



Minitab Workspace®

Multi-User Desktop License Installation Guide

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Basic Installation

This section provides the basic steps in a typical installation of Minitab Workspace. For instructions on advanced installation options, see [Client Installation Options](#) on page 17.

To install Minitab Workspace, follow the steps below. To renew an existing installation that has reached or is close to reaching its expiration date, see [Renewing desktop licenses](#) on page 13.

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

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

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

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 Workspace 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 8 for detailed information that will help you to determine the best configuration for your organization.

Note To ensure compatibility with the Minitab Workspace licenses, ensure that latest version of Minitab License Manager is installed.

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 desktop 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 8 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 11.
- The MAC address of each computer that will host a license. This is the computer's physical address.

To obtain the MAC address:

1. Run the DOS command "ipconfig /all"
2. Record the physical address that appears under Ethernet adapter Local Area Connection.
3. 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, December 1, 2018 4:07:19 PM
Lease Expires.....:Tuesday, December 1, 2020 4:07:19 PM
```

The MAC address for the network interface will be displayed in the form: xx:xx:xx:xx:xx:xx. For example, 3c:09:3a:6c:18:ac. When you create your license file, enter the MAC address without the formatting characters; remove colons or dashes (for example, 3c093a6c18ac).

For more information on how to obtain a computer's MAC address, see

<https://support.minitab.com/installation/frequently-asked-questions/license-fulfillment/locate-my-computers-mac-address/>.

To create license files

1. Go to <https://it.minitab.com/support/licensing/multi-user/customer-entitlement-summary.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 desktop configurations require both Minitab License Manager and Minitab Workspace. Download the applications from the Minitab web site using any Minitab.com account.

To download software

1. Go to <https://www.minitab.com/downloads/>.
2. Download Minitab License Manager and Minitab Workspace. The license file is read by Minitab License Manager, the server software that manages the use of Minitab Workspace based on the information in the license file.
3. If you plan to mass deploy utilizing a software asset management tool, download the Minitab Workspace Mass Deployment Package.

Step 5: Install software

Install Minitab Workspace 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. For more information about client computer configurations, see [Client Installation Options](#) on page 17.

System requirements

You can find the latest system requirements for *Minitab Workspace* and *Minitab License Manager* at <https://www.minitab.com/products/workspace/system-requirements/>.

To install in a networked configuration

1. Ensure that you have administrative privileges to install Minitab License Manager on the server and Minitab Workspace on each workstation.
2. Ensure that the license file is on the desktop of the server. See [Create License File\(s\)](#) on page 5 for more information.
3. Install Minitab License Manager on the server. The default installation folder can be found here: C:\Program Files (x86)\Minitab\License Manager
4. Delete the license file that is on the desktop. The installation program creates a copy of the license file in C:\Program Files (x86)\Minitab\License Manager. Minitab License Manager uses the license file.
5. Install Minitab Workspace on each workstation.
 - You need to specify the network name or IP address of your Minitab License Manager server during installation.
 - Minitab Workspace 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 borrowing 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 8 for more information.

To install in a standalone configuration

1. Ensure that you have administrative privileges to install Minitab License Manager and Minitab Workspace on each workstation.
2. Ensure that the license file is on the desktop of the workstation. See [Create License File\(s\)](#) on page 5 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 (x86)\Minitab\License Manager. Minitab License Manager uses the license file.
5. Install Minitab Workspace on each workstation.
 - When prompted for the name of the Minitab License Manager server, enter *localhost*.
 - Minitab Workspace chooses the first available port between 27000 and 27009.

Installation Configurations

The previous section explained how to install the multi-user desktop version of Minitab products. This section provides a more in-depth explanation of the client-server model and the possible installation configurations.

Multi-user desktop installation

The multi-user desktop versions of Minitab products are based on a client-server installation model. Minitab Workspace (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 up to three workstations for each licensed seat. 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 Workspace and configured Minitab License Manager to control all 100 licenses. Minitab Workspace 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 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 4 (license files should always be named "minitab.lic"). The installation program makes a copy of the license file and places it in the installation directory.

