



## **Minitab 16 Installation Guide**

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# Basic Installation

This section provides the basic steps in a typical installation of Minitab 16. For instructions on advanced installation options, see [Installation options](#) on page 12.

To install Minitab 16, follow the steps below. To renew an existing installation that has reached or is close to reaching its expiration date, see [Renewing licenses](#) on page 11.

- 1 Designate authorized users of multi-user licensing web pages (optional).
- 2 Determine installation configuration.
- 3 Create license files at the multi-user licensing web pages.
- 4 Obtain software.
- 5 Install software.

**Note** | This installation guide applies only to the multi-user installation for Minitab products. If you are not sure whether you have a multi-user or single-user license, see [www.minitab.com/support/answers/answer.aspx?id=2517](http://www.minitab.com/support/answers/answer.aspx?id=2517).

## Step 1: Designate authorized users of multi-user licensing web pages

To access the Minitab multi-user licensing web pages so that you can create the license files for the installation, you must be either the Minitab License Coordinator for your organization or an authorized user.

At the time of purchase, someone from your company was designated as the Minitab License Coordinator. That person has permission to log in to the Minitab multi-user licensing web pages to create license files. In addition, your company can have other authorized users.

If you are not sure whether you're an authorized user, contact your organization's Minitab License Coordinator. Only the License Coordinator can request additional authorized users by contacting a [Minitab sales representative or Minitab Technical Support](#).

## Step 2: Determine installation configuration

All multi-user installations require Minitab License Manager, the software that manages Minitab based on the information in the license file. Minitab License Manager must be installed in a configuration that allows it to communicate with Minitab.

You can choose from several different installation configurations to suit your needs. For example, you can install Minitab License Manager on a server in a networked configuration. In a networked configuration, users access the license file on the server; therefore, each client computer does not need to be permanently assigned to a separate license file. Another option is to install Minitab License Manager and Minitab on each client computer in a standalone configuration, which requires a separate license file for each client computer.

The installation configuration you choose affects the number of license files you need to create and the installation procedures that you need to follow. See [Installation Configurations](#) on page 6 for detailed information that will help you to determine the best configuration for your organization.

## Step 3: Create license file(s)

You need at least one license file for installation. To create license files, you use the Minitab multi-user licensing web pages. One license file *per server* is required in a networked installation. One license file *per workstation* is required in a standalone configuration. See [Installation Configurations](#) on page 6 for more information on networked and standalone configurations.

You need the following information to create a license file:

- The maximum number of simultaneous users that will be served by the license. In a standalone configuration, the maximum number of users is 1 for each license. To determine the maximum number of users in a networked configuration, see [Number of license files](#) on page 9.
- The MAC address of each computer that will host a license. This is the computer's physical address. To obtain the address, run the DOS command "ipconfig /all" and record the physical address that appears under Ethernet adapter Local Area Connection. In the example below, the MAC address of the computer is 01-23-45-AB-CD-EF.

### Ethernet adapter Local Area Connection:

```

Connection-specific DNS Suffix.:domain.local
Description.....:Broadcom NetXtreme 57XX Gigabit
Controller
Physical Address.....01-23-45-AB-CD-EF
Dhcp Enabled.....:Yes
Autoconfiguration Enabled.....:Yes
IP Address.....:192.168.1.1
Subnet Mask.....:255.255.255.0
Default Gateway.....:192.168.2.100
DHCP Server.....:192.168.2.100
DNS Server.....:192.168.10.200
Lease Obtained.....:Saturday, July 25, 2009 4:07:19 PM
Lease Expires.....:Wednesday, July 29, 2009 4:07:19 PM

```

For more information on how to obtain a computer's MAC address, see [www.minitab.com/support/answers/answer.aspx?id=2084](http://www.minitab.com/support/answers/answer.aspx?id=2084).

### To create license files

- 1 Go to <http://www.minitab.com/manage-license-files.aspx>.
- 2 Log in as an authorized user.
- 3 Complete the necessary steps to create the license file(s).

## Step 4: Obtain software

All multi-user configurations require both Minitab License Manager and Minitab. The installation files for these applications are available on the installation CD. However, to ensure that you have the latest version of our products, download the applications from the Minitab Web site using any Minitab.com account.

### To download software

- 1 Go to <http://www.minitab.com/support/licensing/multi-user/downloads/default.aspx>.
- 2 Download Minitab License Manager and Minitab. The license file is read by Minitab License Manager, the server software that manages the use of Minitab based on the information in the license file.

## Step 5: Install software

Install Minitab and Minitab License Manager based on the installation configuration that you determined in step 2. You can install Minitab License Manager on a server in a networked configuration or on each client computer in a standalone configuration.

**Note** | We recommend that you disable your anti-virus software during the installation of Minitab 16.

### System requirements

You can find the latest system requirements for Minitab at <http://www.minitab.com/products/minitab/system-requirements.aspx>.

### To install in a networked configuration

- 1 Ensure that you have administrative privileges to install Minitab License Manager on the server and Minitab on each workstation.
- 2 Ensure that the license file is on the desktop of the server. See [Create License File\(s\)](#) on page 4 for more information.
- 3 Install Minitab License Manager on the server.
- 4 Delete the license file that is on the desktop. The installation program creates a copy of the license file in C:\Program Files\Minitab\License Manager. The Minitab License Manager uses this license file.
- 5 Install Minitab on each workstation.
  - You need to specify the name of your Minitab License Manager server during installation.
  - Minitab chooses the first available port between 27000 and 27009. If your License Coordinator specified a different port within the license file, check **Specify port number**, and enter that port number.

