#### **IBM i Power External Storage Support Matrix Summary**

Last updated: August 9, 2022 (Change log is on page 13)

IBM System Storage Interoperation Center (SSIC) should be used to determine current support for IBM Storage products. This document is intended to provide a quick reference when access to SSIC is not available. And to clarify support when IBM i utilizes VIOS VSCSI or NPIV connections to access storage devices. The URL to access SSIC is:

http://www-03.ibm.com/systems/support/storage/ssic/interoperability.wss

#### When neither SSIC nor this document indicate support, a SCORE RPQ request must be submitted.

This information is provided on "as is" basis and though each data point has been checked, it is possible a point was missed or entered incorrectly into the tables. IBM is working on enhancements to these IBM i & IBM Storage combinations. This document will be updated as enhancements and product announcements are made.

#### NOTES:

- The following tables do not include detailed considerations. For example, all server firmware levels or required PTFs are not included.
- Power10 enterprise servers require IBM i licensed internal code (LIC) level 7.3 with technology refresh 11 (TR11) or 7.4 with technology refresh 5 (TR5) or later.
- Power10 scale-out servers require IBM i licensed internal code (LIC) level 7.3 with technology refresh 12 (TR12) or 7.4 with technology refresh 6 (TR6) or 7.5 or later.
- Power9 servers require IBM i licensed internal code (LIC) level 7.2 with technology refresh 8 (TR8) or 7.3 with technology refresh 4 (TR4) or later.
   IBM i 7.1 is supported on selected servers with restrictions. For more information, see below.
- Power8 servers require IBM i licensed internal code (LIC) level 7.1 with technology refresh 8 (TR8) or later.
- Power7 servers require IBM i licensed internal code (LIC) level 6.1.1 or later.
- VIOS support requires IBM i 6.1 or later and Power6 or later server technology.
- NPIV requires IBM i LIC 6.1.1 or later with exceptions as noted below. NPIV capable fibre channel adapters and SAN switches are also required.
- When attached with a switched fabric, the FlashSystem 840/900 may report the IBM i Host State as "Degraded", even for properly configured systems. So the
  switch zoning should be verified to ensure the IBM i host ports are not degraded. The IBM i ports should explicitly be zoned to separate canisters on the FlashSystem
  840/900 for a proper multipath configuration.
- The FlashSystem A9000 and FlashSystem A9000R are not generally supported with IBM i, please open a SCORE/RPQ for evaluation.
- The Lenovo branded V3700 is **not** supported with IBM i.

Additional details regarding IBM i 7.1 support on select Power9 servers can be found here:

https://www.ibm.com/support/pages/ibm-i-license-topics

The most current version of this document can be found here:

• https://www.ibm.com/support/pages/node/6354233

#### Definition of IBM i attach methods

**Direct attach** – switch or fabric device is <u>not</u> required between the adapter allocated to the IBM i LPAR and the storage device. Unless otherwise noted, **direct attach** requires matching hardware on Server and Storage (e.g. 8Gbps to 8Gbps, 16 Gbps to 16Gbps, or 32Gbps to 32Gbps).

Fabric attach – switch or fabric device is required between the adapter allocated to the IBM i LPAR and the storage device

VIOS VSCSI – A virtual I/O server (VIOS or IBM i) provides a virtual SCSI adapter and virtual SCSI storage devices to a client operating system (IBM i, AIX, or Linux for VIOS; IBM i, AIX, Linux, or Windows for IBM i). Storage may be direct attached (no SAN switches) to the adapters assigned to the VIOS partition. Consult SSIC for valid configurations.

VIOS NPIV – N\_Port ID Virtualization (NPIV) – aka virtual fibre channel – A virtual I/O server (VIOS) provides a virtual fibre channel adapter to the client operating system (IBM i, AIX, or Linux). A switch capable of supporting NPIV is required.