- Minitab License Manager is installed to C:\Program Files (x86)\Minitab\License Manager (by default).
- 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 on as many workstations as necessary. During installation, you need to provide the network name or IP address of the server on which Minitab License Manager is installed.

Using Minitab products while disconnected from the network

In a multi-user desktop installation of Minitab Workspace, 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 Workspace has a utility built into the application that allows you to borrow a license.

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

To borrow a license:

1. In Minitab Workspace, choose **Help**.
2. Click **Borrow License**.
3. In **Borrow Through**, choose a return date on the calendar.
4. Click **Borrow** and then click **OK**.

A borrowed license is returned automatically at the end of the borrowing period. To return a license before the end of the borrowing period, choose and click **Return License**.

Note To limit the number of licenses that can be borrowed, use the options file. For an example, see [Options file](#) on page 16.

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 Workspace. Minitab License Manager starts two daemons that are required to run on each standalone workstation. When Minitab Workspace 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 Workspace on 20 workstations that are connected to the network and also install Minitab Workspace 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 11.

Minitab License Manager

All multi-user desktop installation configurations require the installation of Minitab License Manager, the server software that manages the use of Minitab Workspace. 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.

To restart Minitab License Manager

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.

1. Open a command prompt as an administrator and type *services.msc*.
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 Minitab License Manager.

License Files

License files are required for the installation of Minitab multi-user desktop 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.

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 desktop licensing web pages, save it to the desktop of the computer on which you will install Minitab License Manager, the server software that manages the use of Minitab Workspace based on the information in the license file.

Sample license file

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE SERVER
INCREMENT Minitab minitab 19 01-dec-2020 100 VENDOR STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-dec-2018 \
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:

0A1B2C3D4E5F

The unique MAC address of the computer for which this license file was created.

Minitab

The name of the product for which the license file was created, for example, *Minitab*, *companion*, *workspace*, *predictiveanalytics*, or *healthcare*. Ensure that your product matches the product name in the `minitab.lic` file and in the `minitab.opt` file, if the optional file is in use.

minitab

The vendor daemon name.

19

The version of the product for which the license file was created.

01-dec-2020

The expiration date of the license file.

100

The number of users allowed to concurrently run the software.

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, Minitab License Manager creates a copy of the license file in the following location: C:\Program Files (x86)\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 desktop licensing web pages. See [Create license file\(s\)](#) on page 5 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 Workspace 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 Workspace. 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 a combination of products, Minitab, add-on modules, or Minitab Workspace, you must initially create a license file for each product. However, to install the products, you need to merge the license files into one file. After you download the 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

You may need to be logged in as an administrator to perform the following steps.

1. At <https://it.minitab.com/support/licensing/multi-user/customer-entitlement-summary.aspx>, create a separate license file for the additional product.

2. Save the new license file. Do not overwrite the existing license file in the following folder: C:\Program Files (x86)\Minitab\License Manager
3. Open the new license file for the additional product in a text editor.
4. Copy everything from the INCREMENT line down.
5. Close the new license file.
6. In a text editor, open the original license file from the following folder: C:\Program Files (x86)\Minitab\License Manager
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 9.
10. Verify your changes. Double-click lmtools.exe in the installation directory (by default, C:\Program Files (x86)\Minitab\License Manager). Click the **Server Status** tab, then click **Perform Status Inquiry**.
11. 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