**Note** | After you set up a networked configuration, you can use the Minitab License Borrowing Utility to allow a portable workstation, such as a laptop, to run Minitab products while it is disconnected from the network. See [Using Minitab products while disconnected from the network](#) on page 6 for more information. Borrowing is not available in all regions. See [www.minitab.com/support/answers/answer.aspx?id=2449](http://www.minitab.com/support/answers/answer.aspx?id=2449) to determine whether your license is borrow-enabled.

### To install in a standalone configuration

- 1 Ensure that you have administrative privileges to install Minitab License Manager and Minitab on each workstation.
- 2 Ensure that the license file is on the desktop of the workstation. See [Create License File\(s\)](#) on page 4 for more information.
- 3 Install Minitab License Manager on each workstation.
- 4 Delete the license file that is on the desktop. The installation program creates a copy of the license file in C:\Program Files\Minitab\License Manager. The Minitab License Manager uses this license file.
- 5 Install Minitab on each workstation.
  - When prompted for the name of the Minitab License Manager server, enter *localhost*.
  - Minitab chooses the first available port between 27000 and 27009.

# Installation Configurations

*Basic Installation* on page 3 explained how to install the multi-user version of Minitab products. This section provides a more in-depth explanation of the client-server model and the possible installation configurations.

## Multi-user installation

The multi-user versions of Minitab products are based on a client-server installation model. Minitab (the client software) is installed on individual workstations. Minitab License Manager (the server software) is installed on a server. Every time the client software is started, it communicates with the server to ensure that a license is available.

Typically, Minitab License Manager is installed on a single server. The client software can be installed on an unlimited number of workstations. Minitab License Manager ensures that the number of concurrent users never exceeds the licensed number of seats.

For example, an organization purchased 100 licenses of Minitab and configured Minitab License Manager to control all 100 licenses. Minitab was installed on 300 workstations. Even though the client software has been installed on 300 workstations, Minitab License Manager will allow only 100 instances of the client software to run concurrently.

When the client software is started, it requests a license from Minitab License Manager. If a license is available, it is sent it to the client and the software starts successfully. If a license is not available, an error message is displayed.

## Configuration options

### Networked configuration

To set up a networked configuration, install Minitab License Manager on a server. A license file is requested during the installation process. You need to provide the license file that was created during the procedure detailed in *Basic Installation* on page 3 (license files should always be named "minitab.lic"). Minitab License Manager is installed to C:\Program Files\Minitab\License Manager (by default). The installation program makes a copy of the license file and places it in the installation directory.

The Minitab License Manager installation creates a Windows service called Minitab License Manager. The license manager service starts automatically when it is installed. When the service starts, it checks the Minitab License Manager installation directory for the license file. If the license file is valid, the service starts successfully.

Install the client software, Minitab, on as many workstations as necessary. During installation, you need to provide the name of the server on which Minitab License Manager is installed.

### Using Minitab products while disconnected from the network

In a multi-user installation of Minitab, the client software must be able to communicate with the Minitab License Manager server to start. To allow a portable workstation, such as a laptop, to run Minitab products when it is disconnected from the network, Minitab provides the Minitab License Borrowing Utility.

For example, you might use Minitab on a laptop when you travel for business. Before leaving, while still connected to your company's network, use the Minitab Borrowing Utility to acquire a license from the Minitab License Manager server. Then you can access Minitab on the laptop when you are disconnected from the network.

For more information, refer to License Borrowing Instructions. Go to <http://www.minitab.com/support/licensing/multi-user/documentation/default.aspx>. To download the Minitab License Borrowing Tool, go to <http://www.minitab.com/support/licensing/multi-user/downloads/default.aspx>.

**Note** | Borrowing is not available in all regions. See [www.minitab.com/support/answers/answer.aspx?id=2449](http://www.minitab.com/support/answers/answer.aspx?id=2449) to determine whether your license is borrow-enabled.

### Standalone configuration

In a standalone configuration, Minitab products do not depend on accessing a network server. Instead, the Minitab License Manager server software is installed on the same workstation as the client software, Minitab. When Minitab starts, it checks the Minitab License Manager service that is on the same workstation, regardless of network connectivity. An individual license file must be created for each workstation.

### Mixed configurations

You can use a combination of networked and standalone configurations. For example, you can install Minitab on 20 workstations that are connected to the company's network and also install Minitab on 5 standalone workstations that are not connected to the network.

For information on mixed installation configurations and license files, see [Number of license files](#) on page 9.

## Minitab License Manager

All multi-user installation configurations require the installation of the Minitab License Manager, the server software that manages the use of Minitab. The Minitab License Manager ensures that the number of concurrent users does not exceed the licensed number of seats, based on the information in the license file.

The Minitab License Manager starts its service automatically when you install it. However, you may need to restart the Minitab License Manager service in some cases, such as when you make changes to the license file or use an options file.

### To restart Minitab License Manager

- 1 Open Windows services on the computer:
  - In Vista or later, click the Windows logo (Start). Type `services.msc` in the search box and press Enter.
  - In other Windows versions, choose **Start > Run**. Type `services.msc` and click **OK**.
- 2 Click **Minitab License Manager**.
- 3 Choose **Action > Restart**.

