

Archived support information for IBM Spectrum Scale

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Which levels of the AIX OS are supported by IBM Spectrum Scale?

IBM Spectrum® Scale supports AIX® V7.2, V7.1, and V6.1.

Table 1: IBM Spectrum Scale for AIX

IBM Spectrum Scale	AIX 7.2	AIX V7.1	AIX V6.1
IBM Spectrum Scale V5.0	V5.0.0.0 or later	V5.0.0.0 or later (AIXAIX 7.1 TL3 or later)	
IBM Spectrum Scale V4.2	V4.2.0.0 or later	V4.2.0.0 or later	V4.2.0.0 or later (AIX 6.1.4.0 or later)
IBM Spectrum Scale V4.1	V4.1.1.4 or later	V4.1.0.0 or later	V4.1.0.0 or later (AIX 6.1.4.0 or later)
GPFS V3.5	V3.5.0.29 or later	V3.5.0.0 or later	V3.5.0.0 or later

Note:

1. It is highly suggested that customers apply the latest service updates for their operating system. For links to the latest IBM Spectrum Scale service updates, see the question *How do I download fixes for IBM Spectrum Scale?*
2. The version of OpenSSL that is shipped with some versions of AIX 7.1, AIX V6.1, and AIX V5.3 does not work with GPFS V3.5 or V3.4 due to a change in how the library is built. To obtain the level of OpenSSL that works with GPFS, see the question *How do I get OpenSSL to work with GPFS?*. As of V4, IBM Spectrum Scale does not use OpenSSL for secure communication across nodes. Instead, it uses the GSKit toolkit, which is shipped as `gpfs.gskit` in all editions of IBM Spectrum Scale V4 and later.
3. Service is required for GPFS to work with some levels of AIX. For more information, see the question *What are the current advisories for IBM Spectrum Scale on AIX?*

Which Linux distributions are supported by IBM Spectrum Scale?

IBM Spectrum Scale supports the distributions in the following tables. See the subsequent tables for kernel specific information.

While IBM Spectrum Scale runs with many different Linux® kernel levels, it is highly suggested that customers apply the latest kernel service updates for their operating system. For links to the latest IBM Spectrum Scale service updates, see the *How do I download fixes for IBM Spectrum Scale?* question.

Staying on an OS that has had its support retired is not recommended. Upgrading to a newer IBM Spectrum Scale version with an OS that has had support retired can yield unexpected results, so it is not tested or recommended. For more information, see [The Full Story: IBM Spectrum Scale and Linux version compatibility](#). Consider upgrading the OS to a version that is supported with IBM Spectrum Scale and OS version compatibility. See the following tables for version support statements. Cross reference the OS vendor release life cycle management for which OS versions are still in support.

For example, a cluster running RHEL 7.4 on 4.2.3.15 that wants to upgrade to 5.0.4.2 should consider upgrading to RHEL 7.6 ([Table 5](#) on page 5 shows RHEL 7.6 support started from 4.2.3.13) prior to upgrading to 5.0.4.2 because 5.0.4.2 was released after RHEL 7.4 had its EUS support retired on August 31, 2019. If the cluster were running a version less than 4.2.3.13, it would need to upgrade to a more current IBM Spectrum Scale PTF in order to get support for RHEL7.6 and then upgrade to 5.0.4.2.

Note: For information on RHEL support for protocols, see the *What are the requirements to use the protocol access methods integrated with IBM Spectrum Scale V4.1.1 and later?* question.

Table 2: Linux distributions supported by IBM Spectrum Scale on x86_64 (RHEL and SLES)						
	RHEL			SLES		
	8 ¹	7	6	15 ²	12	11
IBM Spectrum Scale V5.0	V5.0.4	V5.0.0 (RHEL 7.1)		V5.0.3.0	V5.0.0 (SLES 12 SP1)	
IBM Spectrum Scale V4.2		V4.2.0.0	V4.2.0.0 (RHEL 6.4)		V4.2.0.0	V4.2.0.0 (SLES 11 SP3)
IBM Spectrum Scale V4.1		V4.1.0.4	V4.1.0.0 (RHEL 6.2)		V4.1.1.0	V4.1.0.0 (SLES 11 SP2)
GPFS V3.5		V3.5.0.21	V3.5.0.0			V3.5.0.0

Note:

1. RHEL 8 is not supported by the Object protocol. RHEL 8 is supported by Transparent cloud tiering starting with IBM Spectrum Scale 5.0.5. For more information, see the [IBM Spectrum Scale for Linux Red Hat® kernel support](#) table.
2. There is no protocol support on SLES 15. For more information, see the [IBM Spectrum Scale for Linux SLES kernel support](#) table.

Table 3: Linux distributions supported by IBM Spectrum Scale on x86_64 (Debian and Ubuntu)						
	Debian			Ubuntu		
	8	7	6	18.04	16.04	14.04
IBM Spectrum Scale V5.0				V5.0.1.2	V5.0.0	
IBM Spectrum Scale V4.2	V4.2.0.0	V4.2.0.0		V4.2.3.10	V4.2.1.1	V4.2.0.0
IBM Spectrum Scale V4.1	V4.1.1.0	V4.1.0.0	V4.1.0.0		V4.1.1.9	V4.1.0.5
GPFS V3.5			V3.5.0.0			V3.5.0.22

Note: For more detailed information about Debian and Ubuntu support, see the [IBM Spectrum Scale for Linux Debian kernel support](#) and the [IBM Spectrum Scale for Linux Ubuntu kernel support](#) tables.

Table 4: Linux distributions supported by IBM Spectrum Scale on Power									
	RHEL			SLES			Ubuntu		
	8 ¹	7	6	15 ²	12	11	18.04	16.04	14.04
IBM Spectrum Scale V5.0	V5.0.4	V5.0.0 (RHEL 7.1)		V5.0.3.0	V5.0.0 (SLES 12 SP1)		V5.0.1.2 (LE)	V5.0.0 (LE)	
IBM Spectrum Scale V4.2		V4.2.0.0 (RHEL 7.1, BE and LE RHEL 7.0, BE)	V4.2.0.0 (RHEL 6.4)		V4.2.0.0 (LE)	V4.2.0.0 (SLES 11 SP3)	V4.2.3.10 (LE)	V4.2.1.1 (LE)	V4.2.0.0 (LE)

	RHEL			SLES			Ubuntu		
	8 ¹	7	6	15 ²	12	11	18.04	16.04	14.04
IBM Spectrum Scale V4.1		V4.1.1.0 (RHEL 7.1, BE and LE) V4.1.0.4 (RHEL 7.0, BE)	V4.1.0.0 (RHEL 6.2)		V4.1.1.0 (LE)	V4.1.0.0 (SLES 11 SP2)		V4.1.1.9 (LE)	V4.1.0.5 (LE)
GPFS V3.5 ³		V3.5.0.21 (RHEL 7.0, BE)	V3.5.0.0			V3.5.0.0			

Note:

1. RHEL 8 is not supported by the Object protocol. RHEL 8 is supported by Transparent cloud tiering starting with IBM Spectrum Scale 5.0.5. For more information, see the [IBM Spectrum Scale for Linux Red Hat kernel support](#) table.
2. There is no protocol support on SLES 15. For more information, see the [IBM Spectrum Scale for Linux SLES kernel support](#) table.
3. GPFS V3.5 does not support LE.

RHEL Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
8.2	4.18.0-193.19.1.el8_2	4.18.0-193	From V5.0.5.1 in the 5.0 release	From V5.0.5.1 in the 5.0 release
8.1 ⁶⁻⁹	4.18.0-147.24.2	4.18.0-147.el8	From V5.0.4.2 in the 5.0 release	From V5.0.4.2 in the 5.0 release
8 ⁵⁻⁹	4.18.0-80	4.18.0-80	From V5.0.4 in the 5.0 release	From V5.0.4 in the 5.0 release
7.8	3.10.0-1127.19.1.el7	3.10.0-1127	From V4.2.3.22 in the 4.2 release From V5.0.5 in the 5.0 release	From V4.2.3.22 in the 4.2 release From V5.0.5 in the 5.0 release
7.7 ¹¹	3.10.0-1062.33.1.el7	3.10.0-1062	From V4.2.3.18 in the 4.2 release From V5.0.4 in the 5.0 release	From V4.2.3.18 in the 4.2 release From V5.0.4 in the 5.0 release
7.6 for IBM® Power® LE (POWER9™)	4.14.0-115.el7a	4.14.0-115.el7a	From V4.2.3.13 in the 4.2 release From V5.0.2.2 or later in the 5.0 release	From V4.2.3.13 in the 4.2 release From V5.0.2.2 or later in the 5.0 release

Table 5: IBM Spectrum Scale for Linux Red Hat kernel support (continued)

RHEL Distribution	Latest Kernel Level Tested¹	Minimum Kernel Level Required²	Minimum IBM Spectrum Scale Level Tested³	Minimum IBM Spectrum Scale Level Supported⁴
7.6 ¹⁰	3.10.0-957.58.2	3.10.0-957.el7	From V4.2.3.13 in the 4.2 release From V5.0.2.2 in the 5.0 release	From V4.2.3.13 in the 4.2 release From V5.0.2.2 or later in the 5.0 release
7.5 for IBM Power LE (POWER9)	4.14.0-49.el7a	4.14.0-49.el7a	From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release	From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release
7.5	3.10.0-862.el7	3.10.0-862.el7	From V4.1.1.20 in the 4.1.1 release From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release	From V4.1.1.20 in the 4.1.1 release From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release
7.4 for IBM Power LE (POWER9)	4.11.0-44.6.1.el7a	4.11.0-44.6.1.el7a	From V4.2.3.8 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.3.8 in the 4.2 release From V5.0.0 in the 5.0 release
7.4	x86: 3.10.0-693.11.6 Power: 3.10.0-693.17.1	3.10.0-693	From V4.1.1.17 in the 4.1.1 release From V4.2.3.4 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.17 in the 4.1.1 release From V4.2.3.4 in the 4.2 release From V5.0.0 in the 5.0 release
7.3	x86: 3.10.0-514.36.5 Power: 3.10.0-514.41.1	3.10.0-514	From V4.1.1.11 in the 4.1.1 release From V4.2.2.1 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.11 in the 4.1.1 release From V4.2.1.2 in the 4.2 release From V5.0.0 in the 5.0 release
7.2	x86: 3.10.0-327.62.4 Power: 3.10.0-327	3.10.0-327	From V4.1.1.3 in the 4.1.1 release From V4.2 From V5.0.0 in the 5.0 release	From V4.1.1.3 in the 4.1.1 release From V4.2 From V5.0.0 in the 5.0 release

Table 5: IBM Spectrum Scale for Linux Red Hat kernel support (continued)

RHEL Distribution	Latest Kernel Level Tested¹	Minimum Kernel Level Required²	Minimum IBM Spectrum Scale Level Tested³	Minimum IBM Spectrum Scale Level Supported⁴
7.1	3.10.0-229	3.10.0-229	From V3.5.0.26 in the 3.5 release From V4.1.1 From V4.2 From V5.0.0 in the 5.0 release	From V3.5.0.26 in the 3.5 release From V4.1.1 From V4.2 From V5.0.0 in the 5.0 release
7.0	3.10.0-123	3.10.0-123	From V3.5.0.21 in the 3.5 release From V4.1.0.4 in the 4.1 release From V4.2	From V3.5.0.21 in the 3.5 release From V4.1.0.4 in the 4.1 release From V4.2
6.10	x86: 2.6.32-754.el6 Power: 2.6.32-754.el6	2.6.32-754	From V4.1.1.21 in the 4.1 release From V4.2.3.10 in the 4.2 release	From V4.1.1.21 in the 4.1 release From V4.2.3.10 in the 4.2 release
6.9	x86: 2.6.32-696.18.7 Power: 2.6.32-696.23.1	2.6.32-696	From V4.1.1.16 in the 4.1.1 release From V4.2.3.1 in the 4.2 release	From V4.1.1.16 in the 4.1.1 release From V4.2.3.1 in the 4.2 release
6.8	2.6.32-642	2.6.32-642	From V3.5.0.32 in the 3.5 release From V4.1.1.8 in the 4.1.1 release From V4.2.1 in the 4.2 release	From V3.5.0.27 in the 3.5 release From V4.1.1.2 in the 4.1.1 release From V4.2
6.7	x86: 2.6.32-573.49.3 Power: 2.6.32-573	2.6.32-573	From V3.5.0.27 in the 3.5 release From V4.1.1.2 in the 4.1.1 release From V4.2	From V3.5.0.27 in the 3.5 release From V4.1.1.2 in the 4.1.1 release From V4.2
6.6	2.6.32-504	2.6.32-504	From V3.5.0.24 in the 3.5 release From V4.1.0.5 in the 4.1 release From V4.2	From V3.5.0.24 in the 3.5 release From V4.1.0.5 in the 4.1 release From V4.2

Table 5: IBM Spectrum Scale for Linux Red Hat kernel support (continued)

RHEL Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
6.5	2.6.32-431	2.6.32-431	From V3.5.0.17 in the 3.5 release From V4.1 From V4.2	From V3.5.0.17 in the 3.5 release From V4.1 From V4.2
6.4	2.6.32.358.2.1	2.6.32.358	From V3.5.0.8 in the 3.5 release From V4.1 From V4.2	From V3.5.0.8 in the 3.5 release From V4.1 From V4.2
6.3	2.6.32.279.14.1	2.6.32.279	From V3.5.0.1 in the 3.5 release From V4.1	From V3.5.0.1 in the 3.5 release From V4.1
6.2	2.6.32-220.4.1	2.6.32-220	From V3.5.0.1 in the 3.5 release From V4.1	From V3.5.0.1 in the 3.5 release From V4.1
6.1	2.6.32-279.2.1	2.6.32-131.0.15	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release
6.0	2.6.32-220.4.1	2.6.32-71	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release

Note:

1. The Latest Kernel Level Tested column indicates the latest kernel level that full testing is done on.
2. The Minimum Kernel Level Required column indicates the minimum kernel level that is required or the distribution version GA kernel level.
3. The Minimum IBM Spectrum Scale Level Tested column indicates the IBM Spectrum Scale level that full testing is done on.
4. The Minimum IBM Spectrum Scale Level Supported column is the minimum IBM Spectrum Scale level that supports the Linux distribution version.
5. Be aware that RHEL 8.0 is not an EUS release from Red Hat and is no longer supported once RHEL 8.1 is released. Therefore, RHEL 8.0 is no longer supported.
6. RHEL 8.x is not supported by the Object protocol.
7. TCT is supported with RHEL 8.x starting from IBM Spectrum Scale 5.0.5.
8. Live kernel patching is not supported.
9. If protocols and authentication are enabled, python-ldap needs to be installed for mmadquery to run.
10. IBM has identified an issue in IBM Spectrum Scale (GPFS) versions that support RHEL 7.6 (4.2.3.13 or later and 5.0.2.2 or later) in which a RHEL 7.6 node running kernel versions 3.10.0-957.19.1 or higher, including 3.10.0-957.21.2, might encounter a kernel crash while running I/O operations. A fix is available.

For more information, see <https://www.ibm.com/support/pages/node/887729>.

11. IBM has identified an issue in IBM Spectrum Scale versions that support RHEL 7.7 (4.2.3.18 or later and 5.0.4.0 or later) in which a RHEL 7.7 node running kernel versions 3.10.0-1062.18.1 or higher might encounter a kernel crash while performing operations on files in the file system.

For more information, see <https://www.ibm.com/support/pages/node/6193107>.

Table 6: IBM Spectrum Scale for Linux SLES kernel support

SLES Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
15 SP2 ⁵	5.3.18-22-default	5.3.18-22-default	From V5.0.5.2 in the 5.0 release	From V5.0.5.2 in the 5.0 release
15 SP1 ⁵	4.12.14-197.15-default	4.12.14-195-default	From V5.0.3.3 or later in the 5.0 release	From V5.0.3.3 or later in the 5.0 release
15 ⁵	4.12.14-23-default	4.12.14-23-default	From V5.0.3.0 or later in the 5.0 release	From V5.0.3.0 or later in the 5.0 release
12 SP5	4.12.14-120-default	4.12.14-120-default	From V4.2.3.20 in the 4.2 release From V5.0.4.2 in the 5.0 release	From V4.2.3.20 in the 4.2 release From V5.0.4.2 in the 5.0 release
12 SP4	4.12.14-95.3-default	4.12.14-95.3-default	From V4.2.3.13 in the 4.2 release From V5.0.2.3 or later in the 5.0 release	From V4.2.3.13 in the 4.2 release From V5.0.2.3 or later in the 5.0 release
12 SP3	x86: 4.4.103-6.38.1 Power: 4.4.114-94.11	4.4.73-5	From V4.1.1.19 in the 4.1.1 release From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release	From V4.1.1.19 in the 4.1.1 release From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release
12 SP2	x86: 4.4.103-92.56.1 Power: 4.4.114-92.64	4.4.21-69-default	From V4.1.1.14 in the 4.1.1 release From V4.2.2.3 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.14 in the 4.1.1 release From V4.2.2.3 in the 4.2 release From V5.0.0 in the 5.0 release
12 SP1	3.12.74-60.64.69 requires 4.1.1.19, 4.2.3.7, or 5.0.0.1 3.12.74-60.64.82 requires 4.1.1.20, 4.2.3.8, or 5.0.1.0	3.12.49-11	From V4.1.1.5 in the 4.1.1 release From V4.2.0.2 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.5 in the 4.1.1 release From V4.2.0.2 in the 4.2 release From V5.0.0 in the 5.0 release
12	Power: 3.12.51-52.31 x86: 3.12.61-52.111 requires 4.1.1.19 or 4.2.3.7 x86: 3.12.61-52.119 requires 4.1.1.20 or 4.2.3.8	3.12.51-52.31	From V4.1.1 From V4.2	From V4.1.1 From V4.2

SLES Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
11 SP4	x86: 3.0.101-108.21.1 Power: 3.0.101-108.35	3.0.101-63	From V3.5.0.27 in the 3.5 release From V4.1.1.2 in the 4.1.1 release From V4.2	From V3.5.0.27 in the 3.5 release From V4.1.1.2 in the 4.1.1 release From V4.2
11 SP3	x86: 3.0.101-0.47.106.11.1 Power: 3.0.76-0.11	3.0.76-0.11	From V3.5.0.11 in the 3.5 release From V4.1 From V4.2	From V3.5.0.11 in the 3.5 release From V4.1 From V4.2
11 SP2	3.0.101-0.21.1	3.0.42-0.7.3	From V3.5.0.6 in the 3.5 release From V4.1	From V3.5.0.6 in the 3.5 release From V4.1
11 SP1	2.6.32.59-0.7	2.6.32.59-0.7	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release
11	2.6.32.43-0.4	2.6.32.43-0.4	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release
10 SP4	2.6.16.60-0.84.1	2.6.16.60-0.84.1	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release
10 SP3	2.6.16.60-0.59.1	2.6.16.60-0.59.1	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release

Note:

1. The Latest Kernel Level Tested column indicates the latest kernel level that full testing is done on.
2. The Minimum Kernel Level Required column indicates the minimum kernel level that is required or the distribution version GA kernel level.
3. The Minimum IBM Spectrum Scale Level Tested column indicates the IBM Spectrum Scale level that full testing is done on.
4. The Minimum IBM Spectrum Scale Level Supported column is the minimum IBM Spectrum Scale level that supports the Linux distribution version.
5. Protocols are not supported on SLES 15, SLES 15 SP1, or SLES 15 SP2.

