

Planning a Windows Server Installation

Before you begin the Setup program to actually install a Windows Server operating system, you need to make several preliminary decisions, as the following sections describe.

Checking system requirements

Before you install a Windows Server operating system, you should make sure that the computer meets the minimum requirements. Table 11-1 lists the official minimum requirements for Windows Server 2019. (The minimums for Windows Server 2012 are the same.) Table 11-1 also lists what I consider to be more realistic minimums if you expect satisfactory performance from the server as a moderately used file server.

TABLE 11-1 Minimum Hardware Requirements for Windows Server 2019 (Standard Edition)

Item	Official Minimum	A More Realistic Minimum
CPU	1.4 GHz	3 GHz
RAM	2GB*	4GB
Free disk space	32GB	100GB

**Technically, the minimum RAM size is 512MB. But 2GB is required if you want to install the Desktop Experience option, which lets you interact with Windows Server using the same GUI interface as Windows 10. I recommend you install this option unless you have a lot of Windows Server experience under your belt and don't mind working in a command-line environment.*

Reading the release notes

Like all versions of Windows Server, Windows Server 2019 provides a set of release notes that you should read before you start Setup, just to check whether any of the specific procedures or warnings it contains applies to your situation.

You can get the release notes at <https://docs.microsoft.com/en-us/windows-server/get-started-19/rel-notes-19>.

Considering your licensing options

Two types of licenses are required to run a Windows Server operating system: a *server license*, which grants you permission to run a single instance of the server, and *Client Access Licenses* (CALs), which grant users or devices permission to