**Note** | If you need to uninstall Minitab License Manager from a computer, such as when you change servers or installation configurations, you must first stop the license manager service. Follow steps 1 and 2 above; in step 3, choose **Action > Stop**. Then uninstall the Minitab License Manager.

# License Files

License files are required for the installation of Minitab multi-user products. This section provides general background information on license files, including what they are, where they're created and stored, and how they're used. For instructions on how to work with license files after installation, see [License Manager Utility](#) on page 14.

## Using license files

### What is a license file?

A license file is a text file named `minitab.lic`. The file does not have a `.txt` extension, but you can open it in a standard text editor such as Notepad. The file contains information about the licenses that your organization purchased. This information includes the expiration date, the number of licenses, and the computer's MAC address.

After you create a license file at the Minitab multi-user licensing web pages, save it to the desktop of the computer on which you will install the Minitab License Manager, the server software that manages the use of Minitab based on the information in the license file.

### Sample license file

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 16 31-dec-2011 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-jan-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-oct-2010 \
SIGN="1c71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
5B3B 0F38 C3FB DF49 1720 F1BA D1CD 646D 4C9D 824B E7A9 F724 \
3EDA 9B09 5628 733F F646 AC87 6C39"
```

In the sample license file above, the terms in bold specify the following information:

<b>0A1B2C3D4E5F</b>	the unique MAC address of the computer for which this license file was created.
<b>minitab 16</b>	the name of the product for which the license file was created.
<b>31-dec-2011</b>	the expiration date of the license file.
<b>100</b>	the number of users allowed to concurrently run Minitab.

Each license file is created for a single computer. The computer is identified in the license file by its MAC address. The license file cannot be used on a computer that does not have the MAC address specified in the license file.

### How license files are used

During the installation of Minitab License Manager, you need to provide the location of the license file. By default, the installation looks to the desktop for the license file and then creates a copy of the license file in `C:\Program Files\Minitab\License Manager`. The Minitab License Manager service is then installed. The service reads the license files and then starts.

**Note** | After you install Minitab License Manager, you can delete the license file that is on the desktop.

Authorized users can create license files at the Minitab Multi-User Licensing web pages. See [Create License File\(s\)](#) on page 4 for more information.

### Number of license files

You need one license file for each Minitab License Manager that you install. In a typical networked configuration, Minitab License Manager is installed on a single server. In this case, only one license file is needed. For example, Minitab License Manager is installed on a single server that will serve all 100 licenses. You need to create a single license file for all 100 seats.

You can also divide your licenses among multiple servers, if desired. For example, Minitab License Manager is installed on two servers, one for 75 users in Department A and the other for 25 users in Department B. This installation configuration requires two license files: one file for 75 seats and another file for 25 seats.

In a standalone configuration, Minitab License Manager must be installed on each workstation. As a result, a unique license file is required for each installation of Minitab License Manager. For example, a small computer training lab has 10 computers that are not networked. You need to install Minitab and Minitab License Manager on all 10 computers. This installation configuration requires 10 license files, one for each computer.

You can have a combination of networked and standalone installations. You need to create a single license file for the server and a separate license file for each standalone workstation. For example, an organization purchases 100 licenses for Minitab. They want 10 standalone installations in the computer lab. A single server will host the remaining 90 licenses. This installation configuration requires 11 license files: one for the server and one for each of the 10 standalone workstations.

## Adding a second product or additional users to your license file

When you purchase both Minitab Statistical Software and Quality Companion, you must initially create two separate license files at the multi-user licensing web pages, one for each product. However, to install both products, you need to merge the two license files into one file. After you download both license files, append the contents of one license file to the other license file.

You can also add additional users to your license, which also involves appending the contents of your new license file to the existing file.

### To append an additional product to a license file

- 1 At <http://www.minitab.com/manage-license-files.aspx>, create a separate license file for the additional product.
- 2 Save the new license file to the desktop. Do not overwrite the existing license file in C:\Program Files\Minitab\License Manager.
- 3 Open the new license file for the additional product in Notepad.
- 4 Copy everything from the INCREMENT line down.
- 5 Close the license file that is on the desktop.
- 6 Open the original license file in C:\Program Files\Minitab\License Manager in Notepad.
- 7 Paste the copied contents of the new license file to the end of the original license file.
- 8 Choose **File > Save**.

- 9 Restart the Minitab License Manager service. See [To restart Minitab License Manager](#) on page 7 for more information.
- 10 To verify your change, double-click `lmtools.exe` in the installation directory (by default, `C:\Program Files\Minitab\License Manager`).
- 11 Click the **Server Status** tab.
- 12 Click **Perform Status Enquiry**.
- 13 In the results window, look for the line that includes `Users of product` where *product* = the Minitab product you added to your license.

**Example of a license file with appended product**

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 16 31-dec-2011 50 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-jan-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-oct-2010 \
SIGN="1C71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
5B3B 0F38 C3FB DF49 1720 F1BA D1CD 646D 4C9D 824B E7A9 F724 \
3EDA 9B09 5628 733F F646 AC87 6C39"
INCREMENT qualitycompanion minitab 3 31-jan-2012 8 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-mar-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD31415 01234INC" START=01-nov-2010 \
SIGN="1EA6 00D1 E785 EEA9 F026 63B5 BBA0 B8B0 CAB9 \
91CA A57A D123 D9DD 0372 A1CD 136F 12F4 ABCB EA0A 3AD9 A71F \
F014 7B78 A683 6EB2 FCC6 9685 0D66 6355 441C"
```