In the following example, product is either *Minitab*, *companion*, *workspace*, *predictiveanalytics*, or *healthcare*. Ensure that your product matches the product name in the minitab.lic file and in the minitab.opt file, if the optional file is in use. For example, if your products are Minitab and Workspace, then the product names in the minitab.lic file should be *Minitab* and *workspace* as shown in bold below:

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 19 01-dec-2020 50 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-dec-2018 \
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 workspace minitab 5 01-dec-2020 8 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD31415 01234INC" START=01-dec-2018 \
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

You may need to be logged in as an administrator to perform the following steps.

1. At <https://it.minitab.com/support/licensing/multi-user/customer-entitlement-summary.aspx>, create a separate license file for the additional users.
2. Save the new license file. Do not overwrite the existing license file in the following folder: C:\Program Files (x86)\Minitab\License Manager
3. Open the new license file for the additional users in a text editor.

4. Copy everything from the INCREMENT line down.
5. Close the new license file.
6. In a text editor, open the original license file from the following folder: C:\Program Files (x86)\Minitab\License Manager
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 9.
10. Verify your changes. Double-click `lmtools.exe` in the installation directory (by default, C:\Program Files (x86)\Minitab\License Manager). Click the **Server Status** tab, then click **Perform Status Inquiry**.
11. 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

In the following example, product is either *Minitab*, *companion*, *workspace*, *predictiveanalytics*, or *healthcare*. Ensure that your product matches the product name in the `minitab.lic` file and in the `minitab.opt` file, if the optional file is in use. For example, if your product is Minitab, then the product name in the `minitab.lic` file should be *Minitab* as shown in bold below:

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab
USE SERVER
INCREMENT Minitab minitab 19 01-dec-2020 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-dec-2018 \
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 19 01-dec-2020 25 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP_GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD31415 01234INC" START=01-dec-2018 \
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 desktop licenses

To avoid "checkout failed" error messages that are caused by expired license files, renew your organization's Minitab Workspace license before it expires. Minitab Workspace will not start if the license is expired.

1. Your organization's License Coordinator must purchase a new license for your organization.
2. To generate license files that have a new expiration date, an authorized user must log in at <https://it.minitab.com/support/licensing/multi-user/customer-entitlement-summary.aspx>
 - To generate license files based on your existing license configuration, click **Renew (Copy) Previous File**.
 - To generate license files based a new license configuration, see [Step 3: Create license file\(s\)](#) on page 5.

3. You may need to be logged in as an administrator to perform the following steps.
 - Replace the existing license file with the new license file in C:\Program Files (x86)\Minitab\License Manager, then restart Minitab License Manager. See [To restart Minitab License Manager](#) on page 9 for more information.

License manager utility

Flexera Software provides a utility for performing license management tasks. You can use this license manager 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 24 for more information.

The `lmtools.exe` utility provides a graphical user interface to access all the license management tasks. To use `LMTOOLS`, navigate to the license manager installation folder (C:\Program Files (x86)\Minitab\License Manager by default) and double-click `lmtools.exe`.

For more information about the license manager utility, refer to the [FlexNet Publisher License Administration Guide](#) distributed by Flexera Software LLC.

Specifying ports

Minitab Workspace uses two ports for communication between the workstation and the server: the license manager (`lmgrd`) port and the vendor daemon (`minitab`) port. You can modify the license file to specify which port numbers Minitab Workspace 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. See [Error 96](#) on page 26 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`) 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.

You may need to be logged in as an administrator to perform the following steps.

1. In a text editor, open the license file: C:\Program Files (x86)\Minitab\License Manager
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 9.
5. Verify your changes. In a text editor, open the Minitab License Manager log file, `minitab.dl`, which is located at C:\ProgramData\Minitab\License Manager.
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:

In the following example, product is either *Minitab*, *companion*, *workspace*, *predictiveanalytics*, or *healthcare*. Ensure that your product matches the product name in the minitab.lic file and in the minitab.opt file, if the optional file is in use. For example, if your product is Minitab, then the product name in the minitab.lic file should be *Minitab* as shown in bold below:

```
SERVER this_host 0A1B2C3D4E5F 27001
VENDOR minitab
USE_SERVER
INCREMENT Minitab minitab 19 01-dec-2020 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-dec-2018 \
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 vendor daemon (minitab) 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.

You may need to be logged in as an administrator to perform the following steps.

1. In a text editor, open the license file: C:\Program Files (x86)\Minitab\License Manager
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 9.
5. Verify your change. In a text editor, open the Minitab License Manager log file, minitab.dl, which is located at C:\ProgramData\Minitab\License Manager.
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:

In the following example, product is either *Minitab*, *companion*, *workspace*, *predictiveanalytics*, or *healthcare*. Ensure that your product matches the product name in the minitab.lic file and in the minitab.opt file, if the optional file is in use. For example, if your product is Minitab, then the product name in the minitab.lic file should be *Minitab* as shown in bold below:

```
SERVER this_host 0A1B2C3D4E5F
VENDOR minitab port=3000
USE_SERVER
INCREMENT Minitab minitab 19 01-dec-2020 100 VENDOR_STRING="limited \
term, limited users, borrowing enabled" DUP GROUP=UH \
ISSUER=Minitab ISSUED=01-dec-2018 BORROW=26280 \
NOTICE="Customer ID: 01234 License Coord ID: 56789 \
RENI01234" SN="STDORD56789 01234INC" START=01-dec-2018 \
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 Minitab License Manager, such as reserving or excluding licenses for a person or group.

To use an options file

You may need to be logged in as an administrator to perform the following steps.

1. In a text editor, open a new file.
2. Type your settings with the appropriate syntax, as documented in the [FlexNet Publisher License Administration Guide](#) distributed by Flexera Software LLC. 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 (x86)\Minitab\License Manager
4. Save the file with the following file name: *minitab.opt*
5. Restart the Minitab License Manager service. See [To restart Minitab License Manager](#) on page 9.
6. To verify that the options file is successfully implemented. In a text editor, open the Minitab License Manager log file, minitab.dl, which is located at C:\ProgramData\Minitab\License Manager.
7. 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 following example of an options file, line 1 prevents the user "tjones" from using Minitab. Line 2 prevents the same user from using Minitab Workspace. Line 3 creates a group named "quality" and defines members of that group. Line 4 reserves three licenses for the quality group. Line 5 specifies that 5 licenses cannot be borrowed. Line 6 identifies the 5 users that are able to access the Predictive Analytics Module.