#### Power10 servers

|   |   | IBM i attac                                   | ch method                                     |   |   |
|---|---|---|---|---|---|
| Storage family  | Direct  | Fabric  | VIOS VSCSI                                    | VIOS NPIV                                     | Notes   |
| <b>DS8000</b> – DS888x,<br>DS888xF, DS89xxF   | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later |   |
| Storwize – V5010E,<br>V5030, V5030E,<br>V5030F, V5100,<br>V5100F, V7000,<br>V7000F  | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later |   |
| svc   | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | Direct attach: - Direct attach is allowed only when Target Port Mode (NPIV) is in a Disabled or Transitional state. |
| FlashSystems – FS9100, FS9200, FS7200, FS7200H, FS5010, FS5010H, FS5030, FS5030H, FS5100, FS5100H, FS5015, FS5035, FS5200, FS7300, FS9500 | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later | IBM i 7.3 TR11,<br>IBM i 7.4 TR5 and<br>later |   |

## Power9 servers

|  |  | IBM i attac                                    | ch method  |  |   |
|--|--|--|--|--|---|
| Storage family   | Direct                                       | Fabric   | Fabric VIOS VSCSI VIOS NPIV                              |  | Notes   |
| DS8000 - DS8700,<br>DS8800, DS8870,<br>DS888x, DS888xF,<br>DS89xxF   | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | IBM i 7.2, 7.3, and 7.4 support only DS8700 and newer models.  DS89xxF requires a minimum of IBM i 7.2 TR8, 7.3 TR4 and 7.4 or later. Dynamic Volume Expansion is not supported by IBM i 7.2.  *IBM i 7.1 supported with restrictions |
| Storwize - V3500,<br>V3700, V5000, V5010,<br>V5010E, V5020,<br>V5030, V5030E,<br>V5030F, V5100,<br>V5100F, V7000,<br>V7000F  | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later |   |
| svc  | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | Direct attach: - 7.5 or later SVC/Storwize firmware - There is no support for direct attach 8Gbps to 8Gbps - Direct attach is allowed only when Target Port Mode (NPIV) is in a Disabled or - Transitional state.                     |
| FlashSystems –<br>V840, V9000, FS9100,<br>FS9200, FS7200,<br>FS7200H, FS5010,<br>FS5010H, FS5030,<br>FS5030H, FS5100,<br>FS5100H, FS5015,<br>FS5035, FS5200,<br>FS7300, FS9500 | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | *IBM i 7.1 supported with restrictions  |
| FlashSystems –<br>FS810, FS820   | SVC or Storwize is                           | a pre-requisite. VIC<br>Storwize is <u>n</u> e |  | tion without SVC or                                      |   |

# **Power9 servers (continued)**

| FlashSystems –<br>FS840 AE1,<br>FS900 AE2,<br>FS900 AE3 | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | No support   | IBM i 7.2 TR8,<br>IBM i 7.3 TR4 and<br>later | Direct attach: The protocol on 8Gb ports must be configured as FC-AL, 16Gb ports must be confiured as FC-P2P or Automatic.  NPIV requires VIOS 2.2.3.4 or later FlashSystem 1.2.0.11 or later firmware  All volumes must be created with a blocksize of 4096.  NOTE: FS840 or FS900 may be still be attached utilizing SVC or Storwize.  CAUTION: Certain unique workloads show lower than expected performance for IBM i hosts when attached to IBM FlashSystem 840/900 storage without SAN Volume Controller (SVC). It is recommended these opportunities be vetted with a POC to ensure the clients' workload does not encounter this performance issue. In addition, IBM i is maintaining a list of recommended PTFs for any clients running in a 4096 sector size configuration which is required with an attached FlashSystem 840/900. That list can be found here: https://www.ibm.com/support/pages/node/666523 |
|---|--|--|--|--|---|
| XIV   | No support                                   | No support                                   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | No support                                   | *IBM i 7.1 supported with restrictions  |
| DCS3700   | No support                                   | No support                                   | No support   | No support                                   |   |
|   |  | IBM i atta                                   | ch method  |  |   |
| Storage family  | Direct                                       | Fabric                                       | VIOS VSCSI   | VIOS NPIV                                    | Notes   |
| DCS3860   | No support                                   | No support                                   | IBM i 7.1*, IBM i<br>7.2 TR8, IBM i 7.3<br>TR4 and later | No support                                   | *IBM i 7.1 supported with restrictions  |