**To append additional users to a license file**

- 1 At <http://www.minitab.com/manage-license-files.aspx>, create a separate license file for the additional users.
- 2 Save the new license file to the desktop. Do not overwrite the existing license file in `C:\Program Files\Minitab\License Manager`.
- 3 Open the new license file for the additional users in Notepad.
- 4 Copy everything from the INCREMENT line down.
- 5 Close the license file that is on the desktop.
- 6 Open the original license file in `C:\Program Files\Minitab\License Manager` in Notepad.
- 7 Paste the copied contents of the new license file to the end of the original license file.
- 8 Choose **File > Save**.
- 9 Restart the Minitab License Manager service. See [To restart Minitab License Manager](#) on page 7 for more information.
- 10 To verify your change, double-click `lmtools.exe` in the installation directory (by default, `C:\Program Files\Minitab\License Manager`).
- 11 Click the **Server Status** tab.
- 12 Click **Perform Status Enquiry**.

- 13 In the results window, look for the line that includes **Total of x licenses issued** and confirm that *x* is equal to the total number of licenses (original + added).

**Example of a license file with appended users**

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 16 31-dec-2011 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-jan-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-oct-2010 \
SIGN="1c71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
5B3B 0F38 C3FB DF49 1720 F1BA D1CD 646D 4C9D 824B E7A9 F724 \
3EDA 9B09 5628 733F F646 AC87 6C39"
INCREMENT Minitab minitab 16 31-jan-2012 25 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP_UH \
ISSUER=Minitab ISSUED=01-mar-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD31415 01234INC" START=01-nov-2010 \
SIGN="1c71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
5B3B 0F38 C3FB DF49 1720 F1BA D1CD 646D 4C9D 824B E7A9 F724 \
3EDA 9B09 5628 733F F646 AC87 6C39"
```

## Renewing licenses

To avoid "checkout failed" error messages that are caused by expired license files, renew your organization's Minitab license before it expires.

- 1 Your organization's License Coordinator must purchase a new license for your organization.
- 2 An authorized user must log in and generate new license files at <http://www.minitab.com/manage-license-files.aspx>.  
See [Step 3: Create license file\(s\)](#) on page 4 for more information about creating license files.
- 3 Replace the existing license file with the new license file in C:\Program Files\Minitab\License Manager.
- 4 Restart Minitab License Manager. See [To restart Minitab License Manager](#) on page 7 for more information.

**Note** | License files are created with an expiration date. Minitab will not start if the license is expired.

# Advanced Topics

## Installation options

When you install Minitab, you can choose several advanced installation options. After you choose the language, accept the license agreement, and enter license manager information, click **Advanced** to:

- Change the destination folder. By default, Minitab is installed to C:\Program Files\Minitab in the Minitab 16 folder.
- Install a desktop shortcut.
- Install the Minitab Software Update Manager.

**Note**

If you choose not to install the Minitab Software Update Manager on your computer or those of your end-users, you will not be informed of critical software updates. Without the Minitab Software Update Manager, you will not be able to easily identify which updates apply to the software version that is installed on your computer(s). We recommend that you install the Minitab Software Update Manager on at least one regularly monitored computer so that you can receive notices and updates.

**To perform an advanced installation**

- 1 After you add license manager information, click **Next** and then click **Advanced**.
- 2 If you like, type a new destination folder or click **Change** to browse to a different location.
- 3 Click **Next**.
- 4 Check **Install a desktop shortcut** to include a desktop shortcut to Minitab.
- 5 Check **Install Minitab Software Update Manager**.
- 6 Click **Install**.

## Installing additional languages

Minitab 16 is available in English, French, German, Japanese, Korean, Simplified Chinese, and Spanish. You can install one or more than one language pack on any client computer.

**To install additional languages from a downloaded file**

- 1 Go to <http://www.minitab.com/support/licensing/multi-user/downloads/default.aspx>.
- 2 Follow the instructions to install additional language packs of Minitab 16.
  - If you already have one language pack of Minitab installed, you can install one or more additional languages.
  - If you did not already install Minitab, you must install the software before you add additional languages. However, to save time, you can download the full image that includes all language packs of the software. When you install the software, you can install

the language pack(s) that you want by using the Minitab Customization Tool or command line installation.

**Note** | If you plan to use the Minitab Customization Tool for deployment, download the full image with all language packs. For more information, see [Customizing your deployment](#) on page 16 .

### To install additional languages from the CD

Before you can install additional languages, you must first have at least one language version of Minitab 16 installed on your computer.

- 1 Insert the CD. If a splash screen does not appear, double-click **AutorunSetup.exe** on the disk.
- 2 Click **Install Additional Languages**.
- 3 Check any additional language packs to install.

**Note** | You can choose only language packs that are not yet installed. For example, if the Spanish version of Minitab is already installed, Spanish will not be listed as a language pack that you can add.

- 4 Click **Next**.
- 5 Click **Finish**.

## Checking for updates

If you installed the Minitab Software Update Manager, it automatically checks for updates every month and gives each user the ability to manually check for updates at any time.

### To manually check for updates

- 1 Open Minitab.
- 2 Choose **Help > Check for Updates**.
- 3 Select the updates you want and click **Install update(s)**.

### To change the schedule for automatic updates

You can change how often the Update Manager automatically checks for updates.

- 1 Open Minitab.
- 2 Choose **Help > Check for Updates**.
- 3 Click **Preferences**.
- 4 Choose **Daily**, **Weekly**, **Monthly**, or **Never**.
- 5 Click **OK**.

**Note** | If you choose **Never** to check for updates, you will not be automatically informed of critical updates, bug fixes, or notifications of problems or errors. However, Minitab users can still check for Minitab updates manually.

## License manager utility

Flexera Software, formerly Aceso, provides the `lmttools.exe` utility for performing license management tasks. This utility provides a graphical user interface to access all the license management tasks. To use `LMTTOOLS`, navigate to the license manager installation folder (C:\Program Files\Minitab\License Manager by default) and double-click `lmttools.exe`.

For more information on `LMTTOOLS`, refer to the [FLEXnet Licensing End User Guide](#) distributed by Flexera Software.

You can use this utility to check the status of Minitab License Manager and to help you monitor network licensing activities, such as the number of licenses in use and who is using them. You can also review configuration settings. See [Check Minitab License Manager status and settings](#) on page 19 for more information.

## Specifying ports

Minitab uses two ports for communication between the workstation and the server: the license manager (`lmgrd.exe`) port and the vendor daemon (`minitab.exe`) port. You can modify the license file to specify which port numbers Minitab should use.

Specifying ports manually is useful when you need to identify them as open ports on firewalls. When communication appears to be blocked, configure these open ports on any firewall on or between the workstation and server, including software firewalls such as Windows firewall. See [FLEXnet error 96](#) on page 21 for more information.

You can specify both the license manager and vendor daemon ports in the same license file. Make a backup of your license file before you edit it.

### To specify a license manager port

The license manager (`lmgrd.exe`) automatically chooses the first available port between 27000 and 27009 each time the Minitab License Manager service starts. You can set this port number to a permanent value.

- 1 Open the license file in C:\Program Files\Minitab\License Manager in Notepad.
- 2 Type the port number after the MAC address on the first line. Leave a space between the MAC address and port number, as shown in the example below step 7.
- 3 Save the file.
- 4 Restart the Minitab License Manager service to re-read the license file. See [To restart Minitab License Manager](#) on page 7.
- 5 To verify your change, open the Minitab License Manager log file, `minitab.dl`, which is located at C:\Program Files\Minitab\License Manager, in Notepad.
- 6 Locate the line that includes `lmgrd tcp-port`.
- 7 Make sure that the port number on this line is correct. For example, `lmgrd tcp-port 27001`.

Example of license file with specified license manager port of 27001:

```
SERVER this_host 0A1B2C3D4E5F 27001
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 16 31-dec-2011 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-jan-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
```

```
RENI01234" SN="STDORD56789 01234INC" START=01-oct-2010 \
SIGN="1C71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
5B3B 0F38 C3FB DF49 1720 F1BA D1CD 646D 4C9D 824B E7A9 F724 \
3EDA 9B09 5628 733F F646 AC87 6C39"
```

### To specify a vendor daemon port

The four-digit vendor daemon (`minitab.exe`) port is dynamically assigned from a wide range of port numbers each time the Minitab License Manager service starts. You can set this port number to a permanent value.

- 1 Open the license file in `C:\Program Files\Minitab\License Manager` in Notepad.
- 2 Type `port=` and the port number at the end of the second line ("`port`" is case-sensitive). Leave a space between `minitab` and `port=`.
- 3 Save the file.
- 4 Restart the Minitab License Manager service to re-read the license file. See [To restart Minitab License Manager](#) on page 7.
- 5 To verify your change, open the Minitab License Manager log file, `minitab.dl`, which is located at `C:\Program Files\Minitab\License Manager`, in Notepad.
- 6 Locate the line that includes `minitab using TCP=port`.
- 7 Make sure that the port number on this line is correct. For example, `minitab using TCP=port 3000`.

Example of license file with specified vendor daemon port of 3000:

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab port=3000
USE_SERVER
INCREMENT Minitab minitab 16 31-dec-2011 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-jan-2011 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-oct-2010 \
SIGN="1C71 F7B8 641F 7A84 F052 9650 F5E6 B093 ACBC 04C4 AF4D \
```

## Options file

You can use the options file to control various license system options for the Minitab License Manager, such as reserving licenses for a person or group or excluding licenses for a person or group.

### To use an options file

- 1 Open a new file in Notepad.
- 2 Type your settings with the appropriate syntax, as documented in the [FLEXnet Licensing End User Guide](#) distributed by Flexera Software, formerly Acreoso. See the bottom of this topic for an example options file.
- 3 Choose **File > Save As** and browse to the same folder as `minitab.lic` (`C:\Program Files\Minitab\License Manager`).
- 4 In **File name**, type `minitab.opt`.
- 5 In **Save as Type**, choose **All Files**.
- 6 Click **Save**.
- 7 Restart the Minitab License Manager service. See [To restart Minitab License Manager](#) on page 7.

- 8 To verify that the options file is successfully implemented, open the Minitab License Manager log file, `minitab.dl`, at `C:\Program Files\Minitab\License Manager`, in Notepad.
- 9 Locate the line that includes `Using options file: <path_to_options_file>`. If this text is present, the options file has been successfully implemented.

If a `minitab.opt` is present, the Minitab License Manager service reads it and implements the settings in the file.