```
EXCLUDE Minitab USER tjones
EXCLUDE workspace USER tjones
GROUP quality jsmith bmiller awilson
RESERVE 3 minitab GROUP quality
BORROW LOWWATER minitab 5
INCLUDE predictiveanalytics USER abesoe bcarmel cduxelle depson efesler
```


Client Installation Options

- Choose **Activate with a license** (Sign in, Product Key, License Server, or License File).
- Optionally, change the destination folder. By default, Minitab Workspace is installed to C:\Program Files (x86)\Minitab\Minitab Workspace.

Checking for updates

Checking for updates is enabled by default. An automatic check occurs upon every launch of the product, and each user is able to manually check for updates at any time. You can set an optional property during deployment to disable checking for updates. See [Deploying Minitab Workspace](#) on page 17 for additional details.

To manually check for updates

1. Open Minitab Workspace.
2. Choose **Help > Check for Updates**.
3. If an update is available, follow the instructions to update your software.

To disable checking for updates

1. Open a command prompt as an administrator and type *control appwiz.cpl*.
2. Select **Minitab Workspace** and then click **Uninstall/Change**.
You might be prompted for an administrator password or confirmation.
3. In the **Minitab Workspace** Setup dialog box, select **Change**.
4. Uncheck **Enable checking for software updates**.
5. Click **Next**, and then click **Install**.

Note If you choose to remove or disable checking for updates, you will not be automatically informed of critical updates, bug fixes, or notifications of problems or errors.

Deploying Minitab Workspace

You can use the command line to install Minitab Workspace on the client computer. To do so, you must specify the license information for each installation using the appropriate command line syntax. The following tables outline properties and switches that can be used for command line or mass deployment to your end-users.

EXE Switch Table

Command Line Switch	Accepted Values	Description
/exelang	1031 1033 1034 1036 1041 1042 1046 2052	Specify the default language of the installation and application. If language is not specified, the installer will use your system regional settings for the default language, or default to English if a match is not found. 1031=German 1033=English 1034=Spanish 1036=French 1041=Japanese 1042=Korean 1046=Portuguese 2052=Simplified Chinese
/exenoui		Required for a silent install. Use with appropriate MSI switch for modified end-user experience (e.g., /qn, /qb, /passive).

MSI Switch Table (Common)

Command Line Switch	Description
/passive	Basic user interface, progress bar only
/qn	Quiet, no user interface
/qb	Basic user interface, the Cancel button will be active during installation
/qr	Reduced user interface, the Cancel button will be active during installation

Property Table

Property	Accepted Values	Description
APPDIR		Specify a custom installation directory.
ACCEPT_EULA	1	Required property. By specifying a value for this property, you accept the terms of the end-user license agreement and privacy policy .
LICENSE_SERVER	Server name or IP address	For use with a multi-user desktop license to specify the server that hosts Minitab License Manager. <ul style="list-style-type: none"> Not compatible with PRODUCT_KEY, LICENSE_PORTAL, or FILE_LOC

Property	Accepted Values	Description
LICENSE_SERVER_PORT	27000 to 27009	For use with a multi-user desktop license to <i>optionally</i> specify the listening port for the Minitab License Manager server.
PRODUCT_KEY	18-digit Product Key	Single-user desktop licenses can be activated by specifying a Product Key. <ul style="list-style-type: none"> Not compatible with LICENSE_SERVER, LICENSE_SERVER_PORT, LICENSE_PORTAL, or FILE_LOC
FILE_LOC	Fully qualified path to license file, including filename	An alternative license mechanism using a file. Not intended for use with a standalone license configuration utilizing the Minitab License Manager. <ul style="list-style-type: none"> Not compatible with LICENSE_SERVER, LICENSE_SERVER_PORT, LICENSE_PORTAL, or PRODUCT_KEY Corresponds to the location of your minitab.lic file
LICENSE_PORTAL	1	For use only with online accounts that require sign-in. <ul style="list-style-type: none"> Not compatible with LICENSE_SERVER, LICENSE_SERVER_PORT, PRODUCT_KEY, or FILE_LOC

Property	Accepted Values	Description
DISABLE_ANALYTICS	0 or 1	<p>With consent, Minitab collects application analytics to help us better understand our customers' needs. Examples of application analytics include:</p> <ul style="list-style-type: none"> • Product information, including the types of files that are imported, the types and frequency of tools and commands, project characteristics, such as the amount of data and number of worksheets, and the frequency and duration of use. • Performance information about Minitab products and/or services and any issues you may experience while using them. <p>Note: Minitab does not collect any user-entered data or statistical results.</p> <p>Settings:</p> <ul style="list-style-type: none"> • To enable application analytics, enter 0 • To disable application analytics, enter 1 <p>If you do not enter a value for this property now, you can do it later when you launch the application. If you are deploying software on behalf of your end users, these settings will apply to their installations:</p> <ul style="list-style-type: none"> • 0 allows the end user to enable or disable application analytics on their computer • 1 automatically disables application analytics for all end users <p>Note: These settings do not prevent Minitab from collecting other types of data from its websites and products, such as data necessary for managing licenses or accessing online Help. For more information, view our Privacy Policy.</p>
PERSONAL_FOLDER	A path to a location on the user's computer	The location where personal templates are stored. By default, the Personal folder is located in the user's Application Data folder.
WORKGROUP_FOLDER	A path to a commonly accessible location, such as a network folder	The location where shared templates are stored. The Workgroup folder does not have a default value.

Property	Accepted Values	Description
ProductLanguage	1031 1033 1034 1036 1041 1042 1046 2052	Specify the default language of the installation and application. This property can only be set within the Minitab Group Policy file. Refer to EXE Switch Table for additional language options. 1031=German 1033=English 1034=Spanish 1036=French 1041=Japanese 1042=Korean 1046=Portuguese 2052=Simplified Chinese
DISABLE_UPDATES	1	When you specify a value for this property, you turn off the ability to check for software updates. Disabling this option prevents automatic and manual checks from occurring. We recommend that you enable this option on at least one computer. <ul style="list-style-type: none"> Set LICENSE_PORTAL=1 to manage updates through the License Portal.

Command Line Details

1. You must use the /exenoui switch when you use /qn, /qb, or /passive.
2. Verify that command line switches are in correct order.
 - EXE switches must precede MSI switches.
 - MSI switches must precede MSI properties.
3. If you do not specify licensing properties (LICENSE_PORTAL, PRODUCT_KEY, LICENSE_SERVER, or FILE_LOC), a 30-day trial will be installed.
4. If you have a previous version of Minitab Workspace installed, the existing values will be used for APPDIR, LICENSE_PORTAL, LICENSE_SERVER, LICENSE_SERVER_PORT, and PRODUCT_KEY, if they are not specified during the upgrade.

Required Syntax

Use the following syntax: **productV.v.v.setup.exe**, where

- Lowercase **product** is the name of the software,
- Uppercase **V** indicates the major release number of the software; and
- Lowercase **v** (up to 3) indicates an update to the major release of the software.

For example: minitabworkspace1.3.1.2setup.exe [EXE Switch Table] [MSI Switch Table] [Property Table]

Examples

Note The following examples do not contain line breaks.

Install silently, English default language, account sign-in:

```
productV.v.v.setup.exe /exenoui /exelang 1033 /qn ACCEPT_EULA=1 LICENSE_PORTAL=1
```

Install silently, German default language:

```
productV.v.v.setup.exe /exenoui /exelang 1031 /qn ACCEPT_EULA=1
```

Install silently, English default language, multi-user desktop license:

```
productV.v.v.setup.exe /exenoui /exelang 1033 /qn ACCEPT_EULA=1 LICENSE_SERVER=MyServerName
```

Install silently, English default language, multi-user desktop license setting server and port, setting workgroup and personal templates folder, and checking for updates disabled:

```
productV.v.v.setup.exe /exenoui /exelang 1033 /qn ACCEPT_EULA=1 LICENSE_SERVER=MyServerName  
LICENSE_SERVER_PORT=27000 WORKGROUP_FOLDER=\\server1\workgroup PERSONAL_FOLDER=c:\templates  
DISABLE_UPDATES=1
```

Install silently, English default language, license file:

```
productV.v.v.setup.exe /exenoui /exelang 1033 /qn ACCEPT_EULA=1 FILE_LOC="c:\minitab.lic"
```

Install silently, English default language, single-user desktop license with product key, and custom installation directory:

```
productV.v.v.setup.exe /exenoui /exelang 1033 /qn ACCEPT_EULA=1 PRODUCT_KEY=123456789012345678  
APPDIR="c:\New Folder"
```

Upgrade Minitab Workspace silently:

```
productV.v.v.setup.exe /exenoui /qn ACCEPT_EULA=1
```

Uninstall silently using the Minitab Workspace product code:

```
msiexec /x {Product Code} /qn
```

Product Code Registry Location:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Microsoft\Windows\CurrentVersion\Uninstall\Minitab  
Workspace V.v.v.v]
```

String: UninstallPath

Group policy usage

The MSIs in the GroupPolicy folder of the Mass Deployment Package should be used only for Group Policy deployment methods. Use the Group Policy MSIs in conjunction with repackaging tools to ensure that Properties are set correctly for the required configuration.

- To install Minitab Workspace with English as the default language, use productV.v.v.setupGroupPolicy.English.msi.
- To install Minitab Workspace with a non-English default language, use productV.v.v.setupGroupPolicy.MultiLanguage.msi.

The ProductLanguage property must be set to a supported language value. For a list of supported language values, refer to the Property Table.

Changing license types

A valid license is required to use Minitab Workspace. There may be times when it is necessary to switch from one license type to another. For example, you change your license type when you switch from a trial license to a multi-user desktop license utilizing a license server.

To change license type for Minitab Workspace:

1. Open Minitab Workspace.
2. Choose **Help**.
3. Under **License Information**, select **Change License Type**.
4. Select the appropriate license type and enter the required licensing information.

If you get an error when you open Minitab Workspace, select **Change License Type** in the licensing dialog to change the currently installed license type.

Troubleshooting

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

Log files

You can generate log files to use for troubleshooting with both Minitab Workspace and Minitab License Manager.

Installation log file

The installation log file contains information such as the time and date of installation and the folder to which the software was installed. An installation log file can be created by utilizing the following command: `productV.v.vsetup.exe /exenoui /qn /l*v c:\install.log ACCEPT_EULA=1 LICENSE_SERVER=MyServerName`

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. The log file is named `minitab.dl` and is located at `C:\Programdata\Minitab\LicenseManager`.

To read the Minitab License Manager log file, open it in a text editor.

To reset the size of the Minitab License Manager log file (for example, when it gets too large), restart Minitab License Manager. For more information, see [To restart Minitab License Manager](#) on page 9.

Note For detailed information on the Minitab License Manager log file, refer to the [FlexNet Publisher License Administration Guide](#) distributed by Flexera Software LLC.