## Power8 servers

|   |                            | IBM i attac                                  | ch method                  |                            |   |
|---|----------------------------|--|----------------------------|----------------------------|---|
| Storage family  | Direct                     | Fabric                                       | VIOS VSCSI                 | VIOS NPIV                  | Notes   |
| D\$8000 - D\$8100,-<br>D\$8300, D\$8700,<br>D\$8800, D\$8870,<br>D\$888x, D\$888xF,<br>D\$89xxF   | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later                   | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and          | IBM i 7.2, 7.3, and 7.4 support only DS8700 and newer models.  DS8880 requires IBM i 7.1 or 7.2 as the minimum supported operating system level.  If thin Provisioned volumes are used, IBM i 7.1 PTF MF60755 or IBM i 7.2 PTF MF60756 is required.  DS89xxF is supported with IBM i 7.2 TR8, 7.3 TR4 and 7.4 or later. Dynamic Volume Expansion is not supported by IBM i 7.2. |
| Storwize - V3500,<br>V3700, V5000, V5010,<br>V5010E, V5020,<br>V5030, V5030E,<br>V5030F, V5100,<br>V5100F, V7000,<br>V7000F                                 | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later                   | IBM i 7.1 TR8 and<br>later | lotor                      | Direct attach requires: - 7.5 or later SVC/Storwize firmware - PCle 4Gb fibre channel adapters (feature 5774 or 5276) - Adapter on the Storwize, SVC, or Flash System must be 4 or 8 Gbps   |
| SVC   | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later                   | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later |   |
| FlashSystems –<br>V840, V9000, FS9100,<br>FS9200, FS7200,<br>FS7200H, FS5010,<br>FS5010H, FS5030,<br>FS5030H, FS5100,<br>FS5100H, FS5015,<br>FS5035, FS5200 | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later                   | IBM i 7.1 TR8 and<br>later | IBM i 7.1 TR8 and<br>later | There is no support for direct attach 8Gbps to 8Gbps.  Direct attach is allowed only when Target Port Mode (NPIV) is in a Disabled or Transitional state.   |
| FlashSystems –<br>FS810, FS820  | SVC or Storwize is         | a pre-requisite. VI0<br>Storwize is <u>n</u> |                            | tion without SVC or        |   |

# **Power8 servers (continued)**

| FlashSystems –<br>FS840 AE1,<br>FS900 AE2,<br>FS900 AE3 | IBM i 7.2 TR2 and later | IBM i 7.2 TR2 and later | No support              | IBM i 7.2 TR2 and<br>later | Direct attach: The protocol on 8Gb ports must be configured as FC-AL, 16Gb ports must be confiured as FC-P2P or Automatic.  NPIV requires VIOS 2.2.3.4 or later FlashSystem 1.2.0.11 or later firmware  All volumes must be created with a blocksize of 4096.  NOTE: FS840 or FS900 may be still be attached utilizing SVC or Storwize with IBM i 7.1 TR8 or later.  CAUTION: Certain unique workloads show lower than expected performance for IBM i hosts when attached to IBM FlashSystem 840/900 storage without SAN Volume Controller (SVC). It is recommended these opportunities be vetted with a POC to ensure the clients' workload does not encounter this performance issue. In addition, IBM i is maintaining a list of recommended PTFs for any clients running in a 4096 sector size configuration which is required with an attached FlashSystem 840/900. That list can be found here: https://www.ibm.com/support/pages/node/666523 |
|---|-------------------------|-------------------------|-------------------------|----------------------------|---|
| XIV   | No support              | No support              | IBM i 7.1 TR8 and later | No support                 |   |
| DCS3700   | No support              | No support              | No support              | No support                 |   |
|   |                         | IBM i attac             |                         |                            |   |
| Storage family  | Direct                  | Fabric                  | VIOS VSCSI              | VIOS NPIV                  | Notes   |
| DCS3860   | No support              | No support              | IBM i 7.1 TR8 and later | No support                 |   |