In the example below of an options file, line 1 prevents the user `tjones` from using Minitab. Line 2 prevents the same user from using `Quality Companion`. Line 3 creates a group named "quality" and defines members of that group. Line 4 reserves three licenses for the quality group.

```
EXCLUDE Minitab USER tjones
EXCLUDE qualitycompanion USER tjones
GROUP quality jsmith bmiller awilson
RESERVE 3 minitab GROUP quality
```

**Note** | Go to [www.minitab.com/support/answers/answer.aspx?ID=2344](http://www.minitab.com/support/answers/answer.aspx?ID=2344) for more information about the options file.

## Customizing your deployment

The Minitab Customization Tool is a graphical user interface that you can use to create a custom deployment of Minitab 16. The tool creates a configuration file that you can use when you deploy Minitab.

Use the instructions below to set up a custom deployment. To access Setup Help at any time, type `setup.exe /help` at the command prompt.

### To use the Minitab Customization Tool

- 1 Copy the installation files to a network location. Make sure you use the installation files from the CD, or download the full image with all language packs from the Minitab Web site.
- 2 Open the command prompt and navigate to the Minitab 16 installation files.
- 3 Type `Setup.exe /admin` and press Enter to access the Minitab 16 Customization Tool.
- 4 Choose the language to use during customization and click **OK**. (You are not prompted to choose a language if Minitab is already installed on this computer.)
- 5 Set the options for deployment.
- 6 Choose **File > Save** to save the configuration file, `config.xml`, to the directory that contains `setup.exe`. Ensure that these files are in a network location that can be accessed by the computers onto which you will install Minitab 16. Alternately, you can save `config.xml` to a different location and reference it on the command line using this syntax: `setup.exe /config "path"` (for example, `setup.exe /config "\\ServerName\PathTo\config.xml"`). See [Command line installation](#) on page 17 for more information.

**Note** | If you did not copy the installation files to a network location in step 1, you can check **Copy Installation Files** to save both the installation files and the configuration file to the same network location.

## 7 Click Save.

### To deploy a Minitab installation

If you use SMS, Altiris, Tivoli, or another enterprise management tool for deployment, use setup.exe to deploy Minitab.

If you use Active Directory/Group Policy for deployment, use one of these methods to deploy Minitab:

- Startup Script (recommended)
  - 1 Create a configuration file using the Minitab 16 Customization Tool.
  - 2 Ensure that the config.xml file is next to the setup.exe.
  - 3 Call setup.exe within a Startup Script in Active Directory.
- Group Policy Software Deployment (assignment only; updates not supported)
  - 1 Create a configuration file using the Minitab 16 Customization Tool.
  - 2 Ensure that the config.xml file is next to the setup.exe.
  - 3 Assign the core.msi to the GPO (Group Policy Object). You can find this .msi in the administrative package that you created under the Core folder (Core/Core.msi).

If you silently deploy Minitab through Group Policy, setup.exe continues to run in the background even after the user logs on and until the installation is complete.

If you use Organizational Defaults to set the default Minitab user profile, you must save the orgdefs.reg file next to the language pack MSI for each language you install. For more information, see [Identical settings on multiple computers](#) on page 17.

## Command line installation

You can use the command line to install Minitab 16 on the client computer. Use the Minitab Customization Tool to create a configuration file to use for command line installation. You can specify all configurable settings for installation in the configuration file. To do so, you must specify the license information for each installation using the appropriate command line syntax.

From the client computer, execute the following as one continuous line of text, substituting your information for italicized text:

```
setup.exe /config config.xml
```

config.xml is the file that you create with the Minitab Customization Tool.

setup.exe /help displays a full list of command line switches that are available with setup.exe.

## Identical settings on multiple computers

To ensure that multiple computers have identical Minitab 16 settings, you can use **Tools > Manage Profiles** to create and export a preinstall profile as a registry file named `OrgDefs.reg` and include it with the installation files.

This process requires that you open Minitab with its original (unmodified) profile settings. Therefore, it is recommended that you log in to your computer as a user that has not previously modified Minitab profile settings.

### To implement a preinstall profile

- 1 Open Minitab on a computer that does not have any modified profile settings. If you are unsure whether the profile settings have been modified, open Minitab using an Administrator account that has not previously been used to open Minitab.
- 2 Adjust any settings that you want to share on multiple computers.
- 3 Choose **Tools > Manage Profiles**.
- 4 Move MyProfiles from **Active profiles** to **Available profiles** by clicking the arrow. (To be exported, profiles must be under **Available profiles**.)
- 5 With the profile selected, click **Export**.
- 6 In **Save In**, browse to the network folder that contains the Minitab 16 installation files.
- 7 Browse to the LanguagePacks folder. Open the appropriate language folder and save the OrgDefs.reg file.
- 8 In **File name**, rename MyProfile to OrgDefs.reg. Click **Save**.

When Minitab is installed, OrgDefs.reg is put in the user's `Minitab 16\Language\Profiles` folder.

#### Note

If you do not include the custom profile with the installation files, you must copy it to each user's `Minitab 16\Language\Profiles` folder after installing but before opening Minitab for the first time. Therefore, we recommend that you include the custom profile with the installation files and allow the installation to install it for you. On Vista and newer computers, the `Program Files` folder is protected. If you have installed Minitab to this protected area (which is the default), the profile must be copied to the `Minitab 16\Language\Profiles` folder by a user with administrative-level access for all system users to have access to it.