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 the Minitab License Manager folder (by default, at `C:\Program Files (x86)\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 workspace: (Total of 50 licenses used; Total of 33 licenses in use)
```

Specific details about each license are also listed:

```
jsmith LAB_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_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 Publisher License Administration Guide](#).

Error 15

Possible cause	Explanation
The server name that was provided during the installation of Minitab Workspace on the client computer is not valid.	The server name that was provided during the installation of Minitab Workspace 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 https://support.minitab.com/installation/frequently-asked-questions/minitab-license-manager/change-default-location-for-license-manager/ .

Error 25

Possible cause	Explanation
You are using Minitab Workspace with an invalid license file.	The license file that is managed by Minitab License Manager supports some other Minitab product. To resolve this, you need to create a new license file for Minitab Workspace.

Error 34

Possible cause	Explanation
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 the license. Reset the clock on the client computer.

Error 68

Possible cause	Explanation
The license file is not configured to allow for borrowing.	Not all licenses are borrow-enabled. Borrow-enabled licenses will have "borrow-enabled" within the text of the license file.

Error 92

Possible cause	Explanation
The MAC address in the license file does not match the MAC address of the Minitab License Manager server.	The MAC address in the license file must match the MAC address of an enabled network adapter on Minitab License Manager. See License Files on page 10 for more information.

Error 95

Possible cause	Explanation
You are browsing to a license file in a standalone configuration.	Your license type may not support this method. In the Find License dialog box, instead of choosing Specify the License File , choose Specify the License Server System . Type the server name. For example, type <i>@localhost</i> .

Error 96

Possible cause	Explanation
Firewalls or network configurations are blocking communications between the client computer and the Minitab License Manager server.	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 the Minitab License Manager log file on page 24 to determine which port numbers are used. See Specifying ports 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 Workspace.

Error 97

Possible cause	Explanation
The MAC address in the license file does not match the MAC address of the Minitab License Manager server.	The MAC address in the license file must match the MAC address of an enabled network adapter on Minitab License Manager. See License Files on page 10 for more information.
The license expired.	The expiration date for your license is specified in the license file. Minitab Workspace is not usable after the expiration date. See License Files on page 10 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 Workspace cannot start. This issue is most commonly encountered with laptop computers that may change the status of a network card under various conditions.

Possible cause	Explanation
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 a different directory.
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 Workspace.
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 To specify a license manager port on page 14 to manually configure ports.

Error 104

Possible cause	Explanation
You attempt to borrow a license that is past either the expiration date in the license file or a set limit in the options file.	You cannot borrow a license that is past the expiration date 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 Options file on page 16 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 (minitab.lic) is not in the Minitab License Manager installation directory.	Minitab License Manager browses to C:\Program Files (x86)\Minitab\License Manager for the license file. Ensure that minitab.lic 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 minitab.lic.txt (a common mistake). Confirm that the file does not end with .txt. Right-click the file, choose Properties , and verify that Type of file is License and not Text Document .
Extra text is in the license file.	Some text editors, such as WordPad, may add unwanted content to your file. See Sample license file on page 10 for an example of a license file with no unnecessary text. Open the file in Notepad.

Possible cause	Explanation
Minitab License Manager does not have permission to write the log file (minitab.dl) to the directory specified in the Config Services tab of LMTOOLS.	By default, Minitab License Manager creates minitab.dl in C:\Programdata\Minitab\License Manager. You can specify a different directory with LMTOOLS (lmtools.exe). Make sure that the account that runs the Minitab License Manager service has write access to this directory.
The 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 desktop 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 desktop licensing web pages](#) on page 4.

Unable to Proceed: Entitlements Not Available

If you log in to the multi-user desktop 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:

- Troubleshooting solutions at <https://support.minitab.com/installation/>
- The latest downloads for Minitab multi-user desktop products at <https://www.minitab.com/downloads/>
- The latest documentation for Minitab multi-user desktop products at <https://www.minitab.com/support/documentation/>
- The *FlexNet Publisher License Administration Guide* distributed by Flexera Software LLC at <https://www.minitab.com/uploadedFiles/Documents/license-management/FlexNetLicenseAdminGuide.pdf>

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