Debian Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
8.6	3.16.0-4-amd64 3.16.36-1+deb8u1	3.16.0-4-amd64 3.16.36-1+deb8u1	From V4.1.1.12 in the 4.1.1 release From V4.2.2 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release
8.5	3.16.0-4amd64 3.16.7-ckt25-2	3.16.0-4amd64 3.16.7-ckt25-2	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release
8.4	3.16.0-4amd64 3.16.7-ckt25-1	3.16.0-4amd64 3.16.7-ckt25-1	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release

Debian Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
8.3	3.16.0-4amd64 3.16.7-ckt20-1+deb8u3	3.16.0-4amd64 3.16.7-ckt20-1+deb8u3	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release
8.1	3.16.7-ckt11-1	3.16.7-ckt11-1	From V4.1.1.1 in the 4.1.1 release From V4.2	From V4.1.1 From V4.2
7.11	3.2.0-4amd64 3.2.81-1	3.2.0-4amd64 3.2.81-1	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release
7.9	3.2.0-4amd64 3.2.68-1+deb7u3	3.2.0-4amd64 3.2.68-1+deb7u3	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1 From V4.2.1 in the 4.2 release
7.1	3.2.0-4-amd64	3.2.0-4-amd64	From V4.1 From V4.2	From V4.1 From V4.2
6.0.8	3.2.5.1-1	3.2.5.1-1	From V3.5.0.15 in the 3.5 release From V4.1	From V3.5.0.15 in the 3.5 release From V4.1
6.0.3	2.6.32-5-amd64	2.6.32-5-amd64	From V3.5.0.1 in the 3.5 release	From V3.5.0.1 in the 3.5 release

Note:

1. The Latest Kernel Level Tested column indicates the latest kernel level that full testing is done on.
2. The Minimum Kernel Level Required column indicates the minimum kernel level that is required or the distribution version GA kernel level.
3. The Minimum IBM Spectrum Scale Level Tested column indicates the IBM Spectrum Scale level that full testing is done on.
4. The Minimum IBM Spectrum Scale Level Supported column is the minimum IBM Spectrum Scale level that supports the Linux distribution version.

Ubuntu Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
20.04	Coming soon	5.4.0-29-generic	Not supported yet	Not supported yet
18.04.5 (HWE kernel)	Coming soon	5.4.0-44-generic	Not supported yet	Not supported yet
18.04.5	Coming soon	4.15.0-114-generic	Not supported yet	Not supported yet
18.04.4 (HWE kernel)	5.3.0-40-generic	5.3.0-40-generic	From V5.0.5.1 in the 5.0 release	From V5.0.5.1 in the 5.0 release
18.04.4	4.15.0-76-generic	4.15.0-76-generic	From V4.2.3.21 in the 4.2 release From V5.0.5 in the 5.0 release	From V4.2.3.21 in the 4.2 release From V5.0.5 in the 5.0 release

Table 8: IBM Spectrum Scale for Linux Ubuntu kernel support (continued)

Ubuntu Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
18.04.3 (HWE kernel)	5.0.0-27-generic	5.0.0-27-generic	From V5.0.4 or later in the 5.0 release	From V5.0.4 or later in the 5.0 release
18.04.3	4.15.0-62-generic	4.15.0-60-generic	From V4.2.3.18 in the 4.2 release From V5.0.4 or later in the 5.0 release	From V4.2.3.18 in the 4.2 release From V5.0.4 or later in the 5.0 release
18.04.2	4.15.0-45-generic	4.15.0-45-generic	From V4.2.3.14 in the 4.2 release From V5.0.3.0 or later in the 5.0 release	From V4.2.3.14 in the 4.2 release From V5.0.3.0 or later in the 5.0 release
18.04.2	4.18.0-15-generic	4.18.0-15-generic	From V5.0.3.0 or later in the 5.0 release	From V5.0.3.0 or later in the 5.0 release
18.04.1	4.15.0-30-generic	4.15.0-30-generic	From V4.2.3.10 in the 4.2 release From V5.0.1.2 in the 5.0 release	From V4.2.3.10 in the 4.2 release From V5.0.1.2 in the 5.0 release
16.04.6 (HWE kernel)	4.15.0-46-generic	4.15.0-46-generic	From V4.2.3.15 in the 4.2 release From V5.0.3.1 in the 5.0 release	From V4.2.3.15 in the 4.2 release From V5.0.3.1 in the 5.0 release
16.04.6	4.4.0-143-generic	4.4.0-143-generic	From V4.2.3.15 in the 4.2 release From V5.0.3.1 in the 5.0 release	From V4.2.3.15 in the 4.2 release From V5.0.3.1 in the 5.0 release
16.04.5 (HWE kernel)	4.15.0-32-generic	4.15.0-32-generic	From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release	From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release
16.04.5	4.4.0-133-generic	4.4.0-133-generic	From V4.1.1.21 in the 4.1.1 release From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release	From V4.1.1.21 in the 4.1.1 release From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release
16.04.4 (HWE kernel)	4.13.0-37-generic	4.13.0-37-generic	From V4.2.3.9 in the 4.2 release From V5.0.1.0 in the 5.0 release	From V4.2.3.9 in the 4.2 release From V5.0.1.0 in the 5.0 release

Table 8: IBM Spectrum Scale for Linux Ubuntu kernel support (continued)

Ubuntu Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
16.04.4	4.4.0-116-generic	4.4.0-116-generic	From V4.1.1.20 in the 4.1.1 release From V4.2.3.9 in the 4.2 release From V5.0.1.0 in the 5.0 release	From V4.1.1.20 in the 4.1.1 release From V4.2.3.9 in the 4.2 release From V5.0.1.0 in the 5.0 release
16.04.3 (HWE kernel)	x86: 4.10.0-37-generic Power: 4.13.0-36-generic	4.10.0-33-generic	From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release	From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release
16.04.3	x86: 4.4.0-112-generic Power: 4.4.0-116-generic	4.4.0-93-generic	From V4.1.1.18 in the 4.1.1 release From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release	From V4.1.1.18 in the 4.1.1 release From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release
16.04.2	4.4.0-77-generic/ 4.8.0-51-generic	4.4.0-62-generic/ 4.8.0-36-generic	From V4.1.1.16 in the 4.1.1 release From V4.2.3.3 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.16 in the 4.1.1 release From V4.2.3.3 in the 4.2 release From V5.0.0 in the 5.0 release
16.04.1	4.4.0-47-generic	4.4.0-47-generic	From V4.1.1.12 in the 4.1.1 release From V4.2.2 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release From V5.0.0 in the 5.0 release
16.04	4.4.0-31-generic	4.4.0-21-generic	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release From V5.0.0 in the 5.0 release
14.04.5 (HWE kernel)	x86: 4.4.0-111-generic Power: 4.4.0-116-generic	4.4.0-31-generic	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release
14.04.5	x86: 3.13.0-141-generic Power: 3.13.0-142-generic	x86: 3.13.0-141-generic Power: 3.13.0-142-generic	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release

Ubuntu Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
14.04.4	4.2.0-42-generic	4.2.0-27-generic	From V3.5.0.32 in the 3.5 release From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release	From V3.5.0.32 in the 3.5 release From V4.1.1.9 in the 4.1.1 release From V4.2.1.1 in the 4.2 release
14.04.3	3.19.0-28-generic	3.19.0-25-generic	From V3.5.0.30 in the 3.5 release From V4.1.1.3 in the 4.1.1 release From V4.2	From V3.5.0.30 in the 3.5 release From V4.1.1.3 in the 4.1.1 release From V4.2
14.04.2	3.16.0-30-generic	3.13.0-24-generic	From V3.5.0.26 in the 3.5 release From V4.1.0.8 in the 4.1 release From V4.2	From V3.5.0.26 in the 3.5 release From V4.1.0.8 in the 4.1 release
14.04.1	3.13.0-32-generic	3.13.0-24-generic	From V3.5.0.22 in the 3.5 release From V4.1.0.5 in the 4.1 release	From V3.5.0.22 in the 3.5 release From V4.1.0.5 in the 4.1 release

Note:

1. The Latest Kernel Level Tested column indicates the latest kernel level that full testing is done on.
2. The Minimum Kernel Level Required column indicates the minimum kernel level that is required or the distribution version GA kernel level.
3. The Minimum IBM Spectrum Scale Level Tested column indicates the IBM Spectrum Scale level that full testing is done on.
4. The Minimum IBM Spectrum Scale Level Supported column is the minimum IBM Spectrum Scale level that supports the Linux distribution version.

Note:

- When issuing **make World** for Ubuntu 14.04.1, this warning appears but can be disregarded because **kdump-kern-dummy.ko** is not used by IBM Spectrum Scale.
WARNING: ".TOC." [/usr/lpp/mmfs/src/gpl-linux/kdump-kern-dummy.ko] undefined!
- Support for Ubuntu requires IBM Spectrum Scale V4.1.1 or the installation of base RPMs dated December 2014.
 - For products ordered through AAS/eConfig, log in to the Entitled Software page at: <https://www-05.ibm.com/servers/eserver/ess/OpenServlet.wss>.
 - For products ordered through Passport Advantage®, log in to the site at: <http://www.ibm.com/software/lotus/passportadvantage/>.

	RHEL			SLES			Ubuntu	
	8	7	6	15 ¹	12	11	18.04	16.04
IBM Spectrum Scale V5.0	V5.0.4	RHEL 7.1		V5.0.3	SLES 12 SP1		V5.0.1.2	x

	RHEL			SLES			Ubuntu	
IBM Spectrum Scale V4.2		x	RHEL 6.5		SLES 12 SP1	SLES 11 SP4	V4.2.3.10	V4.2.3.1
IBM Spectrum Scale V4.1		V4.1.0.5	V4.1.0.5 RHEL 6.5		V4.1.1.0	V4.1.0.5 SLES 11 SP3		

Note:

1. There is no protocol support on SLES 15.
2. For more detailed support information, see [IBM Spectrum Scale for Linux on Z RHEL kernel support](#), [IBM Spectrum Scale for Linux on Z SLES kernel support](#), and [IBM Spectrum Scale for Linux on Z Ubuntu kernel support](#).

RHEL Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
8.2	4.18.0-193.1.2	4.18.0-193	From V5.0.5.1 in the 5.0 release	From V5.0.5.1 in the 5.0 release
8.1 ²⁻⁵	4.18.0-147	4.18.0-147	From V5.0.4.2 in the 5.0 release	From V5.0.4.2 in the 5.0 release
8 ¹⁻⁵	4.18.0-80.el8.s390x	4.18.0-80.el8.s390x	From V5.0.4 in the 5.0 release	From V5.0.4 in the 5.0 release
7.8	3.10.0-1127	3.10.0-1127	From V4.2.3.22 in the 4.2 release From V5.0.5 in the 5.0 release	From V4.2.3.22 in the 4.2 release From V5.0.5 in the 5.0 release
7.7 ⁷	3.10.0-1062.el7.s390x	3.10.0-1062.el7.s390x	From V5.0.4 in the 5.0 release	From V5.0.4 in the 5.0 release
7.6 ⁶	3.10.0-957.el7.s390x / 4.14.0-115.el7a.s390x	3.10.0-957.el7.s390x / 4.14.0-115.el7a.s390x	From V5.0.2.2 in the 5.0 release	From V5.0.2.2 in the 5.0 release
7.6 ⁶	3.10.0-957.el7.s390x	3.10.0-957.el7.s390x	From V4.2.3.12 in the 4.2 release	From V4.2.3.12 in the 4.2 release
7.5	3.10.0-862.3.2.el7.s390x	3.10.0-862.el7.s390x	From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release	From V4.2.3.9 in the 4.2 release From V5.0.1.1 in the 5.0 release
7.4	3.10.0-693.17.1	3.10.0-693.5.2.el7.s390x	From V4.2.3.7 in the 4.2 release From V5.0.0 in the 5.0 release	From V5.0.0 in the 5.0 release
7.3	3.10.0-514.10.2.el7.s390x	3.10.0-514.10.2.el7.s390x	From V4.2.3 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.3 in the 4.2 release From V5.0.0 in the 5.0 release

RHEL Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
7.2	3.10.0-327.28.3 .el7.s390x ⁵	3.10.0-327.4.5 .el7.s390x	From V4.2.1 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.1 in the 4.2 release From V5.0.0 in the 5.0 release
7.1	3.10.0-229.4.2 .el7.s390x	3.10.0-229 .el7.s390x	From V4.1.1 From V5.0.0 in the 5.0 release	From V4.1.1 From V5.0.0 in the 5.0 release
7.0	3.10.0-123.6.3 .el7.s390x	3.10.0-123	From V4.1.0.5 in the 4.1 release	From V4.1.0.5 in the 4.1 release
6.10	2.6.32-754.2.1 .el6.s390x	2.6.32-754.2.1 .el6.s390x	From V4.2.3.10 in the 4.2 release	From V4.2.3.10 in the 4.2 release
6.9	2.6.23-696.23.1. .el6.s390x	2.6.23-696	From V4.2.3.1 in the 4.2 release	From 4.2.3.1 in the 4.2 release
6.8	2.6.32-642.6.2 .el6.s390x ⁵	2.6.32-573.18.1 .el6.s390x	From V4.2.2 in the 4.2 release	From V4.2.2 in the 4.2 release
6.7	2.6.32-573.18.1 .el6.s390x	2.6.32-573.18.1 .el6.s390x	From V4.2 in the 4.2 release	From V4.2 in the 4.2 release
6.6	2.6.32-504.8.1 .el6.s390x	2.6.32-504.1.3 .el6.s390x	From V4.1.1 in the 4.1 release	From V4.1.1 in the 4.1 release
6.5 + Errata Update RHSA-2014-0328	2.6.32-431.29.2 .el6.s390x	2.6.32-431.11.2	From V4.1.0.5 in the 4.1 release	From V4.1.0.5 in the 4.1 release

Note:

1. Be aware that RHEL 8.0 is not an EUS release from Red Hat and is no longer supported once RHEL 8.1 is released. Therefore, RHEL 8.0 is no longer supported.
2. TCT is supported with RHEL 8.x starting from IBM Spectrum Scale 5.0.5.
3. Live kernel patching is not supported.
4. If protocols and authentication are enabled, python-ldap needs to be installed for mmadquery to run.
5. The leapp utility for an in-place upgrade is not supported for IBM Spectrum Scale for Linux on Z.
6. IBM has identified an issue in IBM Spectrum Scale (GPFS) versions that support RHEL 7.6 (4.2.3.13 or later and 5.0.2.2 or later) in which a RHEL 7.6 node running kernel versions 3.10.0-957.19.1 or higher, including 3.10.0-957.21.2, might encounter a kernel crash while running I/O operations. A fix is available.

For more information, see <https://www.ibm.com/support/pages/node/887729>.

7. IBM has identified an issue in IBM Spectrum Scale versions that support RHEL 7.7 (4.2.3.18 or later and 5.0.4.0 or later) in which a RHEL 7.7 node running kernel versions 3.10.0-1062.18.1 or higher might encounter a kernel crash while performing operations on files in the file system.

For more information, see <https://www.ibm.com/support/pages/node/6193107>.

SLES Distribution	Latest Kernel Level Tested ¹	Minimum Kernel Level Required ²	Minimum IBM Spectrum Scale Level Tested ³	Minimum IBM Spectrum Scale Level Supported ⁴
15 SP2	5.3.18-22-default	5.3.18-22-default	From V5.0.5.2 in the 5.0 release	From V5.0.5.2 in the 5.0 release

Table 11: IBM Spectrum Scale for LinuxLinux on Z SLES kernel support (continued)

SLES Distribution	Latest Kernel Level Tested¹	Minimum Kernel Level Required²	Minimum IBM Spectrum Scale Level Tested³	Minimum IBM Spectrum Scale Level Supported⁴
15 SP1	4.12.14-197.15-default	4.12.14-195-default	From V5.0.3.3 in the 5.0 release	From V5.0.3.3 in the 5.0 release
15	4.12.14-25.25-default	4.12.14-25.25-default	From V5.0.3.0 in the 5.0 release	From V5.0.3.0 in the 5.0 release
12 SP5	4.12.14-120-default	4.12.14-120-default	From V5.0.4.2 in the 5.0 release	From V5.0.4.2 in the 5.0 release
12 SP4	4.12.14-95.3-default	4.12.14-94.41-default	From V4.2.3.13 in the 4.2 release From V5.0.2.3 in the 5.0.2 release	From V4.2.3.13 in the 4.2 release From V5.0.2.3 in the 5.0.2 release
12 SP3	4.4.103-94.6.1-default	4.4.103-94.6-default	From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release	From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release
12 SP2	4.4.38-93-default	4.4.21-69-default	From V4.2.3 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.3 in the 4.2 release From V5.0.0 in the 5.0 release
12 SP1	3.12.62-60.64.8-default	3.12.51-60-20-default	From V4.2.1 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.1 in the 4.2 release From V5.0.0 in the 5.0 release
12	3.12.60-52.54-default	3.12.36-38-default	From V4.1.1 in the 4.1 release	From V4.1.1 in the 4.1 release
11 SP4	3.0.101-84-default	3.0.101-63	From V4.2 in the 4.2 release	From V4.2 in the 4.2 release
11 SP3 + Maintweb Update	3.0.101-0.47.71-default	3.0.101-0.15	From V4.1.0.5 in the 4.1 release	From V4.1.0.5 in the 4.1 release

Table 12: IBM Spectrum Scale for LinuxLinux on Z Ubuntu kernel support

Ubuntu Distribution	Latest Kernel Level Tested¹	Minimum Kernel Level Required²	Minimum IBM Spectrum Scale Level Tested³	Minimum IBM Spectrum Scale Level Supported⁴
18.04.4 (HWE kernel)	5.3.0-53-generic	5.3.0-40-generic	From V5.0.5.1 in the 5.0 release	From V5.0.5.1 in the 5.0 release
18.04.4	4.15.0-88-generic	4.15.0-88-generic	From V5.0.5 in the 5.0 release	From V5.0.5 in the 5.0 release
18.04.3	4.15.0-64-generic	4.15.0-60-generic	From V5.0.4 or later in the 5.0 release	From V5.0.4 or later in the 5.0 release
18.04.2	4.15.0-45-generic	4.15.0-45-generic	From V5.0.3.1 in the 5.0 release	From V5.0.3.1 in the 5.0 release
18.04.1	4.15.0-33	4.15.0-29	From V5.0.2 in the 5.0 release	From V5.0.2 in the 5.0 release

<i>Table 12: IBM Spectrum Scale for LinuxLinux on Z Ubuntu kernel support (continued)</i>				
Ubuntu Distribution	Latest Kernel Level Tested¹	Minimum Kernel Level Required²	Minimum IBM Spectrum Scale Level Tested³	Minimum IBM Spectrum Scale Level Supported⁴
18.04	4.15.0-24	4.15.0-23	From V4.2.3.10 in the 4.2 release From V5.0.1.2 in the 5.0 release	From V4.2.3.10 in the 4.2 release From V5.0.1.2 in the 5.0 release
16.04.6	4.4.0-151-generic	4.4.0-151-generic	From V5.0.3.1 in the 5.0 release	From V5.0.3.1 in the 5.0 release
16.04.5	4.4.0-138 / 4.15.0-39	4.4.0-138 / 4.15.0-39	From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release	From V4.2.3.11 in the 4.2 release From V5.0.2.1 in the 5.0 release
16.04.4	4.4.0-119	4.4.0-116	From V4.2.3.8 in the 4.2 release	From V4.2.3.8 in the 4.2 release
16.04.4 ⁷	4.4.0-119/4.13.0-38	4.4.0-116/4.13.0-38	From V5.0.1 in the 5.0 release	From V5.0.1 in the 5.0 release
16.04.3	4.4.0-112	4.4.0-93/4.10.0-33	From V4.2.3.7 in the 4.2 release From V5.0.0.1 in the 5.0 release	From V5.0.0.1 in the 5.0 release
16.04.2	4.4.0-75 / 4.8.0-49	4.4.0-75 / 4.8.0-49	From V5.0.0 in the 5.0 release	From V5.0.0 in the 5.0 release
16.04.1	4.4.0-51	4.4.0-51	From V4.2.3.1 in the 4.2 release From V5.0.0 in the 5.0 release	From V4.2.3.1 in the 4.2 release From V5.0.0 in the 5.0 release

Note:

1. The Latest Kernel Level Tested column indicates the latest kernel level that full testing is done on.
2. The Minimum Kernel Level Required column indicates the minimum kernel level that is required or the distribution version GA kernel level.
3. The Minimum IBM Spectrum Scale Level Tested column indicates the IBM Spectrum Scale level that full testing is done on.
4. The Minimum IBM Spectrum Scale Level Supported column is the minimum IBM Spectrum Scale level that supports the Linux distribution version.
5. In regard to the latest Kernel for RHEL 6.8 and RHEL 7.2, see the following Technote <http://www-01.ibm.com/support/docview.wss?uid=ssg1S1009622>.
6. AFM and Asynch Disaster Recovery with AFM (Data Management and Advanced editions) require IBM Spectrum Scale V5.0.0.1 or later.
7. IBM Spectrum Scale supports HWE kernel 4.13 on Ubuntu 16.04.4 on V5.0.1.0 for IBM Z®.