When a user opens Minitab for the first time, the file is imported. The imported profile is named `$$OrganizationDefaults`. For more information on profiles, type `Profiles` in the Minitab Help index.

# Troubleshooting

This section provides information for troubleshooting problems related to licensing and installing Minitab products.

## Log files

Minitab 16 and Minitab License Manager each generate log files to use for troubleshooting.

### Installation log file

An installation log file is created when you install Minitab 16. The file is named `setup.log` and is located at `%TEMP%\Minitab16`.

The installation log file contains information such as the time and date of installation and the folder to which the software was installed.

In Windows XP:

- 1 From the Windows taskbar, choose **Start > Run**.
- 2 In **Open**, type `%TEMP%\Minitab16`.
- 3 Click **OK**.
- 4 Browse to `Setup.log`.

In Windows Vista or Windows 7:

- 1 Click the Windows logo (Start).
- 2 In **Start Search**, type `%TEMP%\Minitab16`.
- 3 Press **Enter**.
- 4 Browse to `Setup.log`.

### Minitab License Manager log file

Minitab License Manager is the server software that controls the use of your license. It generates a log file that is updated with events, such as license check-ins, check-outs, and error messages. By default, the log file is named `Minitab.dl` and is located at `C:\Program Files\Minitab\License Manager`.

To read the Minitab License Manager log file, open it in Notepad.

**Note** | For detailed information on the Minitab License Manager log file, refer to the [FLEXnet Licensing End User Guide](#) distributed by Flexera Software, formerly Acresso.

### Check Minitab License Manager status and settings

You can check the status of Minitab License Manager to help you monitor network licensing activities, such as the number of licenses in use and who is using them. You can also review configuration settings.

- 1 Navigate to Minitab License Manager folder (by default, at `C:\Program Files\Minitab\License Manager`).
- 2 Double-click `lmtools.exe`.
- 3 Do any of the following:
  - To check server status, click the **Server Status** tab. Click **Perform Status Enquiry**.
  - To check server configuration, click the **Config Services** tab.

- To check license information, click the **Server Diags** tab. Click **Perform Diagnostics**. The number of licenses are listed, as shown in this example:

```
Users of Minitab: (Total of 50 licenses used; Total of 33 licenses in use)
```

Specific details about each license are also listed:

```
jsmith LAB_PCLAB_PC (v1.0)(LAB_PC/27000 302), start Fri 3/1 4:15
```

jsmith is the user name, LAB\_PC is the computer name, and 27000 is the license manager port

Borrowed licences display the expiration in seconds. For example, the license below will expire in 314159 seconds:

```
jsmith LAB_PCLAB_PC (v1.0)(LAB_PC/27000 302), start Fri 3/1 4:15 (linger: 314159)
```

## FLEXnet license errors

You may encounter several types of FLEXnet error messages that indicate that you cannot check out a license. These messages are formatted in general as follows:

```
FLEXNET License Error Number: Error text.
```

For example:

```
FLEXNET License Error -97-121-0: Check out failed
```

Some of the errors that you may encounter are listed below. For a complete list of possible error codes, see the [FLEXnet Licensing End User Guide](#).

<b>FLEXnet error 15</b>	<b>Possible cause</b>	<b>Explanation</b>
	The server name that was provided during the installation of Minitab 16 on the client computer is not valid.	The server name that was provided during the installation of Minitab 16 on the client computer is used to locate that server on the network. Make sure that the server name is valid. For instructions on locating the server name, see <a href="http://www.minitab.com/support/answers/answer.aspx?id=2085">www.minitab.com/support/answers/answer.aspx?id=2085</a> .
<b>FLEXnet error 25</b>	<b>Possible cause</b>	<b>Explanation</b>
	You are using Minitab 16 with a Minitab 15 license file.	The license file that is managed by Minitab License Manager only supports Minitab 15. To resolve this, you need to create a new license file for Minitab 16.
<b>FLEXnet error 34</b>	<b>Possible cause</b>	<b>Explanation</b>
	The date differs in excess of 24 hours between the client computer and the Minitab License Manager server.	If the date difference is greater than 24 hours, Minitab License Manager will refuse to grant

	Possible cause	Explanation
		the license. Reset the clock on the client computer.
<b>FLEXnet error 92</b>	<b>Possible cause</b> The MAC address in the license file does not match the MAC address of the Minitab License Manager server.	<b>Explanation</b> The MAC address in the license file must match the MAC address of an enabled network adapter on Minitab License Manager. See <a href="#">License Files</a> on page 8 for more information.
<b>FLEXnet error 68</b>	<b>Possible cause</b> The license file is not configured to allow for borrowing.	<b>Explanation</b> Not all licenses are borrow-enabled. Borrow-enabled licenses will have "borrow-enabled" within the text of the license file.
<b>FLEXnet error 95</b>	<b>Possible cause</b> You are browsing to a license file in a standalone configuration.	<b>Explanation</b> Your license type may not support this method. In the Find License dialog box, instead of choosing <b>Specify the License File</b> , choose <b>Specify the License Server System</b> . Type the server name. For example, type @localhost.
<b>FLEXnet error 96</b>	<b>Possible cause</b> Firewalls or network configurations are blocking communications between the client computer and the Minitab License Manager server.	<b>Explanation</b> The client computer must be able to communicate with the Minitab License Manager server over two ports: the Minitab License Manager (lmgrd.exe) port and the minitab vendor daemon (minitab.exe) port. You can use telnet to test communications. See <a href="http://www.minitab.com/support/answers/answer.aspx?id=2178">www.minitab.com/support/answers/answer.aspx?id=2178</a> for more information on telnet. See the <a href="#">Minitab License Manager log file</a> on page 19 to determine which port numbers are used. See <a href="#">Specifying ports</a> on page 14 to manually configure ports.
	The Minitab License Manager service is not running on the license server.	The Minitab License Manager service must be running to process license requests for Minitab.
<b>FLEXnet error 97</b>	<b>Possible cause</b> The MAC address in the license file does not match the MAC address of the Minitab License Manager server.	<b>Explanation</b> The MAC address in the license file must match the MAC address of an enabled network adapter on Minitab License Manager. See <a href="#">License Files</a> on page 8 for more information.
	The license expired.	The expiration date for your license is specified in the license file. Minitab is not usable after

