Planning Your Installation

ⓘ The directions in the subsequent sections assume you are installing up.time for the first time. If you are updating an *existing* up.time installation, there are other steps to consider. Refer to the upgrade page on the uptime software Support Portal (http://support.uptimesoftware.com/upgrade.php) to ensure, when uprading, that your monitoring is uninterrupted and you have safeguarded your historical data.

Understanding up.time's Components

up.time comprises four main components:

Monitoring Station

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

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

DataStore

The DataStore is where all historical performance and availability data are stored. up.time 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 up.time with an Oracle database* or *Running up.time with an MS SQL Server database* in our Knowledge Base for additional information.

Agents

Although agentless monitoring is supported, you can also use up.time Agents to retrieve detailed performance metrics (such as CPU, memory, process, disk, and network usage) from systems that you are monitoring. up.time Agents can also securely and remotely execute programs; for example, the Windows Agent can start and stop services, and reboot the system. You will install an up.time Agent on each monitored system whose metrics are not being collected by some agentless method. Agents support a variety of operating systems.

Controller

The up.time Controller provides access to the API, which gives up.time 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 up.time 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 up.time 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 up.time 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 up.time Agents:

- The installation procedure creates an `uptime` user ID on the Monitoring Station. This `uptime` user should also exist on all systems that will have an up.time Agent; using this ID on monitored systems will minimize 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 up.time 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 up.time Agents, using the `nobody` user ID.
- On Windows operating systems, the up.time Agent must be running with `Administrator` privileges. If it is not, the up.time Agent will not be able to access the system performance counters.

Resource Requirements

The following are the minimum hardware requirements for an up.time deployment.

Monitoring Station

The hardware configurations for a Monitoring Station can change depending on the number of up.time 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. If you plan on monitoring more than 50 systems, first contact uptime software Customer Support to ensure your allocated resources are adequate.

The following is the recommended minimum hardware for a deployment that is monitoring up to 50 systems:

- 64-bit 2.4 GHz quad-core processor
- 4 GB of memory
- 200 GB of disk storage

- 1000 Mbit/s network interface

DataStore

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

Agents

up.time 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

> ⓘ   up.time only runs on 64-bit platforms. You cannot install up.time on a 32-bit operating system running on 32-bit architecture.

For the most up-to-date supported platform information, refer to the uptime software Support Portal (http://support.uptimesoftware.com) for information about supported Monitoring Station platforms, browsers, and databases.

Pre-Installation Checklist

> ⓘ   If you are planning on installing up.time as a VMware virtual appliance, you can skip the following checklist, as it is meant for installations on physical platforms.

Before proceeding with the installation sections, ensure you have done the following:

- identified the system that will act as the central Monitoring Station
- identified which servers, instances, and network devices will be monitored
- ensured systems that will host the up.time Agent are on the supported platforms list for this release
- ensured all systems that you want to monitor are accessible over the network
- have downloaded the appropriate install file from the uptime software Support Portal
    - `up.time-<version>-linux.bin`
    - `up.time-<version>-windows.exe`