#### **Power7 and Power7+ servers**

(No longer maintained, provided for reference only)

|  |                            | IBM i attac                                  | ch method           |                            |   |
|--|----------------------------|--|---------------------|----------------------------|---|
| Storage family   | Direct                     | Fabric                                       | VIOS VSCSI          | VIOS NPIV                  | Notes   |
| DS8000 - DS8100,<br>DS8300, DS8700,<br>DS8800, DS8870,<br>DS888x, DS888xF              | IBM i 6.1 and later        | IBM i 6.1 and later                          | IBM i 6.1 and later | IBM i 6.1 and later        | Direct attach is available using  PCI-x 4Gb fibre channel adapters (feature 5749)  PCIe 4Gb fibre channel adapters (feature 5774 or 5276)  PCIe 8Gb fibre channel adapters (features 5735 or 5273)  PCIe 16Gb fibre channel adapters (features EN0A or EN0B) which requires:  PCIe gen2 or gen3 adapter slots  Minimum IBM i releases are 7.1 TR10, 7.2 TR2, or 7.3  16Gbps fibre on the DS8870 with firmware level R7.5 (87.50.114.0)  IBM i 7.2 or 7.3 support only DS8700, DS8800, DS8870 and all DS888x models.  DS8880 requires IBM i 7.1 or IBM i 7.2 the minimum supported operating system level  If Thin Provisioned volumes are used on DS8870 (R7.4 or R7.5) or DS8880, IBM i 7.1  PTF MF60755 or IBM i 7.2 PTF MF60756 is required. |
| Storwize - V3500,<br>V3700, V5000, V5010,<br>V5020, V5030,<br>V5030F, V7000,<br>V7000F | IBM i 7.1 TR7 and later    | IBM i 7.1 TR7 and later                      | IBM i 6.1 and later | IBM i 7.1 TR6 and<br>later | Direct attach requires: - 7.5 or later SVC/Storwize firmware - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276) - Adapter on the Storwize, SVC, or Flash System must be 4 or 8 Gbps   |
| svc  | IBM i 7.1 TR7 and<br>later | IBM i 7.1 TR7 and<br>later                   | IBM i 6.1 and later | IBM i 7.1 TR6 and<br>later | or (16Gb) - 7.5 or later SVC/Storwize firmware - Minimum IBM i 7.1 TR10, 7.2 TR2, or 7.3  |
| FlashSystems –<br>V840, V9000, FS9100  | IBM i 7.1 TR7 and<br>later | IBM i 7.1 TR7 and<br>later                   | IBM i 6.1 and later | IBM i 7.1 TR6 and<br>later | There is no support for direct attach 8Gbps to 8Gbps.  Direct attach is allowed only when Target Port Mode (NPIV) is in a Disabled or Transitional state.   |
| FlashSystems –<br>FS810, FS820   | SVC or Storwize is         | a pre-requisite. VI0<br>Storwize is <u>n</u> |                     | tion without SVC or        |   |

