Planning Your Installation

ⓘ The directions in the subsequent sections assume you are installing Uptime Infrastructure Monitor for the first time. If you are updating an *existing* Uptime Infrastructure Monitor installation, there are other steps to consider.

Upgrading the Uptime Monitoring Station will overwrite the changes to httpd.conf, so when the upgrade is complete, be sure to update the httpd.conf file again.

You can only upgrade directly to Uptime Infrastructure Monitor 7.9.x if your currently installed version is version 7.8.6. Users on version 7.1 must upgrade to version 7.3, then 7.5 before upgrading to 7.7.3, then 7.8.6, and finally 7.9.x. Upgrades are possible across only two minor releases. Users who are running version 6.0 or 6.0.1 must upgrade to 7.0 > 7.1 > 7.3 > 7.5 > 7.7.3 > 7.8.6 > 7.9.x.

Users who are running version 6.0 or 6.0.1 must upgrade to 7.0 > 7.1 > 7.3 > 7.5 > 7.7.3 > 7.8.6 > 7.9.x. Users who are running version 5.5 or earlier must upgrade to 6.0 or 6.0.1 as a starting point. (Refer to the Uptime Infrastructure Monitor Knowledge Base for specific version upgrade paths.) If you are eligible for a direct upgrade path, you can upgrade using the installer for your Monitoring Station's operating system. The upgrade process installs new features, and does not modify or delete your existing data.

Refer to one of the following topics if your current version is older than the version required for a direct upgrade:

- Upgrading to Uptime Infrastructure Monitor 7.6 and later
- Upgrading to Uptime Infrastructure Monitor 7.2 to 7.5
- Upgrading to Uptime Infrastructure Monitor 7.1 or earlier

Understanding Uptime Infrastructure Monitor's Components

Uptime Infrastructure Monitor comprises four main components:

Monitoring Station

The Uptime Infrastructure Monitor Monitoring Station is a system running the Data Collector (also referred to as the Uptime Core), and a Web server.

- The Data Collector is software that retrieves performance metrics and other information from Elements. Uptime Infrastructure Monitor's Elements include systems, virtual machines and network devices, and metrics and information and retrieved either through installed Uptime Infrastructure Monitor Agents, or by using an existing framework such as WMI or SNMP.
- The self-contained Web server allows administrators and end users to configure Uptime Infrastructure Monitor, as well as access its reports.

DataStore

The DataStore is where all historical performance and availability data are stored. Uptime Infrastructure Monitor includes a MySQL database implementation, but it can also use either an Oracle or MS SQL Server database as its DataStore. If you plan to use either of these databases, refer to Running Uptime Infrastructure Monitor with an Oracle database or Running Uptime Infrastructure Monitor with an MS SQL Server database in our Knowledge Base for additional information.

Agents

Although agentless monitoring is supported, you can also use Uptime Infrastructure Monitor Agents to retrieve detailed performance metrics (such as CPU, memory, process, disk, and network usage) from systems that you are monitoring. Uptime Infrastructure Monitor Agents can also securely and remotely execute programs; for example, the Windows Agent can start and stop services, and reboot the system. Install an Uptime Infrastructure Monitor Agent on each monitored system whose metrics are not collected by some agentless method. Agents support a variety of operating systems. For more information about supported platforms for an agent, see Supported Agent Platforms in Uptime Infrastructure Monitor. For more information about supported platforms when using agentless monitoring, see Supported Agentless Platforms in Uptime Infrastructure Monitor.

Controller

The Uptime Controller provides access to the API, which gives Uptime Infrastructure Monitor users access to inventories of monitored objects at various organizational levels, as well as their respective statuses. This type of information can be used to, for example, build custom dashboards.

The Uptime Infrastructure Monitor installation file includes three of these components (the Monitoring Station, DataStore, and Controller), and thus contains everything you need to begin monitoring your IT infrastructure. If you further require Uptime Infrastructure Monitor Agents as part of your monitoring deployment, you can download and install them individually, based on operating system and platform, from the Support Portal Downloads page.

Component Communication

All communication between Monitoring Station and Uptime Infrastructure Monitor Agents originates from the former, and is performed over TCP using port 9998. (This port can be changed during the installation process.) When a monitored system is outside a firewall, you only need to configure outbound port access.

Access Privileges

The following privilege-related information should be considered if you are planning to use Uptime Infrastructure Monitor Agents:

- The installation procedure creates an `uptime` user ID on the Monitoring Station. This `uptime` user should also exist on all systems that have an Uptime Infrastructure Monitor Agent; using this ID on monitored systems minimizes any security risks by not running the Agents as a privileged process.
- Wherever possible, do not use the `root` account to run the Monitoring Station or Uptime Infrastructure Monitor Agents.
- You can use existing user accounts for the agent, such as `nobody`, `bin`, or `adm`; however, using these accounts may pose security risks depending on other system processes that run under these accounts.
- On HP/UX, you cannot start processes, such as Uptime Infrastructure Monitor Agents, using the `nobody` user ID.
- On Windows operating systems, the Uptime Infrastructure Monitor Agent must be running with `Administrator` privileges. If it is not, the Uptime Infrastructure Monitor Agent cannot access the system performance counters.

Resource Requirements

When reviewing Uptime Infrastructure Monitor resource requirements, it is important to note that sizing varies based on the number of monitors per element, the type of objects monitored, and the method used to gather performance data. Uptime Infrastructure Monitor recommendations are based on an average of 2 or 3 monitors per element. For more information regarding resource requirements, see Uptime Infrastructure Monitor Sizing Examples.

As a general rule of thumb when planning the allocated disk space, you should plan on allocating about 4 GB per monitored element. Note that per element usages are per year, unless you archive using old data.

The following are the minimum hardware requirements for an Uptime Infrastructure Monitor deployment.

Monitoring Station

The hardware configurations for a Monitoring Station can change depending on the number of Uptime Infrastructure Monitor Agents you plan to monitor, the reports that you want to generate, and the amount of historical data that you wish to retain in the DataStore. For sizing examples, see Uptime Infrastructure Monitor Sizing Examples.

DataStore

The amount of storage space for the Uptime Infrastructure Monitor DataStore is dependent on the number of systems monitored. As a guide, use the Uptime Infrastructure Monitor DataStore Sizing Calculator.

Agents

Uptime Infrastructure Monitor Agents are lightweight applications that require minimal space and processing cycles to run; their impact is negligible, and do not require advanced planning.

Latest Platform Support

> ⓘ Uptime Infrastructure Monitor only runs on 64-bit platforms. You cannot install Uptime Infrastructure Monitor on a 32-bit operating system running on 32-bit architecture.

See the following topics for the most up-to-date information regarding:

- Supported monitoring station platforms: Supported Monitoring Station Platforms in Uptime Infrastructure Monitor
- Supported databases: Supported Databases in Uptime Infrastructure Monitor

Pre-Installation Checklist

Before proceeding with the installation sections, ensure you complete the following tasks:

- identify the system that acts as the central Monitoring Station
- identify which servers, instances, and network devices are monitored
- ensure systems that host the Uptime Infrastructure Monitor Agent are on the supported platforms list for this release
- ensure all systems that you want to monitor are accessible over the network
- download the appropriate install file from the IDERA Support Portal:
    - `uptime-<version>-linux.bin`
    - `uptime-<version>-windows.exe`