

# Information Technology Policy

## Server Operating System Policy

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| <b>ITP Number</b><br>ITP-PLT005  | <b>Effective Date</b><br>January 06, 2006 |
| <b>Category</b><br>Platform  | <b>Supersedes</b><br>None                 |
| <b>Contact</b><br><a href="mailto:RA-ITCentral@pa.gov">RA-ITCentral@pa.gov</a> | <b>Scheduled Review</b><br>January 2021   |

### 1. Purpose

Establishes enterprise-wide policy and standards for Microsoft and Linux-based servers.

### 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

All projects implementing Microsoft and Linux server operating systems are required to adhere to product standards as defined in the Commonwealth Server Operating Systems Standards tables detailed at the end of the Policy section. If a product is not listed within the Standards table, agencies must obtain an approved policy waiver before procuring or deploying a non-standard product. Emerging/Research Technologies also require an approved policy waiver. Refer to Section 8 for waiver guidance.

All products are to be deployed and kept up-to-date with patch levels in accordance with ITP-SYM006 *Desktop and Server Patching Policy*.

#### Microsoft Server Platform

Agencies investing in Windows server infrastructure are to continue to monitor the Microsoft Product Roadmap and plan hardware and software deployments accordingly. Minor releases are to be deployed on a tactical, as-needed basis; major releases are to be deployed only after extensive application and integration testing has been performed.

It is essential that agencies develop plans to migrate from products that are listed in "Contained" status. Microsoft typically ends mainstream or "fix" support six (6) years after their Release to Manufacturer (RTM) date. End-of-life, including end of security patch releases, occurs ten (10) years after RTM. It is recommended that a migration plan be completed no later than two (2) years prior to end-of-life to allow sufficient time for testing and the actual migration.

#### Linux Server Platform

Agencies are to implement only standard kernel releases and are not to modify the Linux kernel. Modifying and recompiling the Linux kernel could nullify the vendor support contract and may affect application portability.

Note: Both enterprise versions of Red Hat and SUSE have their products certified as Linux Standard Base (LSB). LSB helps increase the compatibility among Linux systems and enables

software applications to run on any conforming system. It also helps coordinate efforts to allow independent software vendors to port and write products for such systems.

### Naming Standards

Commonwealth Governor's jurisdiction agencies are to adhere to OPD-PLT005A *Server Naming Standards* (authorized CWOPA personnel only, contact [RA-ITCentral@pa.gov](mailto:RA-ITCentral@pa.gov) for requests) which details the requirements for the configuration of servers and their naming conventions.

Any new servers deployed on and after the Effective Date detailed in OPD-PLT005A not in compliance with this policy must obtain a COPPAR waiver approval against this policy prior to deployment of said servers into an operational environment. Refer to section 7 for guidance on that process.

### Commonwealth Server Operating Systems Standards

#### **CURRENT STANDARDS**

These technologies meet the requirements of the current architecture and are recommended for use.

| <b>Software</b>              | <b>Technology Classification</b> |
|------------------------------|----------------------------------|
| Windows Server 2019          | Current                          |
| Windows Server 2016          | Current                          |
| Windows Server 2012 R2       | Current                          |
| Red Hat Enterprise Linux 7.x | Current                          |
| SUSE Linux Enterprise 11.x   | Current                          |

NOTE: All products are to be patched with service packs within six months of the release date in accordance with ITP-SYM006 *Desktop and Server Software Patching Policy*.

#### **CONTAIN STANDARDS**

These technologies no longer meet the requirements of the current architecture and are not recommended for use. They will be phased out over time. No date has been set for their discontinuance.

| <b>Software</b>              | <b>Technology Classification</b> |
|------------------------------|----------------------------------|
| Windows Server 2012 (pre-R2) | Contain                          |
| Red Hat Enterprise Linux 6.x | Contain                          |
| SUSE Enterprise Linux 10.x   | Contain                          |

**EMERGING/RESEARCH TECHNOLOGIES**

Emerging technologies have the potential to become current standards. At the present time, they are to be used only in pilot or test environments where they can be evaluated. Use of these technologies is restricted to a limited production mode and requires approval of a waiver request.

| Software                   | Technology Classification |
|----------------------------|---------------------------|
| Microsoft Nano Server 2016 | Research                  |

**4. Responsibilities**

**Commonwealth Agencies** are to adhere to OPD-PLT005A *Server Naming Standards* for the configuration of server naming conventions for any new servers deployed on and after the Effective Date detailed in OPD-PLT005A

**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*
- OPD-PLT005A *Server Naming Standards* (authorized CWOPA personnel only) (Contact [RA-ITCentral@pa.gov](mailto:RA-ITCentral@pa.gov) for requests)
- ITP-SEC000 *Information Security Policy*
- ITP-SYM006 *Desktop and Server Patching Policy*

**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](mailto:RA-ITCentral@pa.gov).

**8. Exemption from This Policy**

In the event an agency chooses to seek an exemption from the guidance within this IT policy, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to [ITP-BUS004 IT 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 | 01/06/2006 | Base Document  | N/A          |
| Revision | 12/20/2010 | ITP Refresh  | N/A          |
| Revision | 09/06/2017 | ITP re-formatting<br>Merged STD-PLT005A into ITP<br>Removed "Intel Based" from ITP title | N/A          |

|          |            |   |  |
|----------|------------|---|--|
|          |            | Revised list of OS versions in Current/Contain/Retire Standards<br>Revised list of OS versions in Emerging/ Research Standards            |  |
| Revision | 10/04/2018 | Added Server Naming guidance<br>Added OPD-PLT005A<br>Removed Retired Standards table  | <a href="#">Revised IT Policy Redline 10/24/2018</a> |
| Revision | 04/10/2019 | Added Microsoft Server 2019 to Current Standard   | <a href="#">Revised IT Policy Redline 04/10/2019</a> |
| Revision | 01/16/2020 | Removed Microsoft Server 2008 from Contain, now retired.<br>Added clarifying language about use of non-listed products in Standards table | <a href="#">Revised IT Policy Redline 01/16/2020</a> |