# Power7 and Power7+ servers (continued) (No longer maintained, provided for reference only)

|   |                     | IBM i attac             | ch method           |                         |   |
|---|---------------------|-------------------------|---------------------|-------------------------|---|
| Storage family  | Direct              | Fabric                  | VIOS VSCSI          | VIOS NPIV               | Notes   |
| FlashSystems –<br>FS840 AE1,<br>FS900 AE2,<br>FS900 AE3 |                     | IBM i 7.2 TR2 and later | No support          | IBM i 7.2 TR2 and later | Direct attach: The protocol on 8Gb ports must be configured as FC-AL, 16Gb ports must be confiured as FC-P2P or Automatic.  NPIV requires VIOS 2.2.3.4 or later FlashSystem 1.2.0.11 or later firmware  All volumes must be created with a blocksize of 4096.  Power System requires xx780_40 or later firmware. (See page 10 of this document for more information.)  NOTE: FS840 or FS900 may be still be attached utilizing SVC or Storwize with IBM i 7.1 TR7 or later.  CAUTION: Certain unique workloads show lower than expected performance for IBM i hosts when attached to IBM FlashSystem 840/900 storage without SAN Volume Controller (SVC). It is recommended these opportunities be vetted with a POC to ensure the clients' workload does not encounter this performance issue. In addition, IBM i is maintaining a list of recommended PTFs for any clients running in a 4096 sector size configuration which is required with an attached FlashSystem 840/900. That list can be found here: https://www.ibm.com/support/pages/node/666523 |
| XIV   | No support          | No support              | IBM i 6.1 and later | No support              |   |
| DCS3700   | No support          | No support              | IBM i 6.1 and 7.1   | No support              |   |
| DCS3860   | No support          | No support              | IBM i 6.1 and later | No support              |   |
| <b>DS3000</b> – DS3400,<br>DS3500, DS3700,<br>DS3950    | No support          | No support              | IBM i 6.1 and later | No support              | DS3200 is not supported on any rack/tower servers due to SAS only connections.  DS3500 must utilize fibre channel connection for rack/tower servers.  |
| <b>DS4000</b> – DS4700,<br>DS4800                       | No support          | No support              | IBM i 6.1 and later | No support              |   |
| DS5020  | No support          | No support              | IBM i 6.1 and later | No support              |   |
| <b>DS5000</b> – DS5100,<br>DS5300                       | IBM i 6.1 and later | IBM i 6.1 and later     | IBM i 6.1 and later | IBM i 6.1 and later     | - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276) - PCIe 8Gb fibre channel adapters (features 5735 or 5273)  |
| DS6800  | No support          | No support              | No support          | No support              | Support for Power7 or IBM i 7.1 must be made utilizing SCORE System RPQ process. Direct attach to may be requested using this process as well.  |

#### Power6 servers

(No longer maintained, provided for reference only)

|  | IBM i attach method |  |                     |                            |  |  |  |  |  |
|--|---------------------|--|---------------------|----------------------------|--|--|--|--|--|
| Storage family   | Direct              | Fabric                                       | VIOS VSCSI          | VIOS NPIV                  | Notes  |  |  |  |  |
| <b>DS8000</b> – DS8100,<br>DS8300, DS8700,<br>DS8800, DS8870 | IBM i 6.1 and later | IBM i 6.1 and later                          | IBM i 6.1 and later | IBM i 6.1 and later        | Direct attach is available using - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276) - PCIe 8Gb fibre channel adapters (features 5735 or 5273)  IBM i 7.2 supports DS8700, DS8800 and DS8870 models only.               |  |  |  |  |
|  |                     |  |                     |                            |  |  |  |  |  |
| <b>DS6000</b> – DS6800                                       | IBM i 6.1           | IBM i 6.1                                    | No support          | No support                 | DIRECT available when utilizing - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276)   |  |  |  |  |
| <b>Storwize</b> – V3500,<br>V3700, V5000, V7000              | No support          | No support                                   | IBM i 6.1 and later | IBM i 7.1 TR6 and<br>later |  |  |  |  |  |
| svc  | No support          | No support                                   | IBM i 6.1 and later | IBM i 7.1 TR6 and later    |  |  |  |  |  |
| FlashSystems –<br>FS810, FS820, FS840                        |                     | a pre-requisite. VI0<br>Storwize is <u>n</u> |                     | tion without SVC or        |  |  |  |  |  |
| FlashSystems - V840  | No support          | No support                                   | IBM i 6.1 and later | IBM i 7.1 TR6 and later    |  |  |  |  |  |
| XIV  | No support          | No support                                   | IBM i 6.1 and later | No support                 |  |  |  |  |  |
| <b>DS3000</b> – DS3400,<br>DS3500, DS3700,<br>DS3950         | No support          | No support                                   | IBM i 6.1 and later | No support                 | DS3200 is not supported on any rack/tower servers due to SAS only connections.  DS3500 must utilize fibre channel connection for rack/tower servers.   |  |  |  |  |
| <b>DS4000</b> – DS4700,<br>DS4800                            | No support          | No support                                   | IBM i 6.1 and later | No support                 |  |  |  |  |  |
| DS5020   | No support          | No support                                   | IBM i 6.1 and later | No support                 |  |  |  |  |  |
| <b>DS5000</b> – DS5100,<br>DS5300                            | IBM i 6.1 and later | IBM i 6.1 and later                          | IBM i 6.1 and later | IBM i 6.1 and later        | NPIV support requires IBM i 7.1 TR2 and server firmware xx730 or later.  Direct attach is available using - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276) - PCIe 8Gb fibre channel adapters (features 5735 or 5273) |  |  |  |  |
| DS6800   | IBM i 6.1           | IBM i 6.1                                    | No support          | No support                 | Support IBM i 7.1 must be made utilizing SCORE System RPQ process.  DIRECT attach available for Power6 systems when utilizing - PCI-x 4Gb fibre channel adapters (feature 5749) - PCIe 4Gb fibre channel adapters (feature 5774 or 5276)                                       |  |  |  |  |

