

Quick Start Guide

This guide provides instructions for installing IBM Spectrum Scale 5.1.x.

Product overview

IBM Spectrum Scale is a file management infrastructure, based on IBM General Parallel File System (GPFS) technology, that provides unmatched performance and reliability with scalable access to critical file data. IBM Spectrum Scale provides concurrent high-speed file access to applications executing on multiple nodes of a cluster that can contain any combination of AIX[®], Linux[®], and Windows Server nodes.



Step 1: Access the software and documentation

This product offering consists of IBM Spectrum Scale Version 5.1.x.

To obtain the IBM Spectrum Scale product: You can download IBM Spectrum Scale from the following website:

Passport Advantage[®] website

To access the IBM Spectrum Scale documentation: You can access the complete IBM Spectrum Scale documentation and the IBM Spectrum Scale FAQ from the following website: IBM Knowledge Center (KC).

To try IBM Spactrum Scale features in test setups: You can use the IBM Spectrum Scale Developer Edition to try IBM Spectrum Scale features in non-production environments. For more information, see <u>IBM Spectrum Scale</u> product editions in the IBM KC or "IBM Spectrum Scale product editions" in *IBM Spectrum Scale: Concepts, Planning, and Installation Guide.*



Step 2: Validate the hardware and operating system support

Review the IBM Spectrum Scale versions and operating system versions that are supported in the IBM Spectrum Scale FAQ and verify that they are compatible with the software levels you use. For information about IBM Spectrum Scale hardware and system requirements, see the <u>IBM Spectrum Scale FAQ</u> (http://www.ibm.com/support/knowledgecenter/STXKQY/gpfsclustersfaq.html) and <u>Planning for GPFS</u> in the IBM KC or "Planning for GPFS" in *IBM Spectrum Scale: Concepts, Planning, and Installation Guide.*

Step 3: Review the product architecture

See <u>GPFS architecture</u> in the IBM KC or "GPFS architecture" in *IBM Spectrum Scale: Concepts, Planning, and Installation Guide.*

Step 4: Installing IBM Spectrum Scale

- **a.** Install the IBM Spectrum Scale licensed program on your system, by referring to the documentation in the IBM KC, *IBM Spectrum Scale: Concepts, Planning, and Installation Guide*, or *IBM Spectrum Scale: Command and Programming Reference*:
 - For existing systems, see Upgrading.
 - For new systems:
 - For your Linux nodes, see Installing IBM Spectrum Scale on Linux nodes with the installation toolkit.

For information on manual installation on supported Linux distributions, <u>Installing IBM Spectrum Scale on</u> Linux nodes and deploying protocols.

- For your AIX nodes, see Installing IBM Spectrum Scale on AIX nodes.
- For your Windows nodes, see Installing IBM Spectrum Scale on Windows nodes.
- b. Decide which nodes in your system will be quorum and manager nodes. See Planning for GPFS > Recoverability considerations > Node failure > Quorum.
- c. Create your GPFS cluster by issuing the mmcrcluster command. See Planning for GPFS > GPFS cluster creation considerations.
- **d.** Use the mmchlicense command to assign an appropriate IBM Spectrum Scale license to each of the nodes in the cluster. See **Product overview** > **IBM Spectrum Scale license designation**.

After your GPFS cluster has been established:

- a. Ensure that you have configured and tuned your system according to the values suggested in **Configuring** > **Configuring and tuning your system for GPFS**.
- b. Start GPFS by issuing the mmstartup command. See Command reference > mmstartup command.
- c. Create new disks for use in your file systems by issuing the mmcrnsd command. See Planning for GPFS > Disk considerations > Network Shared Disk (NSD) creation considerations.
- **d.** Create new file systems by issuing the mmcrfs command. See **Planning for GPFS** > **File system creation considerations**.
- e. Mount your file systems.
- f. If desired, deploy protocols by installing Cluster Export Services (CES) containing NFS, SMB, HDFS, and Object. Once all protocols are installed, choose which protocols to enable depending on your requirements. See Product overview > Protocols support overview, Planning for GPFS > Planning for protocols, and Installing IBM Spectrum Scale on Linux nodes and deploying protocols > Deploying protocols.

More information

For additional information about installation: See the IBM Spectrum[®] Scale Protocols Quick Overview.

IBM Spectrum Scale 5.1.x Licensed Materials - Property of IBM[®]. [©] Copyright IBM Corp. 2020. U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IBM, the IBM logo, and ibm.com[®] are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "<u>Copyright and trademark information</u>" (www.ibm.com/legal/copytrade.shtml).