Note: Support for IBM Spectrum Scale on IBM Z requires an order for 5737-F33, 5737-F34.

Also see the questions:

- *What are the current requirements/limitations for IBM Spectrum Scale for Linux on Z?*
- *What are the current requirements/limitations for using Ubuntu?*
- *What are the current restrictions on IBM Spectrum Scale Linux kernel support?*
- *Is IBM Spectrum Scale on Linux supported in a virtualization environment?*
- *What are the current advisories for all platforms supported by IBM Spectrum Scale?*
- *What are the current advisories for IBM Spectrum Scale on Linux?*

What levels of the Windows OS are supported by IBM Spectrum Scale?

IBM Spectrum Scale supports the following versions of Windows OS in both heterogeneous also known as mixed (Windows and non-Windows nodes) and homogeneous (Windows-only nodes) clusters:

Table 13: Windows OS versions that are supported by IBM Spectrum Scale

Windows OS version	IBM Spectrum Scale version
Windows Server 2012 R2	IBM Spectrum Scale V4 and V5.0
Windows 10	IBM Spectrum Scale V5.0.2 and newer
Windows Server 2016	IBM Spectrum Scale V5.0.3 and newer
Windows Server 2019	IBM Spectrum Scale V5.0.5 and newer

Desktop OS versions (like Windows 10) require Pro or Enterprise editions, while Windows Server versions require Standard or Datacenter editions.

UEFI Secure Boot on Windows 10 and Windows Server nodes (2016 and later) is supported starting with IBM Spectrum Scale V5.0.4.

For more information, see the following questions:

1. [What are the limitations of IBM Spectrum Scale support for Windows ?](#)
2. [What are the current advisories for all platforms supported by IBM Spectrum Scale?](#)
3. [What are the current advisories for IBM Spectrum Scale on Windows?](#)

Functional Support Matrices

Note:

- POWER7 is discontinued from December 31, 2020 and will no longer be supported on IBM Spectrum Scale.
- Power BE (Linux) is not supported from IBM Spectrum Scale 5.1.0.0.
- If you are running CNFS on RHEL 8.4, you need to apply a workaround to the nodes. For more information, contact IBM Support.

Table 14: IBM Storage Scale 5.1.9: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.6 8.8	RHEL 9.0 ^{5,6} 9.2	Ubuntu 20.04 ^{7,8} 20.04.5 20.04.6	Ubuntu 22.04 ^{7,8} 22.04.2 22.04.3	SLES 15 SP4 SP5
x86_64	<p>RHEL 7.9: 3.10.0-1160.108.1.el7</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>	<p>RHEL 8.6: 4.18.0-372.87.1.el8_6</p> <p>RHEL 8.8: 4.18.0-477.36.1.el8_8</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.85.1.el9_0</p> <p>RHEL 9.2: 5.14.0-284.48.1.el9_2</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>	<p>Ubuntu 20.04: 5.4.0-147-generic</p> <p>Ubuntu 20.04.5: 5.4.0-139-generic</p> <p>Ubuntu 20.04.6: 5.4.0-170-generic</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.2: 5.15.0-78-generic</p> <p>Ubuntu 22.04.3: 5.15.0-88-generic</p>	<p>SLES 15 SP4: 5.14.21-150400.24.100.2</p> <p>SLES 15 SP5: 5.14.21-150500.55.44.1</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.108.1.el7</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>	<p>RHEL 8.6: 4.18.0-372.64.1.el8_6</p> <p>RHEL 8.8: 4.18.0-477.43.1.el8_8</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.36.1.el9_0</p> <p>RHEL 9.2: 5.14.0-284.11.1.el9_2</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>Ubuntu 20.04.6: 5.4.0-170-generic</p> <p>SMB: 4.17.10 3-2</p> <p>NFS: 4.3 (ibm 073.09)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SLES 15 SP5: 5.14.21-150500.53-default</p>

Architecture	RHEL 7.9 ⁴	RHEL 8.6 8.8	RHEL 9.0 ^{5,6} 9.2	Ubuntu 20.04 ^{7,8} 20.04.5 20.04.6	Ubuntu 22.04 ^{7,8} 22.04.2 22.04.3	SLES 15 SP4 SP5
Linux on Z	RHEL 7.9: 3.10.0-1160.108.1.el7 SMB: 4.17.10 3-2 NFS: 4.3 (ibm 073.09)	RHEL 8.6: 4.18.0-372.87.1.el8_6 RHEL 8.8: 4.18.0-477.21.1.el8_8 SMB: 4.17.10 3-2 NFS: 4.3 (ibm 073.09)	RHEL 9.0: 5.14.0-284.18.1.el9_2 RHEL 9.2: 5.14.0-284.30.1.el9_2 SMB: 4.17.10 3-2 NFS: 4.3 (ibm 073.09)	No plan to support	No plan to support	SLES 15 SP4: 5.14.21-150400.24.100.2 SLES 15 SP5: 5.14.21-150500.55.44.1 SMB: 4.17.10 3-2 NFS: 4.3 (ibm 073.09)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows 11 (>= OS Build 22000)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	TL 0				
TL 5	TL 1				

- Red Hat live kernel patching is not supported on IBM Storage Scale.
- If protocols and authentication are enabled, python3-ldap needs to be installed for mmadquery to run.
- With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
- Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)
- Leapp upgrade from RHEL 8 to 9 with IBM Storage Scale installed is not supported.
- For RHEL 9, openssh-server-8.7p1-10.el9 or later is required ([RHBA-2022:6598 - Bug Fix Advisory](#)).
- Only the Ubuntu Server edition is supported.
- Only the default, non-rolling generic kernel image for the Ubuntu Server edition is supported. Ubuntu Hardware Enablement (Ubuntu HWE) kernels and others are not supported with IBM Storage Scale.

Architecture	RHEL 7.9	RHEL 8.6 8.8	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol

Table 16: IBM Storage Scale 5.1.9: Feature exceptions for Linux (continued)						
Architecture	RHEL 7.9	RHEL 8.6 8.8	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Power LE	ECE and object protocol	ECE	ECE, Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.

Table 17: IBM Storage Scale 5.1.9: Feature exceptions for AIX and Windows	
AIX 7.2 7.3	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Storage Scale Container Native deployment • IBM Storage Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Storage Scale: Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Storage Scale support for Windows?</i> in the IBM Storage Scale FAQ.

Table 18: IBM Storage Scale 5.1.8.2: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.6 8.8	RHEL 9.0 ^{5,6} 9.2	Ubuntu 20.04 ^{7,8} 20.04.5 20.04.6	Ubuntu 22.04 ^{7,8} 22.04.2 22.04.3	SLES 15 SP4 SP5
x86_64	<p>RHEL 7.9: 3.10.0-1160.102.1.el7</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>	<p>RHEL 8.6: 4.18.0-372.75.1.el8_6</p> <p>RHEL 8.8: 4.18.0-477.27.1.el8_8</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.70.1.el9_0</p> <p>RHEL 9.2: 5.14.0-284.30.1.el9_2</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>	<p>Ubuntu 20.04: 5.4.0-147-generic</p> <p>Ubuntu 20.04.5: 5.4.0-139-generic</p> <p>Ubuntu 20.04.6: 5.4.0-166-generic</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.2: 5.15.0-78-generic</p> <p>Ubuntu 22.04.3: 5.15.0-88-generic</p>	<p>SLES 15 SP4: 5.14.21-150400.24.92.1</p> <p>SLES 15 SP5: 5.14.21-150500.53-default</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.99.1.el7</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>	<p>RHEL 8.6: 4.18.0-372.64.1.el8_6</p> <p>RHEL 8.8: 4.18.0-477.27.1.el8_8</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.36.1.el9_0</p> <p>RHEL 9.2: 5.14.0-284.11.1.el9_2</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>Ubuntu 20.04.6: 5.4.0-163-generic</p> <p>SMB: 4.17.10 3-1</p> <p>NFS: 3.5 (ibm 071.22)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SLES 15 SP5: 5.14.21-150500.53-default</p>

Architecture	RHEL 7.9 ⁴	RHEL 8.6 8.8	RHEL 9.0 ^{5,6} 9.2	Ubuntu 20.04 ^{7,8} 20.04.5 20.04.6	Ubuntu 22.04 ^{7,8} 22.04.2 22.04.3	SLES 15 SP4 SP5
Linux on Z	RHEL 7.9: 3.10.0-1160.102.1.el7 SMB: 4.17.10 3-1 NFS: 3.5 (ibm 071.22)	RHEL 8.6: 4.18.0-372 RHEL 8.8: 4.18.0-477.21.1.el8_8 SMB: 4.17.10 3-1 NFS: 3.5 (ibm 071.22)	RHEL 9.0: 5.14.0-284.18.1.el9_2 RHEL 9.2: 5.14.0-284.30.1.el9_2 SMB: 4.17.10 3-1 NFS: 3.5 (ibm 071.22)	No plan to support	No plan to support	SLES 15 SP4: 5.14.21-150400.24.92.1 SLES 15 SP5: 5.14.21-150500.55.19 SMB: 4.17.10 3-1 NFS: 3.5 (ibm 071.22)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows 11 (>= OS Build 22000)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	TL 0				
TL 5	TL 1				

1. Red Hat live kernel patching is not supported on IBM Storage Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmadquery to run.
3. With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)
5. Leapp upgrade from RHEL 8 to 9 with IBM Storage Scale installed is not supported.
6. For RHEL 9, openssh-server-8.7p1-10.el9 or later is required ([RHBA-2022:6598 - Bug Fix Advisory](#)).
7. Only the Ubuntu Server edition is supported.
8. Only the default, non-rolling generic kernel image for the Ubuntu Server edition is supported. Ubuntu Hardware Enablement (Ubuntu HWE) kernels and others are not supported with IBM Storage Scale.

Table 20: IBM Storage Scale 5.1.8.2: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.6 8.8	RHEL 9.0 9.1	Ubuntu 20.04 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.

Table 21: IBM Storage Scale 5.1.8.2: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2 7.3</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Storage Scale Container Native deployment • IBM Storage Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Storage Scale: Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Storage Scale support for Windows?</i> in the IBM Storage Scale FAQ.

Table 22: IBM Storage Scale 5.1.7.1: Tested software versions and latest tested kernels for Linux²

Architecture	RHEL ¹ 7.9 ⁴	RHEL ¹ 8.4 8.6 8.7	RHEL ¹ 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5 20.04.6	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.95.1.el7</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.57.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.19.2.el8_7</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.53.1.el9_0</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-139-generic</p> <p>Ubuntu 20.04.6: 5.4.0-146-generic</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.15.0.66-generic</p> <p>Ubuntu 22.04.2: 5.15.0-69-generic</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>SLES 15 SP4: 5.14.21-150400.24.69.1</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.95.1.el7</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.57.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.13.1.el8_7</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.36.1.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 20.04: 5.4.0-148-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>SMB: 4.16.9 8-1</p> <p>NFS: 3.5 (ibm 071.21)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

Architecture	RHEL ¹ 7.9 ⁴	RHEL ¹ 8.4 8.6 8.7	RHEL ¹ 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5 20.04.6	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Linux on Z ³	RHEL 7.9: 3.10.0-1160 SMB: 4.16.9 8-1 NFS: 3.5 (ibm 071.21)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 RHEL 8.7: 4.18.0-425 SMB: 4.16.9 8-1 NFS: 3.5 (ibm 071.21)	RHEL 9.0: 5.14.0-70 RHEL 9.1: 5.14.0-162 SMB: 4.16.9 8-1 NFS: 3.5 (ibm 071.21)	No plan to support	No plan to support	SLES 15 SP4: 5.14.21-150400. 24.69.1 SMB: 4.16.9 8-1 NFS: 3.5 (ibm 071.21)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows 11 (>= OS Build 22000)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	TL 0 7300-00-00-0000				
TL 5	TL 1				

1. Red Hat live kernel patching is not supported on IBM Storage Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmadquery to run.
3. With IBM Storage Scale 5.1.x, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)
5. Leapp upgrade from RHEL8 to 9 with IBM Storage Scale installed is not supported.
6. For RHEL 9, openssh-server-8.7p1-10.el9 or later is required ([RHBA-2022:6598 - Bug Fix Advisory](#)).

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol

Table 24: IBM Spectrum Scale 5.1.7.1: Feature exceptions for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Power LE	ECE and object protocol	ECE	ECE, Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol, SMB, NFS	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 25: IBM Storage Scale 5.1.7.1: Feature exceptions for AIX and Windows

AIX 7.2 7.3	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Storage Scale Container Native deployment • IBM Storage Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Storage Scale: Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Storage Scale support for Windows?</i> in the IBM Storage Scale FAQ.

Table 26: IBM Spectrum Scale 5.1.7: Tested software versions and latest tested kernels for Linux²

Architecture	RHEL ¹ 7.9 ⁴	RHEL ¹ 8.4 8.6 8.7	RHEL ¹ 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.88.1.el7</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8</p> <p>RHEL 8.7: 4.18.0-425.19.2.el8_7</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.50.2.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-139-generic</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.15.0.66-generic</p> <p>Ubuntu 22.04.2: 5.15.0-69-generic</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.88.1.el7</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.13.1.el8_7</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.36.1.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>SMB: 4.16.8 7-1</p> <p>NFS: 3.5 (ibm 071.21)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

Architecture	RHEL ¹ 7.9 ⁴	RHEL ¹ 8.4 8.6 8.7	RHEL ¹ 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Linux on Z ³	RHEL 7.9: 3.10.0-1160 SMB: 4.16.8 7-1 NFS: 3.5 (ibm 071.21)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 RHEL 8.7: 4.18.0-425 SMB: 4.16.8 7-1 NFS: 3.5 (ibm 071.21)	RHEL 9.0: 5.14.0-70 RHEL 9.1: 5.14.0-162	No plan to support	No plan to support	SLES 15 SP4: 5.14.21-150400. 22-default SMB: 4.16.8 7-1 NFS: 3.5 (ibm 071.21)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows 11 (>= OS Build 22000)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	TL 0				
TL 5	TL 1 7300-01-01-2246				

1. Red Hat live kernel patching is not supported on IBM Storage Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmadquery to run.
3. With IBM Storage Scale 5.1.x, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)
5. Leapp upgrade from RHEL8 to 9 with IBM Storage Scale installed is not supported.
6. For RHEL 9, openssh-server-8.7p1-10.el9 or later is required ([RHBA-2022:6598 - Bug Fix Advisory](#)).

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol

Table 28: IBM Spectrum Scale 5.1.7: Feature exceptions for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Power LE	ECE and object protocol	ECE	ECE, Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol, SMB, NFS	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 29: IBM Spectrum Scale 5.1.7: Feature exceptions for AIX and Windows

AIX 7.2 7.3	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 30: IBM Spectrum Scale 5.1.2.11: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5 20.04.6	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.57.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.19.2.el8_7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0-148-generic</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.4.0.138.136</p> <p>Ubuntu 22.04.2: 5.15.0-67-generic</p>	<p>SLES 15 SP4: 5.14.21-150400.24.69.1</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.52.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>Ubuntu 20.04.6: 5.4.0-146-generic</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5 20.04.6	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	No plan to support		SLES 15 SP4: 5.14.21-150400.24. 69.1 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)

AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	TL 0			
TL 5	TL 1			

1. Red Hat live kernel patching is not supported on IBM Spectrum Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmdquery to run.
3. With IBM Spectrum Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Spectrum Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#).

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Spectrum Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Spectrum Scale development about the RPQ or SCORE process.
- Performance monitoring ZIMON packages (gpfs.gss.pmsensors and gpfs.gss.pmcollector) are available from IBM Spectrum Scale 5.1.2.3 and later for SLES15 with ppc64LE.

<i>Table 33: IBM Spectrum Scale 5.1.2.11: Feature exceptions for AIX and Windows</i>	
AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 34: IBM Spectrum Scale 5.1.2.10: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.52.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.19.2.el8_7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.4.0.138.136</p> <p>Ubuntu 22.04.2: 5.15.0-67-generic</p>	<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.52.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

Table 34: IBM Spectrum Scale 5.1.2.10: Tested software versions and latest tested kernels for Linux (continued)					
Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	No plan to support		SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)

Table 35: IBM Spectrum Scale 5.1.2.10: Tested software versions and latest tested kernels for Windows and AIX				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	TL 0			
TL 5	TL 1			

Table 36: IBM Spectrum Scale 5.1.2.10: Feature exceptions for Linux					
Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Spectrum Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Spectrum Scale development about the RPQ or SCORE process.
- Performance monitoring ZIMON packages (gpfs.gss.pmsensors and gpfs.gss.pmcollector) are available from IBM Spectrum Scale 5.1.2.3 and later for SLES15 with ppc64LE.

Table 37: IBM Spectrum Scale 5.1.2.10: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 38: IBM Storage Scale 5.1.6.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	RHEL 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.88.1.el7</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8</p> <p>RHEL 8.7: 4.18.0-425.19.2.el8_7</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.50.2.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.15.0.66-generic</p> <p>Ubuntu 22.04.2: 5.15.0-69-generic</p>	<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.88.1.el7</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.86.2.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.13.1.el8_7</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.36.1.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131-generic</p> <p>Ubuntu 20.04.5: 5.4.0-146-generic</p> <p>SMB: 4.16.8 6-1</p> <p>NFS: 3.5 (ibm 071.21)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	RHEL 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.16.8 6-1 NFS: 3.5 (ibm 071.21)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 RHEL 8.7: 4.18.0-425 SMB: 4.16.8 6-1 NFS: 3.5 (ibm 071.21)	RHEL 9.0: 5.14.0-70 RHEL 9.1: 5.14.0-162 SMB: 4.16.8 6-1 NFS: 3.5 (ibm 071.21)	No plan to support	No plan to support	SLES 15 SP4: 5.14.21-150400. 22-default SMB: 4.16.8 6-1 NFS: 3.5 (ibm 071.21)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	TL 0			
TL 5	TL 1			

1. Red Hat live kernel patching is not supported on IBM Storage Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmdquery to run.
3. With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)
5. Leapp upgrade from RHEL8 to 9 with IBM Storage Scale installed is not supported.
6. For RHEL9, openssh-server-8.7p1-10.el9 or later is required ([RHBA-2022:6598 - Bug Fix Advisory](#)).