# Flex System Power ITEs

(No longer maintained, provided for reference only)

|  |            | IBM i atta | ch method                                   |                            |   |
|--|------------|------------|---|----------------------------|---|
| Storage family   | Direct     | Fabric     | VIOS VSCSI                                  | VIOS NPIV                  | Notes   |
| <b>DS8000</b> – DS8100,<br>DS8300, DS8700,<br>DS8800, DS8870 | No support | No support | IBM i 6.1 and later                         | IBM i 6.1 and later        | IBM i 7.2 supports DS8700, DS8800 and DS8870 models only. |
| <b>Storwize</b> – V3500,<br>V3700, V5000, V7000              | No support | No support | IBM i 6.1 and later                         | IBM i 7.1 TR6 and<br>later |   |
| svc  | No support | No support | IBM i 6.1 and later                         | IBM i 7.1 TR6 and later    |   |
| FlashSystems –<br>FS810, FS820, FS840                        |            |            | OS VSCSI virtualiza<br><u>ot</u> supported. | tion without SVC or        |   |
| FlashSystems - V840  | No support | No support | IBM i 6.1 and later                         | IBM i 7.1 TR6 and later    |   |
| XIV  | No support | No support | IBM i 6.1 and later                         | No support                 |   |
| DCS3700  | No support | No support | IBM i 6.1 and 7.1                           | No support                 |   |

#### IBM Power Systems Power7 and Power8 firmware information

Refer to <a href="http://www14.software.ibm.com/webapp/set2/sas/f/power5cm/supportedcodep7.html">http://www14.software.ibm.com/webapp/set2/sas/f/power5cm/supportedcodep7.html</a> or access IBM Fix Central for more information about firmware for your specific Power Systems server

| Power Server | Machine type-Model (MTM) | Latest firmware level | Initial firmware level |  |  |
|--------------|--------------------------|-----------------------|------------------------|--|--|
| 710          | 8231-E2B                 | 730                   | 720                    |  |  |
| 710          | 8231-E1C; 8231-E2C       | 740                   | 740                    |  |  |
| 750          | 8231-E1D; 8231-E2D       | 770                   | 770                    |  |  |
| 720          | 8202-E4B; 8205-E6B       | 730                   | 720                    |  |  |
| 740          | 8202-E4C; 8205-E6C       | 740                   | 740                    |  |  |
| 740          | 8202-E4D; 8205-E6D       | 770                   | 770                    |  |  |
| 750          | 8233-E8B                 | 730                   | 710                    |  |  |
| 750          | 8408-E8D                 | 770                   | 770                    |  |  |
|              | 9117-MMB                 | 780                   | 711                    |  |  |
| 770          | 9117-MMC                 | 770                   | 770                    |  |  |
|              | 9117-MMD                 | 780                   | 780                    |  |  |
|              | 9179-MHB                 | 780                   | 711                    |  |  |
| 780          | 9179-MHC                 | 770                   | 770                    |  |  |
|              | 9179-MHD                 | 780                   | 780                    |  |  |
| 795          | 9119-FHB                 | 780                   | 720                    |  |  |
| S822         | 8284-22A                 | SV860                 | SV810                  |  |  |
| S814         | 8286-41A                 | SV860                 | SV810                  |  |  |
| S824         | 8286-42A                 | SV860                 | SV810                  |  |  |
| E870         | 9119-MME                 | SC860                 | SC820                  |  |  |
| E880         | 9119-MHE                 | SC860                 | SC820                  |  |  |

