

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

January 2025

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 offices, departments, boards, commissions, and councils under the Governor's jurisdiction and any other entity connecting to the Commonwealth Network (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 Technology Product and Platform Standards (Commonwealth access only)*.

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/IT/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 to OA/IT 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 policy through the appropriate project governance processes. Refer to [ITP- BUS001, IT Planning and Projects](#) for IT project guidance.

3.1 Naming Standards

Agencies shall adhere to *OPD-NET002C, Network Device Naming Standards* (authorized Commonwealth 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 for 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.
- Document the currently installed base and 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) that pertain to the products or services provided to the Commonwealth support the provisions outlined in this ITP. This is not intended to limit the technology used internally by the vendor.

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](#)
- [ITP-BUS001, IT Planning and Projects](#)
- *STD-NET002A, Network Router and Switch Standards* (Commonwealth access only).

- [GEN-NET002B, Network Router and Switch Requirements](#)
- *OPD-NET002C, Network Device Naming Standards* (authorized Commonwealth personnel only, contact RA-ITCentral@pa.gov for requests)
- [ITP-NET017, Network Timing Protocol](#)
- [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 shall 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 shall 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	09/13/2005	Base Document	N/A
Revision	12/20/2010	ITP Refresh	N/A
Revision	10/31/2018	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 • Updated required features and protocols in supplemental document GEN-NET002B 	N/A

Version	Date	Purpose of Revision	Redline Link
Revision	01/05/2024	<ul style="list-style-type: none">• Minor grammatical and reference updates• Added clarification around third-party responsibilities.	Revised IT Policy Redline <01/05/2024>