

# Requirements

You should verify that all requirements have been met before you begin installing DTP, migrating from Concerto (4.x) to DTP, or upgrading to a new version of DTP.

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## Operating System

64-bit versions are required for all platforms. DTP requires 64-bit Java Runtime Environment.

### Windows

The following versions are supported:

- Server 2012
- Server 2016
- Server 2019
- Windows 7
- Windows 10

Microsoft .NET Framework 4.0 is required.

### Linux

You can install DTP on Linux distributions that support 64-bit Java Runtime Environments (e.g., Ubuntu 14.04, 14.10, or RHEL Server 6.x).

A dedicated non-root user account is *recommended* for installing and managing DTP on Linux. A non-root user account is *required* for installing and managing DTP distributions that include an embedded database server.

## Database Requirements

DTP supports MySQL and Oracle databases:

### MySQL

MySQL 5.6.25 to 8.0.x. is supported. See the following section for important information.

- [Database Settings](#)
- [Installing and Configuring the Database](#)

### Oracle

Oracle 11g or Oracle 12c. The Oracle database should not be installed on the same machine as DTP.

## Hardware

If you are installing DTP on a virtual machine (VM), make sure to allocate enough resources. Running DTP on a physical machine may result in greater performance.

- Quad core processor (or higher) with 2GHz CPU
- 8 GB memory (10 GB recommended if using MySQL). By default, 4 GB are allocated to DTP Server and Data Collector.
- If you are installing MySQL with DTP, two hard drive partitions are required, as well as 100 GB for the database and 60GB for programs.
- For heavy usage (more than 100,000 tests per day), you should install the database on a dedicated database server (physical machine) to ensure optimal performance of I/O writes.
- DTP server cannot be installed on a machine with an underscore ("\_") in its name.

An additional 4 GB of RAM is recommended if you are installing DTP Enterprise Pack.

## Ports

Before you begin installation, you should verify that the necessary ports are available:

Default Port	Description
80 (Windows), 8080 (Linux)	DTP Server
8443 (Windows and Linux)	SSL Connector
8005, 8009 (Linux)	Apache Tomcat ports
2002	License Server
8082	Data Collector for Parasoft analysis engines and third-party integrations.
8787	Used by the embedded database server shipped with distribution; this port is non-configurable.
18888	Team Server
3306	Default port used for sending and retrieving MySQL data.
1521	Default port used for sending and retrieving Oracle data.
61617	JMS events broker
1883	MQTT transport connector

You can customize the DTP Server ports as necessary. See [Reconfiguring DTP Ports](#).

## DTP Enterprise Pack Ports

The following ports must be available if you are installing [DTP Enterprise Pack](#):

Default Port	Description
8315	Event broker in the parent process that orchestrates all of the other processes associated with Enterprise Pack.
8314	Extension Designer web interface
8320-8399	DTP Enterprise Pack services.
8000	Policy Center web interface.
8316	Embedded MongoDB database for DTP Enterprise Pack.

## Browsers

The latest version of the following browsers are supported:

- Internet Explorer (compatibility view must be disabled)
- Microsoft Edge
- Firefox
- Google Chrome
- Safari

## Open File Descriptor Limit

Linux imposes a limit on the number of open file descriptors per process, which affects the number of allowable concurrent open connections that DTP can safely support. If many concurrent users will interact with DTP components, such as Report Center Dashboard or REST APIs, you should increase the open file descriptor limit before starting DTP.

Parasoft recommends setting the limit to approximately 100 times the number of concurrent users logged in. For example, if you expect 100 concurrent users, an open file descriptor limit of 10,000 should be sufficient.

Server behavior is inconsistent across operating systems, so you should use discretion when determining the proper limit for your environment. Methods for increasing the limit vary widely for different distributions. Consult your operating system documentation to determine whether it is possible to increase the limit and how to do so.

## ZIP Extractor

The installation machine must have a program installed that can unzip compressed folders and files.