| Last updated April 25,<br>2013 |          |              |          |               | Pow      | er B             | lades    | 6             |          |   |
|--------------------------------|----------|--------------|----------|---------------|----------|------------------|----------|---------------|----------|---|
|                                |          | Chassis type |          | Blade type    |          | IBM i<br>version |          | IBM i attach  |          | Notes   |
| Storag                         | e Family | BCS          | BCH      | POWER6 POWER7 |          | 6.1              | 7.1      | VIOS<br>vSCSI | VIOS     |   |
|                                | DS3200   | 1            | 0        | ~             | 1        | 1                | 1        | 1             | 0        | D\$3200 only supports SAS connection and is not supported on BCH.   |
|                                | DS3400   | 0            | 1        | ~             | ✓        | 1                | 1        | <b>V</b>      | 0        |   |
| DS3000                         | DS3500   | <b>✓</b>     | <b>√</b> | ~             | ~        | ~                | ~        | ~             | 0        | DS3500 has either SAS or Fibre channel connections. BCH blades support either SAS or Fibre channel. BCS blades support only SAS.                  |
|                                | DS3700   | 0            | 1        | <b>V</b>      | V        | /                | 1        | <b>V</b>      | 0        |   |
|                                | DS3950   | 0            | <b>V</b> | <b>✓</b>      | <b>V</b> | 1                | 1        | <b>✓</b>      | 0        |   |
| DO 4000                        | DS4700   | 0            | <b>V</b> | V             | <b>V</b> | /                | <b>V</b> | <b>V</b>      | 0        | i   |
| DS4000                         | DS4800   | 0            | 1        | <b>✓</b>      | 1        | /                | 1        | <b>✓</b>      | 0        |   |
|                                | DS5020   | 0            | 1        | V             | ✓        | V                | <b>V</b> | <b>V</b>      | 0        | ii  |
| DS5000                         | DS5100   | 0            | <b>V</b> | <b>V</b>      | <b>✓</b> | 1                | 1        | <b>V</b>      | /        | NPIV support requires IBM i 7.1 TR2   |
|                                | DS5300   | 0            | 1        | ✓             | 1        | 1                | 1        | 1             | <b>✓</b> | NPIV support requires IBM i 7.1 TR2   |
| DS6000                         | DS6800   | 0            | 0        | 0             | 0        | 0                | 0        | 0             | 0        | See SCORE System RPQs for exception support   |
|                                | DS8100   | 0            | 1        | <b>/</b>      | <b>V</b> | 1                | 1        | 1             | /        | İ   |
|                                | DS8300   | 0            | 1        | <b>✓</b>      | <b>~</b> | 1                | 1        | <b>✓</b>      | V        |   |
| DS8000                         | DS8700   | 0            | <b>V</b> | <b>V</b>      | <b>~</b> | /                | 1        | <b>~</b>      | /        |   |
|                                | DS8800   | 0            | <b>V</b> | <b>V</b>      | <b>✓</b> | <b>V</b>         | V        | <b>✓</b>      | <b>~</b> |   |
|                                | DS8870   | 0            | 1        | 1             | <b>✓</b> | 1                | 1        | <b>V</b>      | <b>/</b> |   |
|                                | v3500    | 0            | ✓        | ~             | ✓        | <b>✓</b>         | <b>✓</b> | ✓             | <b>✓</b> | NPIV support requires IBM i 7.1 TR6 or later  |
| Storwize                       | v3700    | 0            | ~        | <b>V</b>      | ~        | 1                | 1        | ~             | <b>V</b> | NPIV support requires IBM i 7.1 TR6 or later  |
|                                | v7000    | 0            | ✓        | 1             | <b>V</b> | 1                | <b>✓</b> | ~             | <b>✓</b> | NPIV support requires IBM i 7.1 TR6 or later  |
| S                              | SVC      | 0            | 1        | 1             | <b>/</b> | 1                | 1        | <b>V</b>      | <b>V</b> | NPIV support requires IBM i 7.1 TR6 or later  |
| >                              | KIV      | 0            | 1        | ✓             | <b>✓</b> | <b>V</b>         | <b>V</b> | <b>V</b>      | 0        |   |
| N S                            | Series   | ✓            | <b>V</b> | ~             | <b>✓</b> | 1                | 1        | 0             | 0        | N Series is only supported for IFS via NFS mount<br>and can only be used as file server. No load source<br>or boot support. No IBM i DB2 support. |

