implementations shall comply with the technology standards specified in STD-NET002A *Network Router and Switch Standards*.

All Commonwealth router and switch technology implementations shall comply with the protocols and requirements and make use of the evaluation criteria listed in GEN-NET002B *Network Router and Switch Requirements*.

The Office of Administration, Office for Information Technology, Enterprise Technology Services Office (OA/OIT/ETSO) shall review and approve all router and switch designs, changes, and implementations (and waivers, if applicable), to document the currently installed base and to determine the risks associated with non-standard implementations.

All requests for router and switch design changes and implementations, as well as all vendor solutions shall be submitted for OA/OIT for review and approval. Requests shall be submitted to ENS@pa.gov. All IT projects related to router and switch technology will be subject to review for compliance with this standard through the appropriate project governance processes. Refer to ITP-BUS001 *IT Planning and Projects* for IT project guidance.

Naming Standards

Agencies shall adhere to OPD-NET002C *Network Device Naming Standards* (authorized CWOPA personnel only, contact RA-ITCentral@pa.gov for requests), which details the requirements for the configuration of network device and their naming conventions.

Any new network devices deployed on and after the Effective Date detailed in OPD-NET002C not in compliance with this policy shall submit and obtain an approved [IT Policy waiver](#) against this policy prior to deployment of said network devices into an operational environment. Refer to section 8 for guidance on that process.

4. Responsibilities

4.1 Agencies shall adhere to the guidance set forth in this policy. Additionally, Agencies shall request and obtain an approved IT policy waiver before implementing any router or switch technology that does not comply with the standards, requirements, protocols, or naming conventions detailed in this policy and its supplemental documents.

4.2 Office of Administration, Office of Information Technology shall:

- Review any IT policy waiver requests submitted against this ITP.
- Review, render decision and/or comment on all router and switch designs, changes, and implementations (and waivers if applicable)
- Document the currently installed base and to determine the potential risks associated with non-standard implementations.

4.3 Third-party vendors, licensors, contractors, or suppliers shall ensure:

- All interfaces to the Commonwealth comply with this ITP.
- All components within third-party vendors, licensors, contractors, or suppliers' network(s) support the provisions outlined in this ITP.

5. Related ITPs/Other References

- Definitions of associated terms of this policy are published on the Office of Administration's public portal: <http://www.oa.pa.gov/Policies/Pages/Glossary.aspx>
- 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 Amended Commonwealth of Pennsylvania Information Technology Acceptable Use Policy](#)

- STD-NET002A Network Router and Switch Standards
- GEN-NET002B Network Router and Switch Requirements
- OPD-NET002C Network Device Naming Standards (authorized CWOPA personnel only, contact RA-ITCentral@pa.gov for requests)
- [ITP-BUS001 IT Planning and Projects](#)
- [ITP-SEC031 Encryption Standards](#)
- RFD-INF006B Commonwealth Building Codes (authorized CWOPA personnel only, contact RA-ITCentral@pa.gov for requests)

6. Authority

[Executive Order 2016-06 Enterprise Information Technology Governance](#)

7. Publication Version Control

It is the [Authorized 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 from the guidance within this ITP, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to [ITP-BUS004 IT Policy Waiver Review Process](#) for guidance.

This chart contains a history of this publication's revisions. Redline documents detail the revisions and are available to CWOPA users only.

Version	Date	Purpose of Revision	Redline Link
Original		Base Document	N/A
Revision	12/20/2010	ITP Refresh	N/A
Revision	10/31/2018	ITP reformatted Removed unnecessary language throughout Added reference to ITP-EPM006 Merged STD-NET002A into ITP, rescinded STD-NET002A Updated Standards Added OPD-NET002C	N/A
Revision	02/21/2022	ITP Refresh Explained scope to include all entities connecting to Commonwealth Enterprise Network Moved Standards to STD-NET002A Updated responsibilities Updated Exemption section to remove COPPAR reference Updated standards in supplemental document STD-NET002A	Revised IT Policy Redline <02/21/22>

		Updated required features and protocols in supplemental document GEN-NET002B	
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