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1 22.04.2	SLES 15 SP4
Power LE	ECE and object protocol	ECE	Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.

AIX 7.2 7.3	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Storage Scale Container Native deployment • IBM Storage Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Storage Scale: Concepts, Planning, and Installation Guide</i> and <i>Q.2.8 What are the limitations of IBM Storage Scale support for Windows?</i> in the IBM Storage Scale FAQ.

Table 42: IBM Storage Scale 5.1.5.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131.131</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.4.0.138.136</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.24. 28.1</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131.131</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.15.9 11-1</p> <p>NFS: 3.5 (ibm 071.19)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.24. 28.1</p>

Table 42: IBM Storage Scale 5.1.5.1: Tested software versions and latest tested kernels for Linux (continued)					
Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.15.9 11-1 NFS: 3.5 (ibm 071.19)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.15.9 11-1 NFS: 3.5 (ibm 071.19)	No plan to support	No plan to support	SLES 15 SP3: 5.3.18-150300.59.9 3.1 SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.15.9 11-1 NFS: 3.5 (ibm 071.19)

Table 43: IBM Storage Scale 5.1.5.1: Tested software versions and latest tested kernels for Windows and AIX			
AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 4	TL 0		
TL 5			

1. Red Hat live kernel patching is not supported on IBM Storage Scale.
2. If protocols and authentication are enabled, python3-ldap needs to be installed for mmdquery to run.
3. With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.
4. Support for RHEL 7 (POWER9) stopped from version 7.6. If you need to upgrade, see [What is IBM POWER9 Systems compatibility mode?](#)

Table 44: IBM Storage Scale 5.1.5.1: Feature exceptions for Linux					
Architecture	RHEL 7.9	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

Table 44: IBM Storage Scale 5.1.5.1: Feature exceptions for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

- With IBM Storage Scale 5.1.0, NFS and SMB protocols can be served from RHEL or SLES 15 on Linux on System Z servers. An RPQ would be required for IBM to review any requests for Integrated Protocol Server support. Ask your sales representative to contact IBM Storage Scale development about the RPQ or SCORE process.

Table 45: IBM Storage Scale 5.1.5.1: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> AFM AFM-DR Call home Clustered NFS Clustered watch folder ECE File audit logging FPO GUI HDFS IBM Storage Scale Container Native deployment IBM Storage Scale CSI Driver Installation toolkit Integrated protocols (CES) Performance monitoring REST API Transparent cloud tiering 	<ul style="list-style-type: none"> AFM AFM-DR Backup of a file system Call home Clustered NFS Clustered watch folder ECE Encryption of data at rest File audit logging File clones FPO GUI HDFS Health monitoring Installation toolkit Integrated protocols (CES) Performance monitoring Quotas REST API Transparent cloud tiering For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Storage Scale: Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Storage Scale support for Windows?</i> in the IBM Storage Scale FAQ.

Table 46: IBM Spectrum Scale 5.1.2.9: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.9.1.el8</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.4.0.138.136</p>	<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.76.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>		<p>SLES 15 SP4: 5.14.21-150400.24.28.1</p>

<i>Table 46: IBM Spectrum Scale 5.1.2.9: Tested software versions and latest tested kernels for Linux (continued)</i>					
Architecture	RHEL 7.9⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	No plan to support		SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)

<i>Table 47: IBM Spectrum Scale 5.1.2.9: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	TL 0			
TL 5	TL 1			

<i>Table 48: IBM Spectrum Scale 5.1.2.9: Feature exceptions for Linux</i>					
Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 49: IBM Spectrum Scale 5.1.2.9: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 50: IBM Spectrum Scale Container Native and CSI Compatibility Matrix

Container Native	CSI	Architecture	Containerized IBM Spectrum Scale level	Remote non-containerized storage cluster IBM Spectrum Scale level	OCP level	UBI level**	RHCOS	vanilla K8s level	IBM Cloud Satellite	RHEL	Ubuntu
CNSA 5.1.1.1	CSI 2.2.0	x86, ppc64le, s390x	5.1.1.1	5.1.0-1+ , 5.1.1.0+*	4.8	8.4	4.8	N/A	N/A	N/A	N/A
CNSA 5.1.1.3	CSI 2.3.0	x86, ppc64le, s390x	5.1.1.3	5.1.1.3	4.8	8.4	4.8	N/A	N/A	N/A	N/A
CNSA 5.1.1.4	CSI 2.3.1	x86, ppc64le, s390x	5.1.1.4	5.1.1.4+	4.8	8.4	4.8	N/A	N/A	N/A	N/A
CNSA 5.1.2.1	CSI 2.4.0	x86, ppc64le, s390x	5.1.2.1	5.1.2.1	4.8, 4.9	8.5	4.8, 4.9	N/A	N/A	N/A	N/A
CNSA 5.1.3.0	CSI 2.5.0	x86, ppc64le, s390x	5.1.3.0	5.1.3.0+	4.8, 4.9, 4.10	8.5	4.8, 4.9, 4.10	N/A	N/A	N/A	N/A

Table 50: IBM Spectrum Scale Container Native and CSI Compatibility Matrix (continued)

Container Native	CSI	Architecture	Containerized IBM Spectrum Scale level	Remote non-containerized storage cluster IBM Spectrum Scale level	OCF level	UBI level**	RHCOS	vanilla K8s level	IBM Cloud Satellite	RHEL	Ubuntu
CNSA 5.1.3.1	CSI 2.5.1	x86, ppc64le, s390x	5.1.3.1	5.1.3.0+	4.8, 4.9, 4.10	8.5	4.8, 4.9, 4.10	N/A	N/A	N/A	N/A
CNSA 5.1.4.0	CSI 2.6.0	x86, ppc64le, s390x	5.1.4.0	5.1.3.0+	4.8, 4.9, 4.10	8.6	4.8, 4.9, 4.10	N/A	N/A	N/A	N/A
CNSA 5.1.5.0	CSI 2.7.0	x86, ppc64le, s390x	5.1.5.0	5.1.3.0+	4.9, 4.10, 4.11	8.6	4.9, 4.10, 4.11	N/A	N/A	N/A	N/A
CNSA 5.1.6.0	CSI 2.8.0	x86, ppc64le, s390x	5.1.6.0	5.1.3.0+	4.9, 4.10, 4.11	8.7	4.9, 4.10, 4.11	N/A	N/A	N/A	N/A

Table 51: IBM Spectrum Scale 5.1.2.8: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>RHEL 8.4: 4.18.0-305.72.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.9.1.el8</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.4.0.138.136</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.24. 28.1</p> <p>SMB: 4.13.17 7-1</p> <p>NFS: 3.5 (ibm 070.26)</p>

Table 51: IBM Spectrum Scale 5.1.2.8: Tested software versions and latest tested kernels for Linux (continued)					
Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
Power LE	RHEL 7.9: 3.10.0-1160.81.1.el7 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	RHEL 8.4: 4.18.0-305.72.1.el8_4 RHEL 8.6: 4.18.0-372.32.1.el8_6 RHEL 8.7: 4.18.0-425.3.1.el8 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26) Object: 5.1.1	Ubuntu 20.04: 5.4.0-29-generic Ubuntu 20.04.3: 5.4.0-81-generic Ubuntu 20.04.4: 5.4.0.130.130 Ubuntu 20.04.5: 5.4.0.136.134 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)		SLES 15 SP3: 5.3.18-150300.59.9 3.1 SLES 15 SP4: 5.14.21-150400.24. 28.1
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)	No plan to support		SLES 15 SP3: 5.3.18-150300.59.9 3.1 SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.13.17 7-1 NFS: 3.5 (ibm 070.26)

Table 52: IBM Spectrum Scale 5.1.2.8: Tested software versions and latest tested kernels for Windows and AIX				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

Table 53: IBM Spectrum Scale 5.1.2.8: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 54: IBM Spectrum Scale 5.1.2.8: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 55: IBM Spectrum Scale 5.1.6: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	RHEL 9.0 ^{5,6} 9.1 ^{5,6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.72.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.13.1.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131.131</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p> <p>Ubuntu 22.04.1: 5.15.0.57.55</p>	<p>SLES 15 SP3: 5.3.18-150300.5 9.93.1</p> <p>SLES 15 SP4: 5.14.21-150400. 24.28.1</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.81.1.el7</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p>	<p>RHEL 8.4: 4.18.0-305.72.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>RHEL 8.7: 4.18.0-425.3.1.el8</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p> <p>Object: 5.1.1</p>	<p>RHEL 9.0: 5.14.0-70.13.1.el9_0</p> <p>RHEL 9.1: 5.14.0-162.6.1.el9_1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.131.131</p> <p>Ubuntu 20.04.5: 5.4.0.136.134</p> <p>SMB: 4.16.5 4-3</p> <p>NFS: 3.5 (ibm 071.21)</p>		<p>SLES 15 SP3: 5.3.18-150300.5 9.93.1</p> <p>SLES 15 SP4: 5.14.21-150400. 24.28.1</p>

Architecture	RHEL 7.9 ⁴	RHEL 8.4 8.6 8.7	RHEL 9.0 ^{5, 6} 9.1 ^{5, 6}	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04 22.04.1	SLES 15 SP3 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.16.5 4-3 NFS: 3.5 (ibm 071.21)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 RHEL 8.7: 4.18.0-425 SMB: 4.16.5 4-3 NFS: 3.5 (ibm 071.21)	RHEL 9.0: 5.14.0-70 RHEL 9.1: 5.14.0-162	No plan to support	No plan to support	SLES 15 SP3: 5.3.18-150300.5 9.93.1 SLES 15 SP4: 5.14.21-150400. 22-default SMB: 4.16.5 4-3 NFS: 3.5 (ibm 071.21)

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)	Windows Server 2022 (>= OS Build 20348)
TL 4	7300-00-00-0000			
TL 5				

Architecture	RHEL 7.9	RHEL 8.4 8.6 8.7	RHEL 9.0 9.1	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04	SLES 15 SP3
x86_64	Object protocol	N/A	Authentication NIS method restricted and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	Authentication NIS method restricted and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	Authentication NIS method restricted and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 58: IBM Spectrum Scale 5.1.6: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 59: IBM Spectrum Scale 5.1.4.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.5 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.16)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p>

<i>Table 59: IBM Spectrum Scale 5.1.4.1: Tested software versions and latest tested kernels for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.4⁴ 8.5 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.14)	RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 RHEL 8.6: 4.18.0-372 SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.14)	No plan to support	No plan to support	SLES 15 SP3: 5.3.18-150300.59.9 3.1 SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.16)

<i>Table 60: IBM Spectrum Scale 5.1.4.1: Tested software versions and latest tested kernels for Windows and AIX</i>			
AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 4	7300-00-00-0000		
TL 5			

<i>Table 61: IBM Spectrum Scale 5.1.4.1: Feature exceptions for Linux</i>					
Architecture	RHEL 7.9	RHEL 8.4 8.5 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 62: IBM Spectrum Scale 5.1.4.1: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 63: IBM Spectrum Scale 5.1.3.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p>	<p>SLES 15 SP3: 5.3.18-150300.59.93.1</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.07)</p>	<p>SLES 15 SP3: 5.3.18-150300.59.93.1</p>

Table 63: IBM Spectrum Scale 5.1.3.1: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.07)	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.07)	No plan to support	SLES 15 SP3: 5.3.18-150300.59.93.1 SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.07)

Table 64: IBM Spectrum Scale 5.1.3.1: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 4	7300-00-00-0000		
TL 5			

Table 65: IBM Spectrum Scale 5.1.3.1: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 66: IBM Spectrum Scale 5.1.3.1: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 67: IBM Spectrum Scale 5.1.1.4: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.49.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.70.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-150300.59.93.1</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>

Table 67: IBM Spectrum Scale 5.1.1.4: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
Power LE	RHEL 7.9: 3.10.0-1160.49.1.el7 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	RHEL 8.1: 4.18.0-147.54.2.el8_1 RHEL 8.2: 4.18.0-193.70.1.el8_2 RHEL 8.4: 4.18.0-305.65.1.el8_4 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04) Object: 5.1.1	Ubuntu 20.04: 5.4.0-29-generic Ubuntu 20.04.1: 5.4.0-42-generic Ubuntu 20.04.2: 5.4.0-65-generic SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	No plan to support
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-150300.59.93.1 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)

Table 68: IBM Spectrum Scale 5.1.1.4: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 4			
TL 5			

Table 69: IBM Spectrum Scale 5.1.1.4: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	No plan to support
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 70: IBM Spectrum Scale 5.1.1.4: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 71: IBM Spectrum Scale 5.0.5.14: Tested software stack and kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9-3.1</p>

Table 71: IBM Spectrum Scale 5.0.5.14: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Power LE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p>
Power BE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.11.17-24-1</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

Table 71: IBM Spectrum Scale 5.0.5.14: Tested software stack and kernels for Linux (continued)					
Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5 4.18.0-348	Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic Ubuntu 18.04.6 (HWE kernel) 5.4.0-90-generic Ubuntu 18.04.6 4.15.0-163-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP3: 5.3.18-150300.59.9 3.1

Table 72: IBM Spectrum Scale 5.0.5.14: Tested software versions and latest tested kernels for Windows and AIX				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	TL 5			
TL 5				

Table 73: IBM Spectrum Scale 5.0.5.14: Feature exceptions for Linux					
Architecture	RHEL 7.9	RHEL 8.2 8.4 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A

<i>Table 73: IBM Spectrum Scale 5.0.5.14: Feature exceptions for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.2 8.4 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

<i>Table 74: IBM Spectrum Scale 5.0.5.14: Feature exceptions for AIX and Windows</i>	
AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 75: IBM Spectrum Scale 5.1.2.7: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.80.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p>	<p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0-125-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.24. 28.1</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.80.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p>	<p>RHEL 8.4: 4.18.0-305.65.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.32.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0.130.130</p> <p>Ubuntu 20.04.5: 5.4.0-125-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.25)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.24. 28.1</p>

<i>Table 75: IBM Spectrum Scale 5.1.2.7: Tested software versions and latest tested kernels for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.4⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04	SLES 15 SP3 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.25)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.25)	No plan to support		SLES 15 SP3: 5.3.18-150300.59.9 3.1 SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.25)

<i>Table 76: IBM Spectrum Scale 5.1.2.7: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

<i>Table 77: IBM Spectrum Scale 5.1.2.7: Feature exceptions for Linux</i>					
Architecture	RHEL 7.9	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4 20.04.5	Ubuntu 22.04	SLES 15 SP3 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 78: IBM Spectrum Scale 5.1.2.7: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 79: IBM Spectrum Scale 5.1.5.0: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>	<p>RHEL 8.4: 4.18.0-305.62.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.26.1.el8_6</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>	<p>Ubuntu 22.04: 5.15.0.51.51</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.22- default</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>

Table 79: IBM Spectrum Scale 5.1.5.0: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3 SP4
Power LE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>	<p>RHEL 8.4: 4.18.0-305.62.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.26.1.el8_6</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0.130.130</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.22- default</p>
Linux on Z	<p>RHEL 7.9: 3.10.0-1160</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>	<p>RHEL 8.4: 4.18.0-305</p> <p>RHEL 8.6: 4.18.0-372</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>	No plan to support	No plan to support	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.22- default</p> <p>SMB: 4.15.5 6-1</p> <p>NFS: 3.5 (ibm 071.18)</p>

Table 80: IBM Spectrum Scale 5.1.5.0: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 4	7300-00-00-0000		
TL 5			

Table 81: IBM Spectrum Scale 5.1.5.0: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 82: IBM Spectrum Scale 5.1.5.0: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 83: IBM Spectrum Scale 5.1.2.6: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3 SP4
x86_64	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p>	<p>RHEL 8.4: 4.18.0-305.62.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.26.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p>	<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.22- default</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.76.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p>	<p>RHEL 8.4: 4.18.0-305.62.1.el8_4</p> <p>RHEL 8.6: 4.18.0-372.26.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.24)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.9 3.1</p> <p>SLES 15 SP4: 5.14.21-150400.22- default</p>

Table 83: IBM Spectrum Scale 5.1.2.6: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3 SP4
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.24)	RHEL 8.4: 4.18.0-305 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.24)	No plan to support		SLES 15 SP3: 5.3.18-150300.59.9 3.1 SLES 15 SP4: 5.14.21-150400.22- default SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.24)

Table 84: IBM Spectrum Scale 5.1.2.6: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

Table 85: IBM Spectrum Scale 5.1.2.6: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.4 8.6	Ubuntu 20.04 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3 SP4
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 86: IBM Spectrum Scale 5.1.2.6: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 87: IBM Spectrum Scale 5.1.2.5: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.5 8.6	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.71.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p>	<p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.19.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p>	<p>SLES 15 SP3: 5.3.18-150300.59.6 3-default</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.71.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p>	<p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.19.1.el8_6</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.22)</p>		<p>SLES 15 SP3: 5.3.18-150300.59.6 3-default</p>

Table 87: IBM Spectrum Scale 5.1.2.5: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.5 8.6	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.22)	RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 RHEL 8.6: 4.18.0-372 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.22)	No plan to support		SLES 15 SP3: 5.3.18-57-default SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.22)

Table 88: IBM Spectrum Scale 5.1.2.5: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

Table 89: IBM Spectrum Scale 5.1.2.5: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 8.6	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 90: IBM Spectrum Scale 5.1.2.5: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 91: IBM Spectrum Scale 5.1.4: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5 8.6	Ubuntu 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.71.1.el7</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.13.1.el8_6</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>Ubuntu 22.04: 5.15.0-27-generic</p>	<p>SLES 15 SP3: 5.3.18-150300.59.4 6-default</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.71.1.el7</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>RHEL 8.6: 4.18.0-372.13.1.el8_6</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.15.5 4-1</p> <p>NFS: 3.5 (ibm 071.14)</p>		<p>SLES 15 SP3: 5.3.18-57-default</p>

Table 91: IBM Spectrum Scale 5.1.4: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5 8.6	Ubuntu 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.14)	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 RHEL 8.6: 4.18.0-372 SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.14)	No plan to support	No plan to support	SLES 15 SP3: 5.3.18-150300.59.6 3-default SMB: 4.15.5 4-1 NFS: 3.5 (ibm 071.14)

Table 92: IBM Spectrum Scale 5.1.4: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 4	7300-00-00-0000		
TL 5			

Table 93: IBM Spectrum Scale 5.1.4: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 8.6	Ubuntu 20.04.3 20.04.4	Ubuntu 22.04	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	No plan to support	ECE, FPO, HDFS, and object protocol

Table 94: IBM Spectrum Scale 5.1.4: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 95: IBM Spectrum Scale 5.1.2.4: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.66.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p>	<p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p>	<p>SLES 15 SP3: 5.3.18-150300.59.46-default</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.66.1.el7</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p>	<p>RHEL 8.4: 4.18.0-305.49.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>Ubuntu 20.04.4: 5.4.0-100-generic</p> <p>SMB: 4.13.17 5-1</p> <p>NFS: 3.5 (ibm 070.17)</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>

<i>Table 95: IBM Spectrum Scale 5.1.2.4: Tested software versions and latest tested kernels for Linux (continued)</i>				
Architecture	RHEL 7.9	RHEL 8.4⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.17)	RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.17)	No plan to support	SLES 15 SP3: 5.3.18-57-default SMB: 4.13.17 5-1 NFS: 3.5 (ibm 070.17)

<i>Table 96: IBM Spectrum Scale 5.1.2.4: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

<i>Table 97: IBM Spectrum Scale 5.1.2.4: Feature exceptions for Linux</i>				
Architecture	RHEL 7.9	RHEL 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3 20.04.4	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 98: IBM Spectrum Scale 5.1.2.4: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 99: IBM Spectrum Scale 5.1.2.3: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.45.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p>	<p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.45.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.23.1.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.13)</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>

