## IBM Spectrum Scale

#### Version 5.1.x



# **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.

### 1 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 Documentation (IBM Docs).

**To try IBM Spectrum 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 IBM Spectrum Scale product editions in IBM Docs or "IBM Spectrum Scale product editions" in IBM Spectrum Scale: Concepts, Planning, and Installation Guide.

## 2 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 IBM Spectrum Scale FAQ and Planning for GPFS in IBM Docs or "Planning for GPFS" in IBM Spectrum Scale: Concepts, Planning, and Installation Guide.

## 3 Step 3: Review the product architecture

See GPFS architecture in IBM Docs 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 IBM Spectrum Scale documentation in IBM Docs or IBM Spectrum Scale: Concepts, Planning, and Installation Guide and 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, Installing IBM Spectrum Scale on 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.

For additional information about protocol deployment: See the IBM Spectrum® Scale Protocols Quick Overview.

#### More information



Refer to IBM Spectrum Scale on IBM Documentation.

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