#### Change log:

- August 9, 2022: Power10 scale-out updates, added new FlashSystem products
- September 8, 2021: Power10 updates
- June 4, 2021: Added new FlashSystems products, updated reference URLs for this document and 4096 PTFs, added information about IBM i 7.1 on Power9.
- April 30, 2020: Added new FlashSystems products, cleared up some Direct Attach notes.
- December 17, 2019: Added DS89xxF
- May 8, 2019: Added V5010E, V5030E, V5100 to Power8 and Power9
- December 19, 2018: Added requirement that NPIV must be disabled/transitional for direct attach of SVC/Storwize/FlashSystems to Power7, Power8 and Power9
- October 1, 2018: Added the V7000F and the V5030F to Power7, Power8 and Power9 and modified several comments
- September 24, 2018: Added FS900 AE3 and corrected page reference for Power7 Firmare
- Last Updated September 6, 2018: Added Power9 support section and added support for FS9100
- February 12, 2018: Added AE2 to the Storage Family along with V840 and V900 for P8 and P7/P7+.
- March 1, 2017: Added note regarding FlashSystem 900 performance. Added support statement regarding Lenovo branded V3700.
- July 20, 2016: Added note regarding FlashSystem A9000 and A9000R
- July 6, 2016: Clarified support for Storwize, SVC, and FlashSystem Vxxx direct attach.
- May 16, 2016: Added V5010, V5020, V5030 Storwize systems. Added IBM i 7.3 support where applicable.
- March 7, 2016: Added DS8880; added information about DS8100 and DS8300 withdrawal from service
- January 5, 2016: Clarified Power7 server firmware requirements
- October 7, 2015: Added note regarding Flash System reporting host state as "degraded"
- September 9, 2015: Minor fix for storage attached to Power8 servers.
- June 29, 2015: Added information regarding firmware required on Power7 servers to support direct and native attached Flash Systems. Fixed feature code for low profile 8Gbps fibre channel
- June 16, 2015: Changed FS840 direct, fabric, and NPIV support. Clarified direct attach for DS8000, SVC, Storwize.
- June 1, 2015: DS8870 16Gbps fibre direct attach support
- May 13, 2015: Additional information for FS900 support added
- May 12, 2015: Additional information for FS900 support added
- May 4, 2015: Added FS900 native attach support
- March 4, 2015: Added V9000 and FS900
- December 18, 2014: Clarified support for DCS3700
- November 5, 2014; Added many no longer marketed storage systems support
- November 4, 2014; Added DCS3700 support
- September 16, 2014: Added definitions for attach methods
- September 2, 2014: Clarified DS8000 support for Power8
- July 28, 2014: Added direct attach for Power8 with 5774 adapters
- June 30, 2014; Added support for DS8700 for IBM i 7.2
- June 6: major revision to format, addition of Power8 servers, addition of IBM i 7.2