3.1 Cisco Device Connection

As you study this section, answer the following questions:

- How do you connect to a Cisco switch?
- What are the storage methods available on a Cisco device?
- What is the boot sequence for a Cisco device?
- Where is the startup-config file stored?
- Where is the running-config file stored?
- What is stored in read-only memory (ROM)?
- In which locations does the system check for the Internetwork Operation System (IOS) image if the startup-config file is missing?

In this section, you will learn to:

- Boot a router
- Modify configuration files

Key terms for this section include the following:

Term	Definition
Boot loader software	A small program located in ROM that runs after the power-on self-test (POST) completes. The boot loader software is used to locate and launch the operating system.
Central processing unit (CPU) subsystem	The CPU subsystem is made up of the CPU, the dynamic random-access memory (DRAM), and the flash file system. POST checks the CPU subsystem at device bootup.
Non-volatile	Memory that does not lose content when the device is powered down.
Power-on-self-test	A series of tests that a device performs when booting.
Random access memory (RAM)	Volatile memory that is used in routers to provide temporary storage. It is used for running config files, IP routing tables, ARP tables, and the IOS.
Read-only memory	Nonvolatile memory that is used to provide storage for diagnostic software, boot instructions, and some IOS files.
Volatile memory	Memory that loses content when the device is powered down.

This section helps you prepare for the following certification exam objectives:

Exam	Objective
Cisco CCNA 200-301	4.8 Configure network devices for remote access using SSH