Table 99: IBM Spectrum Scale 5.1.2.3: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.13)	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.13)	No plan to support	SLES 15 SP3: 5.3.18-57-default SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.13)

Table 100: IBM Spectrum Scale 5.1.2.3: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 4	7300-00-00-0000			
TL 5				

Table 101: IBM Spectrum Scale 5.1.2.3: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 102: IBM Spectrum Scale 5.1.2.3: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 103: IBM Spectrum Scale 5.0.5.13: Tested software stack and kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.45.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.20.1.el8_5</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>

Table 103: IBM Spectrum Scale 5.0.5.13: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Power LE	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.45.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.20.1.el8_5</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>
Power BE	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

Table 103: IBM Spectrum Scale 5.0.5.13: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5 4.18.0-348	Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic Ubuntu 18.04.6 (HWE kernel) 5.4.0-90-generic Ubuntu 18.04.6 4.15.0-163-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP3: 5.3.18-57-default

Table 104: IBM Spectrum Scale 5.0.5.13: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

Table 105: IBM Spectrum Scale 5.0.5.13: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

<i>Table 105: IBM Spectrum Scale 5.0.5.13: Feature exceptions for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP3
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

<i>Table 106: IBM Spectrum Scale 5.0.5.13: Feature exceptions for AIX and Windows</i>	
AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 107: IBM Spectrum Scale 5.1.3: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.40.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.20.1.el8_5</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p>	<p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.62.1.el7</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p>	<p>RHEL 8.2: 4.18.0-193.80.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.40.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.20.1.el8_5</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.15.5 2-1</p> <p>NFS: 3.5 (ibm 071.04)</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>

<i>Table 107: IBM Spectrum Scale 5.1.3: Tested software versions and latest tested kernels for Linux (continued)</i>				
Architecture	RHEL 7.9	RHEL 8.2 8.4⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.04)	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.04)	No plan to support	SLES 15 SP3: 5.3.18-57-default SMB: 4.15.5 2-1 NFS: 3.5 (ibm 071.04)

<i>Table 108: IBM Spectrum Scale 5.1.3: Tested software versions and latest tested kernels for Windows and AIX</i>			
AIX 7.2	AIX 7.3	Windows 10 (>= version 1809, OS Build 17763)	Windows Server 2019 (>= version 1809, OS Build 17763)
TL 3	7300-00-00-0000		
TL 4			
TL 5			

<i>Table 109: IBM Spectrum Scale 5.1.3: Feature exceptions for Linux</i>				
Architecture	RHEL 7.9	RHEL 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 110: IBM Spectrum Scale 5.1.3: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 111: IBM Spectrum Scale 5.0.5.12: Tested software stack and kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.59.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.75.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.40.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>

Table 111: IBM Spectrum Scale 5.0.5.12: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Power LE	<p>RHEL 7.9: 3.10.0-1160.59.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.75.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.40.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP3: 5.3.18-57-default</p>
Power BE	<p>RHEL 7.9: 3.10.0-1160.59.1.el7</p> <p>SMB: 4.11.17 gpfs-23-IBM</p> <p>NFS: 2.7.5 (ibm 058.18)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

<i>Table 111: IBM Spectrum Scale 5.0.5.12: Tested software stack and kernels for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.2 8.4³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5 4.18.0-348	Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic Ubuntu 18.04.6 (HWE kernel) 5.4.0-90-generic Ubuntu 18.04.6 4.15.0-163-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP3: 5.3.18-57-default

<i>Table 112: IBM Spectrum Scale 5.0.5.12: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

<i>Table 113: IBM Spectrum Scale 5.0.5.12: Feature exceptions for Linux</i>					
Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

Table 113: IBM Spectrum Scale 5.0.5.12: Feature exceptions for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP3
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 114: IBM Spectrum Scale 5.0.5.12: Feature exceptions for AIX and Windows

AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 115: IBM Spectrum Scale 5.1.2.2: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.59.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>RHEL 8.2: 4.18.0-193.75.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.34.2.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.59.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>RHEL 8.2: 4.18.0-193.75.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.34.2.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>

<i>Table 115: IBM Spectrum Scale 5.1.2.2: Tested software versions and latest tested kernels for Linux (continued)</i>				
Architecture	RHEL 7.9	RHEL 8.2 8.4⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)

<i>Table 116: IBM Spectrum Scale 5.1.2.2: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	Coming soon			
TL 4				
TL 5				

<i>Table 117: IBM Spectrum Scale 5.1.2.2: Feature exceptions for Linux</i>				
Architecture	RHEL 7.9	RHEL 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 118: IBM Spectrum Scale 5.1.2.2: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 119: IBM Spectrum Scale 5.0.5.11: Tested software stack and kernels for Linux

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.53.1.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.71.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.34.2.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>

Table 119: IBM Spectrum Scale 5.0.5.11: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP2 SP3
Power LE	<p>RHEL 7.9: 3.10.0-1160.53.1.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.2: 4.18.0-193.71.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.34.2.el8_4</p> <p>RHEL 8.5: 4.18.0-348.12.2.el8_5</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>Ubuntu 18.04.6 (HWE kernel): 5.4.0-90-generic</p> <p>Ubuntu 18.04.6: 4.15.0-163-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>
Power BE	<p>RHEL 7.9: 3.10.0-1160.53.1.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

Table 119: IBM Spectrum Scale 5.0.5.11: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.2 8.4 ³ 8.5	Ubuntu 18.04.5 18.04.6	SLES 12 SP5	SLES 15 SP2 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160	RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5 4.18.0-348	Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic Ubuntu 18.04.6 (HWE kernel) 5.4.0-90-generic Ubuntu 18.04.6 4.15.0-163-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default

Table 120: IBM Spectrum Scale 5.0.5.11: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

Table 121: IBM Spectrum Scale 5.0.5.11: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

Table 121: IBM Spectrum Scale 5.0.5.11: Feature exceptions for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 18.04.6	SLES 12 SP5	SLES 15 SP2 SP3
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 122: IBM Spectrum Scale 5.0.5.11: Feature exceptions for AIX and Windows

AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 123: IBM Spectrum Scale 5.1.2.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.53.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>RHEL 8.1: 4.18.0-147.57.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.71.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.30.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.7.1.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.53.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>RHEL 8.1: 4.18.0-147.57.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.71.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.30.1.el8_4</p> <p>RHEL 8.5: 4.18.0-348.7.1.el8_5</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 3.5 (ibm 070.11)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>

<i>Table 123: IBM Spectrum Scale 5.1.2.1: Tested software versions and latest tested kernels for Linux (continued)</i>				
Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4⁴ 8.5	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5: 4.18.0-348 SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default SMB: 4.13.10 2-0 NFS: 3.5 (ibm 070.11)

<i>Table 124: IBM Spectrum Scale 5.1.2.1: Tested software versions and latest tested kernels for Windows and AIX</i>				
AIX 7.2	AIX 7.3	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	Coming soon			
TL 4				
TL 5				

<i>Table 125: IBM Spectrum Scale 5.1.2.1: Feature exceptions for Linux</i>				
Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 126: IBM Spectrum Scale 5.1.2.1: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 127: IBM Spectrum Scale 5.0.5.10: Tested software stack and kernels for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ³ 8.5	Ubuntu 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.49.1.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.70.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.28.1.el8_4</p> <p>RHEL 8.5 Coming soon</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.49.1.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.70.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.28.1.el8_4</p> <p>RHEL 8.5 Coming soon</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>

Table 127: IBM Spectrum Scale 5.0.5.10: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ³ 8.5	Ubuntu 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
Power BE	RHEL 7.9: 3.10.0-1160.49.1.el7 SMB: 4.11.17 gpfs-20-IBM-2 NFS: 2.7.5 (ibm 058.17) Object: Pike, 1.12	N/A	N/A	N/A	N/A
Linux on Z	RHEL 7.9: 3.10.0-1160	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 RHEL 8.5 Coming soon	Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default

Table 128: IBM Spectrum Scale 5.0.5.10: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

Table 129: IBM Spectrum Scale 5.0.5.10: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 16.04.6	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)

<i>Table 129: IBM Spectrum Scale 5.0.5.10: Feature exceptions for Linux (continued)</i>					
Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 16.04.6	SLES 12 SP5	SLES 15 SP2 SP3
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

<i>Table 130: IBM Spectrum Scale 5.0.5.10: Feature exceptions for AIX and Windows</i>	
AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 131: IBM Spectrum Scale 5.1.2: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.9: 3.10.0-1160.45.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>RHEL 8.1: 4.18.0-147.57.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.68.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.25.1.el8_4</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>
Power LE	<p>RHEL 7.9: 3.10.0-1160.45.1.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>RHEL 8.1: 4.18.0-147.57.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.68.1.el8_2</p> <p>RHEL 8.4: 4.18.0-305.25.1.el8_4</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>Ubuntu 20.04.3: 5.4.0-81-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>No plan to support</p>

Table 131: IBM Spectrum Scale 5.1.2: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
Linux on Z	RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.4: 4.18.0-305 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)

Table 132: IBM Spectrum Scale 5.1.2: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 133: IBM Spectrum Scale 5.1.2: Feature exceptions for Linux

Architecture	RHEL 7.9	RHEL 8.1 8.2 8.4	Ubuntu 20.04 20.04.1 20.04.2 20.04.3	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE protocol	ECE, HDFS, installation toolkit, and object protocol	No plan to support
Linux on Z	ECE, FPO, HDFS, and object protocol	FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 134: IBM Spectrum Scale 5.1.2: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 135: IBM Spectrum Scale 5.1.1.3: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.42.2.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.65.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.19.1.el8_4</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>
Power LE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.42.2.el7</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.65.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.19.1.el8_4</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.10 2-0</p> <p>NFS: 2.7.5 (ibm 067.04)</p>	<p>No plan to support</p>

Table 135: IBM Spectrum Scale 5.1.1.3: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: 4.18.0-305 SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default SMB: 4.13.10 2-0 NFS: 2.7.5 (ibm 067.04)

Table 136: IBM Spectrum Scale 5.1.1.3: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 137: IBM Spectrum Scale 5.1.1.3: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE, HDFS and object protocol	ECE, HDFS and object protocol
Power LE	ECE and object protocol	ECE protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, object protocol, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 138: IBM Spectrum Scale 5.1.1.3: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 139: IBM Spectrum Scale 5.0.5.9: Tested software stack and kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.42.2.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.65.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.19.1.el8_4</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>

Table 139: IBM Spectrum Scale 5.0.5.9: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
Power LE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.42.2.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.54.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.65.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.19.1.el8_4</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p>
Power BE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.42.2.el7</p> <p>SMB: 4.11.17 gpfs-20-IBM-2</p> <p>NFS: 2.7.5 (ibm 058.17)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

Table 139: IBM Spectrum Scale 5.0.5.9: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: 4.18.0-305	Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic Ubuntu 18.04.4: 4.15.0-88-generic Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default

Table 140: IBM Spectrum Scale 5.0.5.9: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

Table 141: IBM Spectrum Scale 5.0.5.9: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

<i>Table 141: IBM Spectrum Scale 5.0.5.9: Feature exceptions for Linux (continued)</i>					
Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2 SP3
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

<i>Table 142: IBM Spectrum Scale 5.0.5.9: Feature exceptions for AIX and Windows</i>	
AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 143: IBM Spectrum Scale 5.1.1.2: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.36.2.el7</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p>	<p>RHEL 8.1: 4.18.0-147.52.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.12.1.el8_4</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: 5.3.18-57-default</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p>
Power LE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.36.2.el7</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p>	<p>RHEL 8.1: 4.18.0-147.52.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.12.1.el8_4</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.02)</p>	<p>No plan to support</p>

Table 143: IBM Spectrum Scale 5.1.1.2: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160 SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.02)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: 4.18.0-305 SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.02)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: 5.3.18-57-default SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.02)

Table 144: IBM Spectrum Scale 5.1.1.2: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 145: IBM Spectrum Scale 5.1.1.2: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, object protocol, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 146: IBM Spectrum Scale 5.1.1.2: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 147: IBM Spectrum Scale 5.0.5.8: Tested software stack and kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.36.2.el7</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.51.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.10.2.el8_4</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: Coming soon</p>

Table 147: IBM Spectrum Scale 5.0.5.8: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
Power LE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.36.2.el7</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.51.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.10.2.el8_4</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: Coming soon</p>
Power BE	<p>RHEL 7.7: 3.10.0-1062.52.2.el7</p> <p>RHEL 7.9: 3.10.0-1160.36.2.el7</p> <p>SMB: 4.11.16-gpfs-20-IBM</p> <p>NFS: 2.7.5 (ibm 058.15)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A

Table 147: IBM Spectrum Scale 5.0.5.8: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2 SP3
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: 4.18.0-305	Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic Ubuntu 18.04.4: 4.15.0-88-generic Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: Coming soon

Table 148: IBM Spectrum Scale 5.0.5.8: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			
TL 4				
TL 5				

Table 149: IBM Spectrum Scale 5.0.5.8: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2 SP3
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit

<i>Table 149: IBM Spectrum Scale 5.0.5.8: Feature exceptions for Linux (continued)</i>					
Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2 SP3
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

<i>Table 150: IBM Spectrum Scale 5.0.5.8: Feature exceptions for AIX and Windows</i>	
AIX 7.1 AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the <i>IBM Spectrum Scale FAQ</i>.

Table 151: IBM Spectrum Scale 5.1.1.1: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	<p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.31.1.el7</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>RHEL 8.1: 4.18.0-147.51.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.10.2.el8_4</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SLES 15 SP3: Coming soon</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>
Power LE	<p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.31.1.el7</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>RHEL 8.1: 4.18.0-147.51.2.el8_1</p> <p>RHEL 8.2: 4.18.0-193.60.2.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: 4.18.0-305.10.2.el8_4</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 2-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>No plan to support</p>

Table 151: IBM Spectrum Scale 5.1.1.1: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4 ⁴	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160 SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.00)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: 4.18.0-305 SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.00)	No plan to support	SLES 15 SP2: 5.3.18-22-default SLES 15 SP3: Coming soon SMB: 4.13.4 2-1 NFS: 2.7.5 (ibm 067.00)

Table 152: IBM Spectrum Scale 5.1.1.1: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 153: IBM Spectrum Scale 5.1.1.1: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2 SP3
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, object protocol, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 154: IBM Spectrum Scale 5.1.1.1: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 155: IBM Spectrum Scale 5.0.5.7: Tested software stack and kernels for Linux

Architecture	RHEL 7.6 ⁵ 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
x86_64	<p>RHEL 7.6: 3.10.0-957.72.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: Coming soon</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p>

Table 155: IBM Spectrum Scale 5.0.5.7: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.6 ⁵ 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
Power LE	<p>RHEL 7.6: 3.10.0-957.72.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: Coming soon</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p>

Table 155: IBM Spectrum Scale 5.0.5.7: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.6 ⁵ 7.7 7.9	RHEL 8.1 8.2 8.3 ³ 8.4	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
Power BE	<p>RHEL 7.6: 3.10.0-957.72.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A	N/A
Linux on Z	<p>RHEL 7.6: 3.10.0-957</p> <p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.9: 3.10.0-1160</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: 4.18.0-240</p> <p>RHEL 8.4: Coming soon</p>	<p>Ubuntu 16.04.6: 4.4.0-151-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic</p> <p>Ubuntu 18.04.4: 4.15.0-88-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p>

Table 156: IBM Spectrum Scale 5.0.5.7: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			

Table 156: IBM Spectrum Scale 5.0.5.7: Tested software versions and latest tested kernels for Windows and AIX (continued)				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 4				
TL 5				

Table 157: IBM Spectrum Scale 5.0.5.7: Feature exceptions for Linux					
Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 158: IBM Spectrum Scale 5.0.5.7: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.1 AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 159: IBM Spectrum Scale 5.1.1.0: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2
x86_64	<p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: Coming soon</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 067.00)</p>
Power LE	<p>RHEL 7.7: 3.10.0-1062.49.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>RHEL 8.4: Coming soon</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p> <p>Object: 5.1.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>Ubuntu 20.04.2: 5.4.0-65-generic</p> <p>SMB: 4.13.4 1-1</p> <p>NFS: 2.7.5 (ibm 067.00)</p>	<p>No plan to support</p>

Table 159: IBM Spectrum Scale 5.1.1.0: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160 SMB: 4.13.4 1-1 NFS: 2.7.5 (ibm 067.00)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 RHEL 8.4: Coming soon SMB: 4.13.4 1-1 NFS: 2.7.5 (ibm 067.00)	No plan to support	SLES 15 SP2: 5.3.18-22-default SMB: 4.12.10 4-2 NFS: 2.7.5 (ibm 067.00)

Table 160: IBM Spectrum Scale 5.1.1.0: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 161: IBM Spectrum Scale 5.1.1.0: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 8.4	Ubuntu 20.04 20.04.1 20.04.2	SLES 15 SP2
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, object protocol, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 162: IBM Spectrum Scale 5.1.1.0: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 163: IBM Spectrum Scale 5.0.5.6: Tested software stack and kernels for Linux

Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2 8.3 ³	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
x86_64	<p>RHEL 7.6: 3.10.0-957.72.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.46.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p>

Table 163: IBM Spectrum Scale 5.0.5.6: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2 8.3 ³	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
Power LE	<p>RHEL 7.6: 3.10.0-957.72.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.46.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.25.1.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP2: 5.3.18-22-default</p>

Table 163: IBM Spectrum Scale 5.0.5.6: Tested software stack and kernels for Linux (continued)						
Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2 8.3 ³	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP2
Power BE	RHEL 7.6: 3.10.0-957.72.1.el7 RHEL 7.6 (POWER9): 4.14.0-115.el7a RHEL 7.7: 3.10.0-1062.46.1.el7 RHEL 7.9: 3.10.0-1160.25.1.el7 SMB: 4.11.16-19-2 NFS: 2.7.5 (ibm 058.12) Object: Pike, 1.12	N/A	N/A	N/A	N/A	N/A
Linux on Z	RHEL 7.6: 3.10.0-957 RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240	Ubuntu 16.04.6: 4.4.0-151-generic Ubuntu 16.04.7: 4.4.0-187-generic	Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic Ubuntu 18.04.4: 4.15.0-88-generic Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP2: 5.3.18-22-default

Table 164: IBM Spectrum Scale 5.0.5.6: Tested software versions and latest tested kernels for Windows and AIX				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			

Table 164: IBM Spectrum Scale 5.0.5.6: Tested software versions and latest tested kernels for Windows and AIX (continued)				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 4				
TL 5				

Table 165: IBM Spectrum Scale 5.0.5.6: Feature exceptions for Linux					
Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2	Ubuntu 16.04.6 16.04.4	SLES 12 SP5	SLES 15 SP2
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	N/A
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 166: IBM Spectrum Scale 5.0.5.6: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.1 AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 167: IBM Spectrum Scale 5.1.0.3: Tested software versions and latest tested kernels for Linux

<p style="text-align: center;">Architecture</p>	<p style="text-align: center;">RHEL 7.7 7.9</p>	<p style="text-align: center;">RHEL 8.1 8.2 8.3³</p>	<p style="text-align: center;">Ubuntu 20.04 20.04.1</p>	<p style="text-align: center;">SLES 15 SP2</p>
<p>x86_64</p>	<p>RHEL 7.7: 3.10.0-1062.46.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.24.1.el7</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.3</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>

Table 167: IBM Spectrum Scale 5.1.0.3: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3 ³	Ubuntu 20.04 20.04.1	SLES 15 SP2
Power LE	<p>RHEL 7.7: 3.10.0-1062.46.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.24.1.el7</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.44.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.51.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.22.1.el8_3</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.3</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	No plan to support
Linux on Z	<p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.9: 3.10.0-1160</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: 4.18.0-240</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	No plan to support	<p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>