Possible cause	Explanation
	the expiration date. See <a href="#">License Files</a> on page 8 for more information.
The network adaptor on the Minitab License Manager server is disabled.	The network adaptor card must be enabled for the Minitab License Manager server to verify the MAC address. Without this, Minitab cannot start. This issue is most commonly encountered with laptop computers that may change the status of a network card under various conditions.
The license file was modified.	You can make a few valid changes to the license file, such as specifying a port number. Most other changes will corrupt the license file, making it unusable to Minitab License Manager.
The date is incorrect on the computer that runs Minitab License Manager software.	Minitab installations are sensitive to the computer's date.
Minitab License Manager is installed to C:\FlexLM\Minitab.	Minitab License Manager should not be installed to this directory. Uninstall Minitab License Manager and install to another directory. See <a href="http://www.minitab.com/support/answers/answer.aspx?id=2251">www.minitab.com/support/answers/answer.aspx?id=2251</a> for more information.
The Minitab License Manager service is not running on the license server.	The Minitab License Manager service must be running to provide license requests for Minitab.
Minitab License Manager is using a different communication port than expected.	Multiple FLEXlm license managers may be running on this server, which caused the Minitab License Manager to use a different port. See <a href="#">To specify a license manager port</a> on page 14 to manually configure ports.

## FLEXnet error 104

Possible cause	Explanation
You attempt to borrow a license longer than is allowed by either the expiration date in the license file or a limit set in the options file.	You cannot borrow a license beyond the expiration data of the license file. If the specified end date for borrowing is before the expiration date, the options file may contain limits on borrowing. See <a href="#">Options file</a> on page 15 for more information.

## Minitab License Manager fails to start

If the Minitab License Manager service fails to start, you may see the following error message:

```
The Minitab License Manager service on Local Computer started and then
stopped. Some services stop automatically if they have no work to do, for
example, the Performance Logs and Alerts Services.
```

Use the following table to troubleshoot the problem:

Possible cause	Explanation
The license file ( <code>minitab.lic</code> ) is not in the Minitab License Manager installation directory.	Minitab License Manager browses to <code>C:\Program Files\Minitab\License Manager</code> for the license file. Ensure that <code>minitab.lic</code> is at this location.
The license file is not named correctly.	The license file must be named "minitab.lic" (unless this default value was modified later). Make sure that the file is not named <code>minitab.lic.txt</code> (a common mistake). Confirm that the file does not end with <code>.txt</code> . Right-click the file, choose <b>Properties</b> , and verify that <b>Type of file</b> is <b>License</b> and not <b>Text Document</b> .
Extra text is in the license file.	Some text editors, such as WordPad, may add unwanted content to your file. See <a href="#">Sample license file</a> on page 8 for an example of a license file with no unnecessary text. Open the file in Notepad.
Minitab License Manager does not have permission to write the log file ( <code>minitab.dl</code> ) to the directory specified in the Config Services tab of LMTOOLS.	By default, Minitab License Manager creates <code>minitab.dl</code> in <code>C:\Program Files\Minitab\License Manager</code> . You can specify a different directory with LMTOOLS ( <code>lmttools.exe</code> ). Make sure that the account that runs the Minitab License Manager service has write access to this directory.
Minitab License Manager server has non-ANSI characters in its name.	For best results, install Minitab License Manager to a computer with only ANSI characters in its name.

## Web site errors

### Access Denied

If you try to log in to the Minitab multi-user license management web pages and you are not an authorized user, the Access Denied error message may appear. For more information, see [Step 1: Designate authorized users of multi-user licensing web pages](#) on page 3.

### Unable to Proceed: Entitlements Not Available

If you log in to the multi-user license management web pages to create license files and there are no valid orders for your organization, the message **Unable to Proceed: Entitlements Not Available** appears. Contact your Minitab Sales Representative.

## Online resources

The following online resources are available:

- Customer support questions in the Minitab Knowledgebase at [www.minitab.com/support/answers/](http://www.minitab.com/support/answers/)
- The latest downloads for Minitab multi-user products at <http://www.minitab.com/support/licensing/multi-user/downloads/default.aspx>

- The latest documentation for Minitab multi-user products at <http://www.minitab.com/support/licensing/multi-user/documentation/default.aspx>
- The FLEXnet Licensing End User Guide at [www.minitab.com/uploadedFiles/Shared\\_Resources/Documents/License\\_Management/flexnet\\_licensing\\_end\\_user\\_guide.pdf](http://www.minitab.com/uploadedFiles/Shared_Resources/Documents/License_Management/flexnet_licensing_end_user_guide.pdf)

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