Table 168: IBM Spectrum Scale 5.1.0.3: Tested software versions and latest tested kernels for Windows and AIX

AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

Table 169: IBM Spectrum Scale 5.1.0.3: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3	Ubuntu 20.04 20.04.1	SLES 15 SP2
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, object protocol, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 170: IBM Spectrum Scale 5.1.0.3: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 171: IBM Spectrum Scale 5.1.0.2: Tested software versions and latest tested kernels for Linux

Architecture	RHEL 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3 ⁴	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
Power LE	<p>RHEL 7.7: 3.10.0-1062.45.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.15.2.el7</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.43.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.47.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.15.1.el8_3</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.2</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>
x86_64	<p>RHEL 7.7: 3.10.0-1062.45.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.15.2.el7</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.43.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.47.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.15.1.el8_3</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.2</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10 4-2</p> <p>NFS: 2.7.5 (ibm 066.02)</p>

<i>Table 171: IBM Spectrum Scale 5.1.0.2: Tested software versions and latest tested kernels for Linux (continued)</i>				
Architecture	RHEL 7.7 7.8³ 7.9	RHEL 8.1 8.2 8.3⁴	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
Linux on Z	RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160 SMB: 4.12.10 4-2 NFS: 2.7.5 (ibm 066.02)	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240 SMB: 4.12.10 4-2 NFS: 2.7.5 (ibm 066.02)	No plan to support	SLES 15 SP1: 4.12.14-197.15-default SLES 15 SP2: 5.3.18-22-default SMB: 4.12.10 4-2 NFS: 2.7.5 (ibm 066.02)

<i>Table 172: IBM Spectrum Scale 5.1.0.2: Tested software versions and latest tested kernels for Windows and AIX</i>			
AIX 7.2	Windows 10	Windows Server 2016	Windows Server 2019
TL 3			
TL 4			
TL 5			

<i>Table 173: IBM Spectrum Scale 5.1.0.2: Feature exceptions for Linux</i>				
Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 174: IBM Spectrum Scale 5.1.0.2: Feature exceptions for AIX and Windows

AIX 7.2	Windows 10 Windows Server 2016 Windows Server 2019
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 175: IBM Spectrum Scale 5.0.5.5: Tested software stack and kernels for Linux

Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP1 SP2
x86_64	<p>RHEL 7.6: 3.10.0-957.66.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.45.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.15.2.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.43.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.41.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.15.1.el8_3</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 175: IBM Spectrum Scale 5.0.5.5: Tested software stack and kernels for Linux (continued)

Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP1 SP2
Power LE	<p>RHEL 7.6: 3.10.0-957.66.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.45.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.15.2.el7</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.43.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.41.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240.15.1.el8_3</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.16 19-2</p> <p>NFS: 2.7.5 (ibm 058.12)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 175: IBM Spectrum Scale 5.0.5.5: Tested software stack and kernels for Linux (continued)						
Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP5	SLES 15 SP1 SP2
Power BE	RHEL 7.6: 3.10.0-957.66.1.el7 RHEL 7.6 (POWER9): 4.14.0-115.el7a RHEL 7.7: 3.10.0-1062.45.1.el7 RHEL 7.9: 3.10.0-1160.15.2.el7 SMB: 4.11.16 19-2 NFS: 2.7.5 (ibm 058.12) Object: Pike, 1.12	N/A	N/A	N/A	N/A	N/A
Linux on Z	RHEL 7.6: 3.10.0-957 RHEL 7.7: 3.10.0-1062 RHEL 7.9: 3.10.0-1160	RHEL 8.1: 4.18.0-147 RHEL 8.2: 4.18.0-193 RHEL 8.3: 4.18.0-240	Ubuntu 16.04.6: 4.4.0-151-generic Ubuntu 16.04.7: 4.4.0-187-generic	Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic Ubuntu 18.04.4: 4.15.0-88-generic Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic Ubuntu 18.04.5: 4.15.0-112-generic	SLES 12 SP5: 4.12.14-120-default	SLES 15 SP1: 4.12.14-197.15-default SLES 15 SP2: 5.3.18-22-default

Table 176: IBM Spectrum Scale 5.0.5.5: Tested software versions and latest tested kernels for Windows and AIX				
AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 3	TL 5			

AIX 7.2	AIX 7.1	Windows 10	Windows Server 2016	Windows Server 2019
TL 4				
TL 5				

Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2	Ubuntu 16.04.6 16.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and integrated protocols (CES) N/A for SLES 15
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 178: IBM Spectrum Scale 5.0.5.5: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.1 AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 179: IBM Spectrum Scale 5.1.0.1: Tested software versions and latest tested kernels for Linux

<p style="text-align: center;">Architecture</p>	<p style="text-align: center;">RHEL 7.7 7.8³ 7.9</p>	<p style="text-align: center;">RHEL 8.1 8.2 8.3</p>	<p style="text-align: center;">Ubuntu 20.04 20.04.1</p>	<p style="text-align: center;">SLES 15 SP1 SP2</p>
<p>Power LE</p>	<p>RHEL 7.7: 3.10.0-1062.43.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.11.1.el7</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.38.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.41.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>

Table 179: IBM Spectrum Scale 5.1.0.1: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
x86_64	<p>RHEL 7.7: 3.10.0-1062.43.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.11.1.el7</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147.38.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.41.1.el8_2</p> <p>RHEL 8.3: 4.18.0-240</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p> <p>Object: 5.1.0.1</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>
Linux on Z	<p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.9: 3.10.0-1160</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: 4.18.0-240</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>	No plan to support	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.10</p> <p>NFS: 2.7.5 (ibm 066.02)</p>

Table 180: IBM Spectrum Scale 5.1.0.1: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
Power LE	ECE and object protocol	ECE and HDFS protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol
x86_64	Object protocol	N/A	ECE and object protocol	ECE and object protocol
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 181: IBM Spectrum Scale 5.1.0.1: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 182: IBM Spectrum Scale 5.0.5.4: Tested software stack and kernels

Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP4 SP5	SLES 15 SP1 SP2
x86_64	<p>RHEL 7.6: 3.10.0-957.65.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.43.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.11.1.el7</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.34.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.37.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 182: IBM Spectrum Scale 5.0.5.4: Tested software stack and kernels (continued)

Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power LE	<p>RHEL 7.6: 3.10.0-957.65.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.43.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.11.1.el7</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.34.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.37.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 182: IBM Spectrum Scale 5.0.5.4: Tested software stack and kernels (continued)

Architecture	RHEL 7.6 7.7 7.8 ³ 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6 16.04.7 ⁴	Ubuntu 18.04.4 18.04.5	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power BE	<p>RHEL 7.6: 3.10.0-957.65.1.el7</p> <p>RHEL 7.6 (POWER9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.43.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.11.1.el7</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.11)</p> <p>Object: Pike, 1.12</p>	N/A	N/A	N/A	N/A	N/A
Linux on Z	<p>RHEL 7.6: 3.10.0-957</p> <p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.9: 3.10.0-1160.el7</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: Coming soon</p>	<p>Ubuntu 16.04.6: 4.4.0-151-generic</p> <p>Ubuntu 16.04.7: 4.4.0-187-generic</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic</p> <p>Ubuntu 18.04.4: 4.15.0-88-generic</p> <p>Ubuntu 18.04.5 (HWE kernel): 5.4.0-54-generic</p> <p>Ubuntu 18.04.5: 4.15.0-112-generic</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 183: IBM Spectrum Scale 5.0.5.4: Feature exceptions for Linux

Architecture	RHEL 7.6 7.7 7.9	RHEL 8.1 8.2	Ubuntu 16.04.6 16.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol N/A for 18.04	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and integrated protocols (CES) N/A for SLES 15
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 184: IBM Spectrum Scale 5.0.5.4: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.1 AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 185: IBM Spectrum Scale 5.1.0: Tested software versions and latest tested kernels for Linux

<p style="text-align: center;">Architecture</p>	<p style="text-align: center;">RHEL 7.7 7.9</p>	<p style="text-align: center;">RHEL 8.1 8.2 8.3</p>	<p style="text-align: center;">Ubuntu 20.04 20.04.1</p>	<p style="text-align: center;">SLES 15 SP1 SP2</p>
<p>Power LE</p>	<p>RHEL 7.7: 3.10.0-1062.40.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.6.1.el7</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>RHEL 8.1: 4.18.0-147.32.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.29.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>

Table 185: IBM Spectrum Scale 5.1.0: Tested software versions and latest tested kernels for Linux (continued)

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2 8.3	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
x86_64	<p>RHEL 7.7: 3.10.0-1062.40.1.el7</p> <p>RHEL 7.9: 3.10.0-1160.6.1.el7</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>RHEL 8.1: 4.18.0-147.32.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.29.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>Ubuntu 20.04: 5.4.0-29-generic</p> <p>Ubuntu 20.04.1: 5.4.0-42-generic</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>
Linux on Z	<p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.9: 3.10.0-1160</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>	No plan to support	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p> <p>SMB: 4.12.6 2-1</p> <p>NFS: 2.7.5 (ibm 066.00)</p>

Table 186: IBM Spectrum Scale 5.1.0: Feature exceptions for Linux

Architecture	RHEL 7.7 7.9	RHEL 8.1 8.2	Ubuntu 20.04 20.04.1	SLES 15 SP1 SP2
Power LE	ECE and object protocol	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	ECE, HDFS, installation toolkit, and object protocol
x86_64	ECE (7.9 only) and object protocol	Object protocol	ECE and object protocol	ECE and object protocol
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	No plan to support	ECE, FPO, HDFS, and object protocol

Table 187: IBM Spectrum Scale 5.1.0.1: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 188: IBM Spectrum Scale 5.0.5.3: Tested software stack and kernels

Architecture	RHEL 7.6 7.7 7.8 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6	Ubuntu 18.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power BE	<p>RHEL 7.6: 3.10.0-957.61.2.el7</p> <p>RHEL 7.6 (Power9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.37.1.el7</p> <p>RHEL 7.8: 3.10.0-1127.19.1</p> <p>RHEL 7.9: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	N/A	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 188: IBM Spectrum Scale 5.0.5.3: Tested software stack and kernels (continued)

Architecture	RHEL 7.6 7.7 7.8 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6	Ubuntu 18.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power LE	<p>RHEL 7.6: 3.10.0-957.61.2.el7</p> <p>RHEL 7.6 (Power9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.37.1.el7</p> <p>RHEL 7.8: 3.10.0-1127.19.1</p> <p>RHEL 7.9: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.32.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.29.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 188: IBM Spectrum Scale 5.0.5.3: Tested software stack and kernels (continued)

Architecture	RHEL 7.6 7.7 7.8 7.9	RHEL 8.1 8.2 8.3	Ubuntu 16.04.6	Ubuntu 18.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
x86_64	<p>RHEL 7.6: 3.10.0-957.61.2.el7</p> <p>RHEL 7.6 (Power9): 4.14.0-115.el7a</p> <p>RHEL 7.7: 3.10.0-1062.37.1.el7</p> <p>RHEL 7.8: 3.10.0-1127.19.1</p> <p>RHEL 7.9: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>RHEL 8.1: 4.18.0-147.32.1.el8_1</p> <p>RHEL 8.2: 4.18.0-193.29.1.el8_2</p> <p>RHEL 8.3: Coming soon</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p>	<p>Ubuntu 16.04.6 (HWE kernel): 4.15.0-46-generic</p> <p>Ubuntu 16.04.6: 4.4.0-143-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-40-generic</p> <p>Ubuntu 18.04.4: 4.15.0-76-generic</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p> <p>SMB: 4.11.11 18-1</p> <p>NFS: 2.7.5 (ibm 058.08)</p> <p>Object: Pike, 1.12</p>	<p>SLES 15 SP1: 4.12.14-23-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>
Linux on Z	<p>RHEL 7.6: 3.10.0-957</p> <p>RHEL 7.7: 3.10.0-1062</p> <p>RHEL 7.8: 3.10.0-1127</p> <p>RHEL 7.9: Coming soon</p>	<p>RHEL 8.1: 4.18.0-147</p> <p>RHEL 8.2: 4.18.0-193</p> <p>RHEL 8.3: Coming soon</p>	<p>Ubuntu 16.04.6: 4.4.0-151-generic</p>	<p>Ubuntu 18.04.4 (HWE kernel): 5.3.0-53-generic</p> <p>Ubuntu 18.04.4: 4.15.0-88-generic</p>	<p>SLES 12 SP4: 4.12.14-95.3-default</p> <p>SLES 12 SP5: 4.12.14-120-default</p>	<p>SLES 15 SP1: 4.12.14-197.15-default</p> <p>SLES 15 SP2: 5.3.18-22-default</p>

Table 189: IBM Spectrum Scale 5.0.5.3: Feature exceptions for Linux

Architecture	RHEL 7.6 7.7 7.8	RHEL 8.1 8.2	Ubuntu 16.04.6 16.04.4	SLES 12 SP4 SP5	SLES 15 SP1 SP2
Power BE	Clustered watch folder, ECE, and file audit logging	N/A	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and integrated protocols (CES)
Power LE	ECE	ECE, HDFS, and object protocol	ECE, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, installation toolkit, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, integrated protocols (CES), and installation toolkit
x86_64	None	Object protocol	ECE, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, HDFS, and object protocol	Clustered watch folder, ECE, file audit logging, and integrated protocols (CES)
Linux on Z	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and object protocol	ECE, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)	Clustered watch folder, ECE, file audit logging, FPO, HDFS, and integrated protocols (CES)

Table 190: IBM Spectrum Scale 5.0.5.3: Feature exceptions for AIX and Windows

<p style="text-align: center;">AIX 7.1 AIX 7.2</p>	<p style="text-align: center;">Windows 10 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019</p>
<ul style="list-style-type: none"> • AFM • AFM-DR • Call home • Clustered NFS • Clustered watch folder • ECE • File audit logging • FPO • GUI • HDFS • IBM Spectrum Scale container native deployment • IBM Spectrum Scale CSI Driver • Installation toolkit • Integrated protocols (CES) • Performance monitoring • REST API • Transparent cloud tiering 	<ul style="list-style-type: none"> • AFM • AFM-DR • Backup of a file system • Call home • Clustered NFS • Clustered watch folder • ECE • Encryption of data at rest • File audit logging • File clones • FPO • GUI • HDFS • Health monitoring • Installation toolkit • Integrated protocols (CES) • Performance monitoring • Quotas • REST API • Transparent cloud tiering • For more information, see <i>GPFS limitations in Windows</i> in the <i>IBM Spectrum Scale Concepts, Planning, and Installation Guide</i> and <i>Q2.8 What are the limitations of IBM Spectrum Scale support for Windows?</i> in the IBM Spectrum Scale FAQ.

Table 191: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x

Table 191: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	<p>x Starting with RHEL 7.1¹ x86_64 Power BE, Power LE</p> <p>SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p> <p>RHEL 8²</p>	<p>SMB/NFS only starting with RHEL 7.6^{1, 6} RHEL 8</p>	
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	<p>x Starting with RHEL 7.1¹ RHEL 8² Power BE, Power LE x86_64</p> <p>SLES 12 SLES 12 SP1³ SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15⁴ SP1 x86_64 Ubuntu 16.04 16.04.3 16.04.6 18.04.1 18.04.2 18.04.3⁵ 18.04.4 x86_64</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 SP3 SLES 12 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>	

Table 191: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Call Home	x Starting with RHEL 7.1 ¹ RHEL 8 x86_64 Power BE, Power LE SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 x SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	
Performance Monitoring Tool	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4 x86_64 Power LE Starting with RHEL 7 ¹ SLES 12 Power BE Starting with RHEL 7.1 ¹ SLES 11	x Starting with RHEL 7.1 ¹ SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	
Health Monitoring	x	x	x

Table 191: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Active File Mgt (AFM)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SP5 SLES 15 SP1 Ubuntu 16.04 (x86_64 and Power LE) 18.04.1 18.04.3 ⁵ 18.04.4	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SP5 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x

Table 191: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
REST API	<p>x Starting with RHEL 7.1¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>	
TCT	<p>Client: Starting with RHEL 7.1¹ SLES 12 Debian 7/8 x86_64 Starting with RHEL 7.2 on Power8 LE¹</p> <p>Server: Starting with RHEL 7.1¹ x86_64 Starting with RHEL 7.2 on Power8 LE¹</p>	<p>Client: Starting with RHEL 7.5¹ Starting with SLES 12 SP3 Starting with Ubuntu 18.04⁵</p> <p>Server: Starting with RHEL 7.5¹</p>	
File audit logging Watch folder API Clustered watch folder	<p>Starting with RHEL 7.1¹ RHEL 8 x86_64 Power LE</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4 x86_64</p>	<p>Starting with RHEL 7.1¹ RHEL 8</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>	

Important:

1. For more information about RHEL support, see the [IBM Spectrum Scale for Linux Red Hat kernel support](#) and [IBM Spectrum Scale for Linux on Z RHEL kernel support](#) tables and the footnotes that follow them.
2. RHEL 8 is not supported by the Object protocol.
3. SLES 12 SP1 is not supported by the Object protocol for the installation toolkit.
4. SLES 15 is supported in the installation toolkit, but it restricts SMB, NFS and Object because protocols are not supported for SLES 15.
5. For more information about Ubuntu support, see the [IBM Spectrum Scale for Linux Ubuntu kernel support](#) and [IBM Spectrum Scale for Linux on Z Ubuntu kernel support](#) tables.
6. An RPQ is required. For more information, see [Q8.1 What are the requirements to use the protocol access methods integrated with IBM Spectrum Scale V4.1.1 and later?](#)

Table 192: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Standard or Data Access Edition)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Encryption of Data at Rest				
Asynch Disaster Recovery with AFM				
GUI	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	x Starting with RHEL 7.1 ¹ or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4		
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x Starting with RHEL 7.1 ¹ x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4 RHEL 8 ²	SMB/NFS only starting with RHEL 7.6 ^{1, 6} RHEL 8		

Table 192: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	<p>x Starting with RHEL 7.1¹ Power BE, Power LE x86_64 RHEL 8² x86_64 Power LE</p> <p>SLES 12 SLES 12 SP1³ SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15⁴ SP1 x86_64 Ubuntu 16.04 16.04.3 16.04.6 18.04.1 18.04.2 18.04.3⁵ 18.04.4 x86_64</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 SP3 SLES 12 SP4 SLES 15</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>		
Call Home	<p>x Starting with RHEL 7.1¹RHEL 8 x86_64 Power BE, Power LE</p> <p>SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 x SLES 15</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵ 18.04.4</p>		

Table 192: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Performance Monitoring Tool	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4 x86_64 Power LE RHEL 7 SLES 12 Power BE Starting with RHEL 7.1 ¹	x Starting with RHEL 7.1 ¹ SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SP5 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4 (x86_64 and Power LE)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SP5 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x

Table 192: IBM Spectrum Scale V5.0.5 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵ 18.04.4		
TCT				

Important:

1. For more information about RHEL support, see the [IBM Spectrum Scale for Linux Red Hat kernel support](#) and [IBM Spectrum Scale for Linux on Z RHEL kernel support](#) tables and the footnotes that follow them.
2. RHEL 8 is not supported by the Object protocol.
3. SLES 12 SP1 is not supported by the Object protocol for the installation toolkit.
4. SLES 15 is supported in the installation toolkit, but it restricts SMB, NFS and Object because protocols are not supported for SLES 15.
5. For more information about Ubuntu support, see the [IBM Spectrum Scale for Linux Ubuntu kernel support](#) and [IBM Spectrum Scale for Linux on Z Ubuntu kernel support](#) tables.
6. An RPQ is required. For more information, later, see [Q8.1 What are the requirements to use the protocol access methods integrated with IBM Spectrum Scale V4.1.1 and later?](#)

Table 193: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x
Asynch Disaster Recovery with AFM	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ (x86_64 and Power LE)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x
GUI	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵	

Table 193: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	<p>x Starting with RHEL 7.1¹ x86_64 Power BE, Power LE</p> <p>SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵</p> <p>RHEL 8²</p>	NFS only starting with RHEL 7.6 ^{1, 6}	
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	<p>x Starting with RHEL 7.1¹ Power BE, Power LE x86_64 RHEL 8² x86_64 Power LE</p> <p>SLES 12 SLES 12 SP1³ SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15⁴ SP1 x86_64 Ubuntu 16.04 16.04.3 16.04.6 18.04.1 18.04.2 18.04.3⁵ x86_64</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 SP3 SLES 12 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3⁵</p>	

Table 193: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Call Home	x Starting with RHEL 7.1 ¹ RHEL 8 x86_64 Power BE, Power LE SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 x SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵	
Performance Monitoring Tool	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ x86_64 Power LE Starting with RHEL 7 ¹ SLES 12 Power BE Starting with RHEL 7.1 ¹ SLES 11	x Starting with RHEL 7.1 ¹ SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵	
Health Monitoring	x	x	x
Active File Mgt (AFM)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 (x86_64 and Power LE) 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x

Table 193: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵	

Table 193: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX
TCT	Client: Starting with RHEL 7.1 ¹ SLES 12 Debian 7/8 x86_64 Starting with RHEL 7.2 on Power8 LE ¹ Server: Starting with RHEL 7.1 ¹ x86_64 Starting with RHEL 7.2 on Power8 LE ¹	Client: Starting with RHEL 7.5 ¹ Starting with SLES 12 SP3 Starting with Ubuntu 18.04 ⁵ Server: Starting with RHEL 7.5 ¹	
File audit logging Watch folder API Clustered watch folder	Starting with RHEL 7.1 ¹ RHEL 8 x86_64 Power LE Ubuntu 16.04 18.04.1 18.04.3 ⁵ x86_64	Starting with RHEL 7.1 ¹ RHEL 8 Ubuntu 16.04 18.04.1 18.04.3 ⁵	

Important:

1. For more information about RHEL support, see the [IBM Spectrum Scale for Linux Red Hat kernel support](#) and [IBM Spectrum Scale for Linux on Z RHEL kernel support](#) tables and the footnotes that follow them.
2. RHEL 8 is not supported by the Object protocol.
3. SLES 12 SP1 is not supported by the Object protocol for the installation toolkit.
4. SLES 15 is supported in the installation toolkit, but it restricts SMB, NFS and Object because protocols are not supported for SLES 15.
5. For more information about Ubuntu support, see the [IBM Spectrum Scale for Linux Ubuntu kernel support](#) and [IBM Spectrum Scale for Linux on Z Ubuntu kernel support](#) tables.
6. An RPQ is required. For more information, see [Q8.1 What are the requirements to use the protocol access methods integrated with IBM Spectrum Scale V4.1.1 and later?](#)

Table 194: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Standard or Data Access Edition)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Encryption of Data at Rest				

Table 194: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Asynch Disaster Recovery with AFM				
GUI	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵		
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x Starting with RHEL 7.1 ¹ x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64 Ubuntu 16.04 18.04.1 18.04.3 ⁵ RHEL 8 ²	NFS only starting with RHEL 7.6 ^{1, 6}		

Table 194: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	<p>x Starting with RHEL 7.1¹ Power BE, Power LE x86_64 RHEL 8² x86_64 Power LE</p> <p>SLES 12 SLES 12 SP1³ SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15⁴ SP1 x86_64 Ubuntu 16.04 16.04.3 16.04.6 18.04.1 18.04.2 18.04.3⁵ x86_64</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 SP3 SLES 12 SP4 SLES 15</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵</p>		
Call Home	<p>x Starting with RHEL 7.1¹RHEL 8 x86_64 Power BE, Power LE</p> <p>SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1 18.04.3⁵</p>	<p>x Starting with RHEL 7.1¹ RHEL 8 SLES 12 x SLES 15</p> <p>Ubuntu 16.04 18.04.1 18.04.3⁵</p>		

Table 194: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Performance Monitoring Tool	x Starting with RHEL 7.1 ¹ RHEL 8 SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ x86_64 Power LE RHEL 7 SLES 12 Power BE Starting with RHEL 7.1 ¹	x Starting with RHEL 7.1 ¹ SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵ (x86_64 and Power LE)	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 SP1 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x

Table 194: IBM Spectrum Scale V5.0.4 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and Linux on Power (LoP)	Linux on Z	AIX	Win
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1 18.04.3 ⁵	x Starting with RHEL 7.1 ¹ RHEL 8 or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 18.04.3 ⁵		
TCT				

Important:

1. For more information about RHEL support, see the [IBM Spectrum Scale for Linux Red Hat kernel support](#) and [IBM Spectrum Scale for Linux on Z RHEL kernel support](#) tables and the footnotes that follow them.
2. RHEL 8 is not supported by the Object protocol.
3. SLES 12 SP1 is not supported by the Object protocol for the installation toolkit.
4. SLES 15 is supported in the installation toolkit, but it restricts SMB, NFS and Object because protocols are not supported for SLES 15.
5. For more information about Ubuntu support, see the [IBM Spectrum Scale for Linux Ubuntu kernel support](#) and [IBM Spectrum Scale for Linux on Z Ubuntu kernel support](#) tables.
6. An RPQ is required. For more information, see [Q8.1 What are the requirements to use the protocol access methods integrated with IBM Spectrum Scale V4.1.1 and later?](#)

Table 195: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x
Asynch Disaster Recovery with AFM	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	x
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64 Ubuntu 16.04 18.04.1		

Table 195: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15 x86_64 Ubuntu 16.04 16.04.3 18.04.1 18.04.2 x86_64	x RHEL 7.1 or later SLES 12 SP3 SLES 12 SP4 SLES 15 (Installation of integrated services NFS, SMB, Object is not supported on s390x) Ubuntu 16.04 18.04.1	
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later SLES 12 x SLES 15 Ubuntu 16.04 18.04.1	
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 x86_64 Power LE RHEL 7 SLES 12 Power BE RHEL 7.1 or later SLES 11	x RHEL 7.1 or later SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	
Health Monitoring	x	x	x

Table 195: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 (x86_64 and Power LE) 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x

Table 195: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	
TCT	Client: RHEL 7.1 or later SLES 12 Debian 7/8 x86_64 RHEL 7.2 on Power8 LE Server: RHEL 7.1 or later x86_64 RHEL 7.2 on Power8 LE	Client: RHEL 7.5 or later SLES 12 SP3 or later Ubuntu 18.04 or later Server: RHEL 7.5 or later	
File audit logging Watch folder Clustered watch	RHEL 7.1 or later x86_64 Power LE Ubuntu 16.04 18.04.1 x86_64	RHEL7.x Ubuntu 16.04 18.04.1	

1. To use the `mmsdirrestore -ccr-repair` option on AIX, you need to install Python 2.7.5 or later from [AIX Toolbox for Linux Applications](#).

Table 196: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Standard or Data Access Edition)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest				

Table 196: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Asynch Disaster Recovery with AFM				
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1		
Integrated Protocols Support (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 SP4 x86_64 Ubuntu 16.04 18.04.1			

Table 196: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 SLES 12 SP4 SLES 15 x86_64 Ubuntu 16.04 16.04.3 18.04.1 18.04.2 x86_64	x RHEL 7.1 or later SLES 12 SP3 SLES 12 SP4 SLES 15 (Installation of integrated services NFS, SMB, Object is not supported on s390x) Ubuntu 16.04 18.04.1		
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x SLES 15 x86_64 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later SLES 12 x SLES 15 Ubuntu 16.04 18.04.1		
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 x86_64 Power LE RHEL 7 SLES 12 Power BE RHEL 7.1 or later	x RHEL 7.1 or later SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1		
Health Monitoring	x	x	x	

Table 196: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	

Table 196: IBM Spectrum Scale V5.0.3 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 SLES 15 Ubuntu 16.04 18.04.1		
TCT				

1. To use the `mmsdirrestore -ccr-repair` option on AIX, you need to install Python 2.7.5 or later from [AIX Toolbox for Linux Applications](#).

Table 197: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x
Asynch Disaster Recovery with AFM	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	x

Table 197: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 x86_64 Ubuntu 16.04 18.04.1		
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 x86_64 Ubuntu 16.04 16.04.3 18.04.1 x86_64	x RHEL 7.1 or later SLES 12 SP3 SLES 12 SP4 ¹ (Installation of integrated services NFS, SMB, Object is not supported on s390x)	

Table 197: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04 18.04.1	
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 x86_64 Power LE RHEL 7 SLES 12 Power BE RHEL 7.1 or later SLES 11	x RHEL 7.1 or later SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	
Health Monitoring	x	x	x
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 (x86_64 and Power LE) 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	x
Quality of Service (QoS)	x	x	x

Table 197: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	
TCT	Client: RHEL 7.1 or later SLES 12 Debian 7/8 x86_64 RHEL 7.2 on Power8 LE Server: RHEL 7.1 or later x86_64 RHEL 7.2 on Power8 LE		

Table 197: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
File audit logging	RHEL 7.1 or later x86_64 Power LE Ubuntu 16.04 18.04.1 x86_64	RHEL7.x Ubuntu 16.04 18.04.1	

Note:

1. SLES 12 SP4 is supported in IBM Spectrum Scale 5.0.2.3 and later.

Table 198: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Standard or Data Access Edition)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest				
Asynch Disaster Recovery with AFM				
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1		

Table 198: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 SP3 x86_64 Ubuntu 16.04 18.04.1			
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 x86_64 Ubuntu 16.04 16.04.3 18.04.1 x86_64	x RHEL 7.1 or later SLES 12 SP3 SLES 12 SP4 ¹ (Installation of integrated services NFS, SMB, Object is not supported on s390x)		
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04 18.04.1		

Table 198: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 18.04.1 x86_64 Power LE RHEL 7 SLES 12 Power BE RHEL 7.1 or later	x RHEL 7.1 or later SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	

Table 198: IBM Spectrum Scale V5.0.2 Functional Support Matrix (Standard or Data Access Edition) (continued)

	Standard or Data Access Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 18.04.1	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 SP4 ¹ Ubuntu 16.04 18.04.1		
TCT				

Note:

1. SLES 12 SP4 is supported in IBM Spectrum Scale 5.0.2.3 and later.

Table 199: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x

Table 199: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Asynch Disaster Recovery with AFM	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 x86_64 Ubuntu 16.04		
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 x86_64 Ubuntu 16.04 Ubuntu 16.04.3 x86_64		

Table 199: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04	
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 7.1 or later SLES 11	x RHEL 7.1 or later SLES 12 SP1 SP2 Ubuntu 16.04	
Health Monitoring	x	x	x
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x

Table 199: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	
TCT	Client: RHEL 7.1 or later SLES 12 Debian 7/8 x86_64 RHEL 7.2 on Power8 LE Server: RHEL 7.1 or later x86_64 RHEL 7.2 on Power8 LE		
File audit logging	RHEL 7.1 or later x86_64 Power LE Ubuntu 16.04 x86_64		

Table 200: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Standard Edition)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest				
Asynch Disaster Recovery with AFM				
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04		
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 x86_64 Ubuntu 16.04			
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 x86_64 Ubuntu 16.04 Ubuntu 16.04.3 x86_64			

Table 200: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Standard Edition) (continued)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04		
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 7.1 or later	x RHEL 7.1 or later SLES 12 SP1 SP2 Ubuntu 16.04		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x

<i>Table 200: IBM Spectrum Scale V5.0.1 Functional Support Matrix (Standard Edition) (continued)</i>				
	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 SP3 Ubuntu 16.04		
TCT				

<i>Table 201: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Advanced or Data Management Edition)</i>			
	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x

Table 201: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Asynch Disaster Recovery with AFM	x RHEL 7.1 or later ¹ or SLES 12 SP1 SP2 SP3 ¹ Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later ¹ or SLES 12 SP1 SP2 SP3 ¹ Ubuntu 16.04	x
GUI	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04	
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7.1 or later ² x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 x86_64 Ubuntu 16.04		
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7.1 or later ³ Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3 ³ x86_64 Ubuntu 16.04 Ubuntu 16.04.3 ³ x86_64		

Table 201: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04	
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 7.1 or later SLES 11	x RHEL 7.1 or later SLES 12 SP1 SP2 Ubuntu 16.04	
Health Monitoring	x	x	x
Active File Mgt (AFM)	x RHEL 7.1 or later ¹ or SLES 12 SP1 SP2 SP3 ¹ Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later ¹ or SLES 12 SP1 SP2 SP3 ¹ Ubuntu 16.04	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x

Table 201: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04	
TCT	Client: RHEL 7.1 or later SLES 12 Debian 7/8 x86_64 RHEL 7.2 on Power8 LE Server: RHEL 7.1 or later x86_64 RHEL 7.2 on Power8 LE		
File audit logging	RHEL 7.1 or later x86_64 Power LE Ubuntu 16.04 x86_64		

Note:

1. AFM and Asynch Disaster Recovery with AFM are supported on RHEL 7.4 and SLES 12 SP3 in IBM Spectrum Scale V5.0.0.1.

2. Integrated Protocols is supported on RHEL 7.4 in IBM Spectrum Scale V5.0.0.1.

3. The Installation Toolkit is supported on RHEL 7.4, SLES 12 SP3, and Ubuntu 16.04.3 in IBM Spectrum Scale V5.0.0.1.

Table 202: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Standard Edition)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest				
Asynch Disaster Recovery with AFM				
GUI	<p>x RHEL 7.1 or later or SLES 12 SP1 SP2</p> <p>Ubuntu 16.04</p>	<p>x RHEL 7.1 or later or SLES 12 SP1 SP2</p> <p>Ubuntu 16.04</p>		
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	<p>x RHEL 7.1 or later¹ x86_64 Power BE, Power LE</p> <p>SMB/NFS only with SLES 12 SP1 SP2 x86_64</p> <p>Ubuntu 16.04</p>			
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	<p>x RHEL 7.1 or later² Power BE, Power LE x86_64 SLES 12 SLES 12 SP2 SLES 12 SP3² x86_64 Ubuntu 16.04 Ubuntu 16.04.3² x86_64</p>			

Table 202: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Standard Edition) (continued)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Call Home	x RHEL 7.1 or later x86_64 Power BE, Power LE SLES 12 x x86_64 Ubuntu 16.04	x RHEL 7.1 or later SLES 12 x Ubuntu 16.04		
Performance Monitoring Tool	x RHEL 7.1 or later SLES 12 Debian 7/8.1 Ubuntu 16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 7.1 or later	x RHEL 7.1 or later SLES 12 SP1 SP2 Ubuntu 16.04		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x RHEL 7.1 or later ³ or SLES 12 SP1 SP2 SP3 ³ Ubuntu 16.04 (x86_64 and Power LE)	x RHEL 7.1 or later ³ or SLES 12 SP1 SP2 SP3 ³ Ubuntu 16.04	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x

Table 202: IBM Spectrum Scale V5.0.0 Functional Support Matrix (Standard Edition) (continued)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04	x RHEL 7.1 or later or SLES 12 SP1 SP2 Ubuntu 16.04		
TCT				

Note:

1. Integrated Protocols is supported on RHEL 7.4. in IBM Spectrum Scale V5.0.0.1.
2. The Installation Toolkit is supported on RHEL 7.4, SLES 12 SP3, and Ubuntu 16.04.3 in IBM Spectrum Scale V5.0.0.1.
3. AFM is supported on RHEL 7.4 and SLES 12 SP3 in IBM Spectrum Scale V5.0.0.1.

Table 203: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Advanced or Data Management Edition)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x

Table 203: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Asynch Disaster Recovery with AFM	x	x	x
GUI	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7. x x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 x86_64		
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7. x Power BE, Power LE RHEL 6.8 x86_64 Power BE SLES 12 SLES 12 SP4 ⁴ x86_64		
Call Home	x RHEL 7. x x86_64 Power BE, Power LE SLES 12 x x86_64		

Table 203: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04/16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES 11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP1 Ubuntu ² 16.04	
Health Monitoring	x	x	x
Active File Mgt (AFM)	x	x	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		

<i>Table 203: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Advanced or Data Management Edition) (continued)</i>			
	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API ¹	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	
TCT	Client: RHEL 6/7 SLES 11/12 Debian 7/8 Ubuntu 14.04 x86_64 RHEL 7.2 on Power8 LE ³ Server: RHEL 7 x86_64 RHEL 7.2 on Power8 LE ³		

Note:

1. The REST API that is delivered with IBM Spectrum Scale V4.2.3 is based on the GUI stack, so it supports the same architectures and operating systems as the GUI.
2. Ubuntu 16.04.1 support is delivered with IBM Spectrum Scale V4.2.3.1.
3. TCT support on Power8 LE is delivered with IBM Spectrum Scale V4.2.3.1.
4. Installation toolkit supports SLES 12 SP4 on x86 in IBM Spectrum Scale V4.2.3.13.

<i>Table 204: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Standard Edition)</i>				
	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest				

Table 204: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Standard Edition) (continued)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Asynch Disaster Recovery with AFM				
GUI	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04		
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7. x x86_64 Power BE, Power LE SMB/NFS only with SLES 12 SP1 SP2 x86_64			
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7. x Power BE, Power LE RHEL 6.8 x86_64 Power BE SLES 12 SLES 12 SP4 ³ x86_64			
Call Home	x RHEL 7. x x86_64 Power BE, Power LE SLES 12 x x86_64			

Table 204: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Standard Edition) (continued)

	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04/16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES 11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP1 Ubuntu ² 16.04		
Health Monitoring	x	x	x	
Active File Mgt (AFM)	x	x	x	
Quality of Service (QoS)	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x
Backup of a file system	x	x	x	
File Placement Optimizer	x		x	
Hadoop including shared storage	x			

Table 204: IBM Spectrum Scale V4.2.3 Functional Support Matrix (Standard Edition) (continued)				
	Standard Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win
Clustered NFS	x			
Filesets	x	x	x	x
File clones	x	x	x	
Quotas	x	x	x	
REST API ¹	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04	x RHEL 7.x or SLES 12 SP1 SP2 Ubuntu ² 16.04		
TCT				

Note:

1. The REST API that is delivered with IBM Spectrum Scale V4.2.3 is based on the GUI stack, so it supports the same architectures and operating systems as the GUI.
2. Ubuntu 16.04.1 support is delivered with IBM Spectrum Scale V4.2.3.1.
3. Installation toolkit supports SLES 12 SP4 on x86 in IBM Spectrum Scale V4.2.3.13.

Table 205: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Advanced or Data Management Edition)				
	Advanced or Data Management Edition			
	Linux x86 and LoP	Linux on Z	AIX	
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x	
Asynch Disaster Recovery with AFM	x ³	x ³	x ³	
GUI	x RHEL 7.x or SLES 12 SP0 SP1	x RHEL 7.x or SLES 12 SP0 SP1		

Table 205: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7. x x86_64 Power BE, Power LE SMB/NFS only with SLES 12 x86_64		
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x ⁴ RHEL 7. x Power BE, Power LE RHEL 6.8 x86_64 Power BE SLES 12 x86_64		
Call Home	x RHEL 7. x x86_64 Power BE, Power LE SLES 12 x x86_64		
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04/16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1	
Health Monitoring	x	x	x ⁵

Table 205: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Advanced or Data Management Edition) (continued)

	Advanced or Data Management Edition		
	Linux x86 and LoP	Linux on Z	AIX
Active File Mgt (AFM)	x ⁶	x	x
Quality of Service (QoS)	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x
Backup of a file system	x	x	x
File Placement Optimizer	x		x
Hadoop including shared storage	x		
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	x
Quotas	x	x	x
REST API	RHEL 7.x x86_64		
TCT	Client: RHEL 6/7 SLES 11/12 Debian 7/8 Ubuntu 14.04 x86_64 Server: RHEL 7 x86_64		

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. Unless noted otherwise, the functions listed are supported on all platforms supported by IBM Spectrum Scale.
3. Our initial feedback from the field suggests that success of a disaster recovery solution depends on administration discipline, including careful design, configuration, and testing. Considering this, IBM has decided to disable the Active File Management-based Asynchronous Disaster Recovery feature (AFM DR) by default and require that customers deploying the AFM DR feature first review their deployments with IBM Spectrum Scale development. You should contact IBM Spectrum Scale Support at scale@us.ibm.com to have your use case reviewed. IBM will help optimize your tuning parameters and enable the feature. Please include this message while contacting IBM Support.
4. The Installation Toolkit will not install the extra packages from the advanced package. The advanced RPMs must be installed manually.
5. For Health monitoring on AIX, you need to install Python 2.7.5 or later from the AIX Toolbox for Linux Applications.
6. The Active File Management function is not supported on Debian.
7. The mmapplypolicy command does not run on Windows.
8. If you are running SLES 12 SP0, the gpfs.gss.pmsensors-* .sles12.1.s390x.rpm packages can be used with the Systems Performance Monitoring Tool.
9. The Data Management Edition is available in IBM Spectrum Scale V4.2.2 and later.

Table 206: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Standard Edition and Express Edition)

	Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest								
Asynch Disaster Recovery with AFM								
GUI	x RHEL 7.x or SLES 12 SP0 SP1	x RHEL 7.x or SLES 12 SP0 SP1						
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7. x x86_64 Power BE, Power LE SMB/NFS only with SLES 12 x86_64				x RHEL 7. x x86_64 Power BE, Power LE SMB/NFS only with SLES 12 x86_64			

Table 206: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Standard Edition and Express Edition) (continued)

	Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x RHEL 7. x Power BE, Power LE RHEL 6.8 x86_64 Power BE SLES 12 x86_64							
Call Home	x RHEL 7. x x86_64 Power BE, Power LE SLES 12 x x86_64				x RHEL 7. x x86_64 Power BE, Power LE SLES12 x x86_64			
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04/16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1			x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04/16.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1		
Health Monitoring	x	x	x ⁵		x	x	x ⁵	
Active File Mgt (AFM)	x ⁶	x	x					
Quality of Service (QoS)	x	x	x	x	x	x	x	x

Table 206: IBM Spectrum Scale V4.2.2 Functional Support Matrix (Standard Edition and Express Edition) (continued)

	Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x ⁷				
Backup of a file system	x	x	x					
File Placement Optimizer	x		x		x		x	
Hadoop including shared storage	x							
Clustered NFS	x							
Filesets	x	x	x	x				
File clones	x	x	x		x	x	x	
Quotas	x	x	x		x	x	x	
REST API	RHEL 7.x x86_64							
TCT								

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. Unless noted otherwise, the functions listed are supported on all platforms supported by IBM Spectrum Scale.
3. Our initial feedback from the field suggests that success of a disaster recovery solution depends on administration discipline, including careful design, configuration, and testing. Considering this, IBM has decided to disable the Active File Management-based Asynchronous Disaster Recovery feature (AFM DR) by default and require that customers deploying the AFM DR feature first review their deployments with IBM Spectrum Scale development. You should contact IBM Spectrum Scale Support at scale@us.ibm.com to have your use case reviewed. IBM will help optimize your tuning parameters and enable the feature. Please include this message while contacting IBM Support.
4. The Installation Toolkit will not install the extra packages from the advanced package. The advanced RPMs must be installed manually.
5. For Health monitoring on AIX, you need to install Python 2.7.5 or later from the AIX Toolbox for Linux Applications.
6. The Active File Management function is not supported on Debian.
7. The `mmapplypolicy` command does not run on Windows.
8. If you are running SLES 12 SP0, the `gpfs.gss.pmsensors-*sles12.1.s390x.rpm` packages can be used with the Systems Performance Monitoring Tool.

Table 207: IBM Spectrum Scale V4.2.1 Functional Support Matrix

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest	x	x 4.2.1.1 or later only	x								
Asynch Disaster Recovery with AFM	x ³	x ³	x ³								
GUI	x RHEL 7.x or SLES 12 SP0 SP1	x RHEL 7.x or SLES 12 SP0 SP1		x RHEL 7.x or SLES 12 SP0 SP1	x RHEL 7.x or SLES 12 SP0 SP1						
Integrated Protocols Support CES (SMB, NFS, OBJ, iSCSI)	x RHEL 7. x x86_64 Power BE SMB/NFS only with SLES 12 x86_64			x RHEL 7. x x86_64 Power BE SMB/NFS only with SLES 12 x86_64							
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x ⁴ RHEL 7. x			x RHEL 7. x							
Call Home	x RHEL 7. x x86_64 Power BE SLES 12 x x86_64			x RHEL 7. x x86_64 Power BE SLES12 x x86_64				x RHEL 7. x x86_64 Power BE SLES12 x x86_64			

Table 207: IBM Spectrum Scale V4.2.1 Functional Support Matrix (continued)

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1		x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6,7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1			x RHEL 6.x 7.x SLES 11/12 Debian 7/8.1 Ubuntu 14.04 x86_64 Power LE RHEL 7 SLES12 Power BE RHEL 6, 7 SLES11	x RHEL 6.5 6.6 6.7 7.x SLES 11 SP3 SP4 SLES 12 SP0 SP1		
Health Monitoring	x	x	x ⁵	x	x	x ⁵		x	x	x ⁵	
Active File Mgt (AFM)	x ⁶	x	x	x ⁶	x	x					
Quality of Service (QoS)	x	x	x	x	x	x	x	x	x	x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x	x	x	x ⁷				
Backup of a file system	x	x	x	x	x	x					
File Placement Optimizer	x		x	x		x		x		x	
Hadoop including shared storage	x			x							

Table 207: IBM Spectrum Scale V4.2.1 Functional Support Matrix (continued)

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Clustered NFS	x			x							
Filesets	x	x	x	x	x	x	x				
File clones	x	x	x	x	x	x		x	x	x	
Quotas	x	x	x	x	x	x		x	x	x	
TCT	Client: RHEL 6/7 SLES 11/12 Debian 7/8 Ubuntu14.04 x86_64 Server: RHEL 7 x86_64										

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. Unless noted otherwise, the functions listed are supported on all platforms supported by IBM Spectrum Scale.
3. Our initial feedback from the field suggests that success of a disaster recovery solution depends on administration discipline, including careful design, configuration, and testing. Considering this, IBM has decided to disable the Active File Management-based Asynchronous Disaster Recovery feature (AFM DR) by default and require that customers deploying the AFM DR feature first review their deployments with IBM Spectrum Scale development. You should contact IBM Spectrum Scale Support at scale@us.ibm.com to have your use case reviewed. IBM will help optimize your tuning parameters and enable the feature. Please include this message while contacting IBM Support.
4. The Installation Toolkit will not install the extra packages from the advanced package. The advanced RPMs must be installed manually.
5. For Health monitoring on AIX, you need to install Python 2.7.5 or later from the AIX Toolbox for Linux Applications.
6. The Active File Management function is not supported on Debian.
7. The mmapplypolicy command does not run on Windows.
8. If you are running SLES 12 SP0, the `gpfs.gss.pmsensors-* .sles12.1.s390x.rpm` packages can be used with the Systems Performance Monitoring Tool.

Table 208: IBM Spectrum Scale V4.2 Functional Support Matrix

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Encryption of Data at Rest	x		x								

Table 208: IBM Spectrum Scale V4.2 Functional Support Matrix (continued)

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Asynch Disaster Recovery with AFM	x ²	x ²	x ²								
GUI	x RHEL 7.x as listed in the RedHat support table or SLES 12 only			x RHEL 7.x as listed in the RedHat support table or SLES 12 only							
Integrated Protocols Support (CES, SMB, and NFS)	x RHEL 7 or 7.1 x86_64 Power BE			x RHEL 7 or 7.1 x86_64 Power BE							
Installation Toolkit (allows the installation of NFS services, CES framework, SMB and Object)	x ³ RHEL 7 or 7.1 only			x RHEL 7 or 7.1 only							
Call Home	x RHEL 7 or 7.1 only x86_64 Power BE			x RHEL 7 or 7.1 only x86_64 Power BE							
Performance Monitoring Tool	x RHEL 6.x 7.x SLES 12 Debian 7/8.1 Ubuntu 14.04 x86_64 RHEL 7.x Power BE			x RHEL 6.x 7.x SLES 12 Debian 7/8.1 Ubuntu 14.04 x86_64 RHEL 7.x Power BE				x RHEL 6.x 7.x SLES 12 Debian 7/8.1 Ubuntu 14.04 x86_64 RHEL 7.x Power BE			

Table 208: IBM Spectrum Scale V4.2 Functional Support Matrix (continued)

	Advanced Edition			Standard Edition				Express Edition			
	Linux x86 and LoP	Linux on Z	AIX	Linux x86 and LoP	Linux on Z	AIX	Win	Linux x86 and LoP	Linux on Z	AIX	Win
Active File Mgt (AFM)	x ⁴	x	x	x ⁴	x	x					
Quality of Service (QoS)	x		x	x		x	x	x		x	x
Integrated Lifecycle Mgt (ILM) policy support	x	x	x	x	x	x	x ⁵				
Backup of a file system	x	x	x	x	x	x					
File Placement Optimizer	x		x	x		x		x		x	
Hadoop including shared storage	x			x							
Clustered NFS	x			x							
Filesets	x	x	x	x	x	x	x				
File clones	x	x	x	x	x	x		x	x	x	
Quotas	x	x	x	x	x	x		x	x	x	

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. Our initial feedback from the field suggests that success of a disaster recovery solution depends on administration discipline, including careful design, configuration, and testing. Considering this, IBM has decided to disable the Active File Management-based Asynchronous Disaster Recovery feature (AFM DR) by default and require that customers deploying the AFM DR feature first review their deployments with IBM Spectrum Scale development. You should contact IBM Spectrum Scale Support at scale@us.ibm.com to have your use case reviewed. IBM will help optimize your tuning parameters and enable the feature. Please include this message while contacting IBM Support.
3. The Installation Toolkit will not install the extra packages from the advanced package. The advanced RPMs must be installed manually.
4. The Active File Management function is not supported on Debian.
5. The `mmapplypolicy` command does not run on Windows.

Table 209: IBM Spectrum Scale V4.1.1 Functional Support Matrix

	Advanced Edition		Standard Edition				Express Edition			
	Linux x86 and LoP	AIX	Linux x86 and LoP	Linux on Z	AIX	Windows	Linux x86 and LoP	Linux on Z	AIX	Windows
Encryption of Data at Rest	x	x								
Asynchronous Disaster Recovery with AFM	x ²	x ²								
Integrated Protocols Support (CES, SMB, and NFS)	x RHEL 7 or 7.1 only		x RHEL 7 or 7.1 only							
Active File Management (AFM)	x	x	x	x	x					
Integrated Lifecycle Management (ILM) policy support	x	x	x	x	x	x ³				
Backup of a file system	x V4.1.1.1 or later		x V4.1.1.1 or later	x V4.1.1.1 or later		x V4.1.1.1 or later				
Integrated Installer (allows the installation of NFS services, CES framework, SMB and Object)	x ⁴ RHEL 7 or 7.1 only		x RHEL 7 or 7.1 only							
File Placement Optimizer	x	x	x		x		x		x	
Hadoop shared storage	x		x							
Clustered NFS	x		x							

Table 209: IBM Spectrum Scale V4.1.1 Functional Support Matrix (continued)

	Advanced Edition		Standard Edition				Express Edition			
	Linux x86 and LoP	AIX	Linux x86 and LoP	Linux on Z	AIX	Windows	Linux x86 and LoP	Linux on Z	AIX	Windows
Filesets	x	x	x	x	x	x				
File clones	x	x	x	x	x		x	x	x	
Quotas	x	x	x	x	x		x	x	x	

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. Our initial feedback from the field suggests that success of a disaster recovery solution depends on administration discipline, including careful design, configuration, and testing. Considering this, IBM has decided to disable the Active File Management-based Asynchronous Disaster Recovery feature (AFM DR) by default and require that customers deploying the AFM DR feature first review their deployments with IBM Spectrum Scale development. You should contact IBM Spectrum Scale Support at scale@us.ibm.com to have your use case reviewed. IBM will help optimize your tuning parameters and enable the feature. Please include this message while contacting IBM Support.
3. The `mmapplypolicy` command does not run on Windows.
4. The Integrated Installer will not install the extra packages from the advanced package. The advanced RPMs must be installed manually.

Table 210: IBM Spectrum Scale V4.1 Functional Support Matrix

	Advanced Edition		Standard Edition				Express Edition			
	Linux x86 and LoP	AIX	Linux x86 and LoP	Linux on Z	AIX	Windows	Linux x86 and LoP	Linux on Z	AIX	Windows
Encryption of Data at Rest	x									
Active File Management (AFM)	x	x	x		x					
Integrated Lifecycle Management (ILM) policy support	x	x	x	x	x	x ²				
Backup of a file system	see V4.1.1	see V4.1.1	see V4.1.1		see V4.1.1					
File Placement Optimizer and Hadoop	x	x	x		x		x		x	

Table 210: IBM Spectrum Scale V4.1 Functional Support Matrix (continued)

	Advanced Edition		Standard Edition				Express Edition			
	Linux x86 and LoP	AIX	Linux x86 and LoP	Linux on Z	AIX	Windows	Linux x86 and LoP	Linux on Z	AIX	Windows
Clustered NFS	x		x							
Filesets	x	x	x	x	x	x				
File clones	x	x	x	x	x		x	x	x	
Quotas	x	x		x	x					

Note:

1. Functions that are supported by all editions on all platforms are not listed in the matrix.
2. The mmapplypolicy command does not run on Windows.

Table 211: IBM Spectrum Scale V3.5 Functional Support Matrix

	Linux x86 and LoP	AIX	Windows
Active File Management (AFM)	x	x	
Integrated Lifecycle Management (ILM) policy support	x	x	x
Backup of a file system	x	x	
File Placement Optimizer	x	x	
Clustered NFS	x		
Filesets	x	x	x
File clones	x	x	
Quotas	x	x	

Note: Functions that are supported on all platforms are not listed in the matrix.

Component Version Tables

<i>Table 212: IBM Spectrum Scale SMB</i>		
IBM Spectrum Scale version	Samba version	Build version
5.0.5.2	4.11.11	17-1
5.0.5.1	4.11.9	15-1
5.0.5.0	4.11.5	13-1
5.0.4.4	4.9.18	37-1
5.0.4.3	4.9.18	35-1
5.0.4.2	4.9.16	34-1
5.0.4.1	4.9.13	33-1
5.0.4.0	4.9.11	28-1
5.0.3.3	4.9.8	21-4
5.0.3.2	4.9.8	21-2
5.0.3.1	4.9.7	20-1
5.0.3.0	4.9.4	15-1
5.0.2.3	4.6.16	59-1
5.0.2.2	4.6.16	54-1
5.0.2.1	4.6.16	53-1
5.0.2.0	4.6.15	49-1
5.0.1.2	4.6.15	48-1
5.0.1.1	4.6.15	44-1
5.0.1.0	4.6.14	36-1
5.0.0.2	4.6.11	32-1
5.0.0.1	4.6.11	32-1
5.0.0.0	4.6.8	27-1
4.2.3.22	4.6.16	78-1
4.2.3.20	4.6.16	77-1
4.2.3.19	4.6.16	76-1
4.2.3.18	4.6.16	73-1
4.2.3.17	4.6.16	70-1
4.2.3.16	4.6.16	68-1
4.2.3.15	4.6.16	64-1
4.2.3.14	4.6.15	60-1
4.2.3.13	4.6.16	59-1
4.2.3.12	4.6.15	54-1
4.2.3.11	4.6.15	51-1
4.2.3.10	4.6.15	48-1
4.2.3.9	4.6.15	44-1

<i>Table 212: IBM Spectrum Scale SMB (continued)</i>		
IBM Spectrum Scale version	Samba version	Build version
4.2.3.8	4.5.16	37-1
4.2.3.7	4.5.15	31-1
4.2.3.0	4.5.5	15-1

<i>Table 213: IBM Spectrum Scale CES NFS</i>	
IBM Spectrum Scale version	NFS Ganesha version
5.0.5.2	2.7.5(ibm058.05)
5.0.5.1	2.7.5(ibm058.01)
5.0.5.0	2.7.5(ibm057.00)
5.0.4.4	2.7.5(ibm056.02)
5.0.4.3	2.7.5(ibm054.05)
5.0.4.2	2.7.5(ibm054.03)
5.0.4.1	2.7.5(ibm053.02)
5.0.4.0	2.7.5(ibm053)
5.0.3.3	2.5.3(ibm036.11)
5.0.3.2	2.5.3(ibm036.04)
5.0.3.1	2.5.3(ibm036.02)
5.0.3.0	2.5.3(ibm036)
5.0.2.3	2.5.3(ibm030.01)
5.0.2.2	2.5.3(ibm029)
5.0.2.1	2.5.3(ibm028)
5.0.2.0	2.5.3(ibm026)
5.0.1.2	2.5.3(ibm022)
5.0.1.1	2.5.3(ibm021)
5.0.1.0	2.5.3(ibm020)
5.0.0.2	2.5.3(ibm015.01)
5.0.0.1	2.5.3(ibm013)
5.0.0.0	2.5.3(ibm011)
4.2.3.22	2.3.2-0(ibm69)
4.2.3.21	2.3.2-0(ibm69)
4.2.3.20	2.3.2-0(ibm69)
4.2.3.19	2.3.2-0(ibm69)
4.2.3.18	2.3.2-0(ibm67)
4.2.3.17	2.3.2-0(ibm67)
4.2.3.16	2.3.2-0(ibm65)
4.2.3.15	2.3.2-0(ibm65)
4.2.3.14	2.3.2-0(ibm62)
4.2.3.13	2.3.2-0(ibm61)

<i>Table 213: IBM Spectrum Scale CES NFS (continued)</i>	
IBM Spectrum Scale version	NFS Ganesha version
4.2.3.11	2.3.2-0(ibm59)
4.2.3.10	2.3.2-0(ibm58)
4.2.3.9	2.3.2-0(ibm57)
4.2.3.7	2.3.2-0(ibm55)
4.2.3.6	2.3.2-0(ibm53)
4.2.3.5	2.3.2-0(ibm50)
4.2.3.4	2.3.2-0(ibm47)
4.2.3.3	2.3.2-0(ibm46)
4.2.3.2	2.3.2-0(ibm44)
4.2.3.1	2.3.2-0(ibm40)
4.2.3.0	2.3.2-0(ibm38)

<i>Table 214: IBM Spectrum Scale Object</i>		
IBM Spectrum Scale version	OpenStack release	Swift3 version
5.0.5.2	Pike	1.12
5.0.5	Pike	1.12
5.0.4	Pike	1.12
5.0.3	Pike	1.12
5.0.2	Pike	1.12
5.0.1	Pike	1.12
5.0.0	Mitaka	1.10
4.2.3	Mitaka	1.10

