Licensing

This topic explains how to set the license.

- About Parasoft License
- Setting a Network License in the GUI
- Setting the Local License in the GUI
- Setting the License with Localsettings

About Parasoft License

C/C++test can run on either a local or a network license. The local license is machine-locked and cannot be transferred. The network license is retrieved from Parasoft License Server, which stores and distributes license tokens for Parasoft products.

By default, C/C++test is configured to retrieve the license from the same DTP server that you configured for your development testing workflow (see Connecting to DTP). Alternatively, you can obtain your license from:

- a standalone License Server
- a License Server deployed on a secondary instance of DTP

You can configure your license by specifying the options in the GUI or by manually adding the license settings to a file where local settings are stored (see Setting the License with Localsettings).
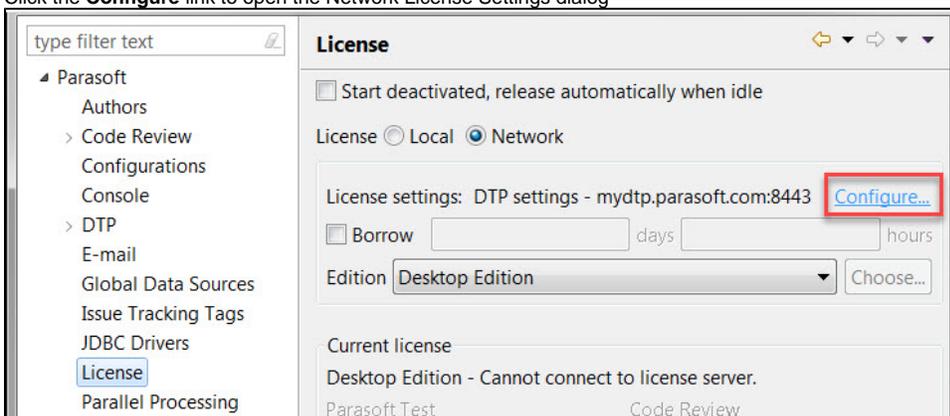

Legacy Licensing

C/C++test Professional supports the legacy License Server on default port 2002. If you upgrade to a newer version of C/C++test, you can configure your license settings to retrieve the license from the server you used before the upgrade.

Setting a Network License in the GUI

If your team or organization manages Parasoft licensing via License Server on DTP, connecting to DTP automatically enables your network license; see Connecting to DTP.

To customize the options or retrieve the license from another License Server:

1. Choose **Parasoft> Preferences** to open the Preferences dialog.
2. Select the **License** category in the left pane.
3. Select the **Network** option.
4. Enable or disable the **Borrow** option; see License Borrowing.
5. Select the license edition you want to use from the **Edition** drop-down menu. If you select Custom Edition, click **Choose** to customize the license features.
6. Click the **Configure** link to open the Network License Settings dialog

7. Configure the connection to your License Server in the Network License Settings dialog.

The following options are available:
- Enable the **Use configured DTP settings** option to retrieve your license from License Server on your primary DTP (enabled by default).
- Enable the **Use License Server settings from DTP project** option to retrieve your license from License Server that you configured directly in a project stored on DTP using the licensing settings; see Setting the License with Localsettings. The project must be specified in the DTP panel; see Connecting to DTP.
- Enable the **Use the following License Server** option to retrieve your license form a custom License Server. You can configure one of the following:

  Standalone License Server

  a. Specify the host where your standalone License Server is deployed. If your server uses the HTTPS protocol, precede the hostname with `https://`.
  b. Specify the port. The port number depends on your Tomcat settings (commonly, a HTTP port, for example 8080).
  c. Skip configuring the context path (context path is not supported for standalone License Server).
  d. Enable the **HTTP/S** option.
     ❌ Do NOT use authentication.

  License Server on a secondary DTP

  a. Specify the host.
  b. Specify the port (commonly, a HTTPS port, for example 443 or 8443).
  c. (optional) Specify the context path if DTP is deployed in a location relative to the host address you provided.
  d. Enable the **HTTP/S** option.
  e. Enable the **Use authentication** option.
  f. Enter the username and password.

  Legacy License Server

  a. Specify the host.
  b. Specify the port (commonly, 2002).
  c. Skip configuring the context path (context path is not supported for legacy License Server).
  d. Enable the **TCP/IP(legacy)** option.
     ❌ Do NOT use authentication.
8. Click **OK**.
9. Click **Apply**. The License preferences page will display the features that you are licensed to use.
10. Click **OK** to set and save your license.

Borrowing a License

You can borrow a network license token to use C/C++test when DTP is inaccessible, for example, during travel or when the machine hosting DTP is being upgraded.

When you borrow a license, one of the license tokens available on DTP is locked to your machine for the specified amount of time. Licenses can be borrowed from 1 hour to 14 days.

To borrow a license, enable the **Borrow** option in the License panel and specify the number of days and hours you are going to use the license.

License Activation and Deactivation

If you want to deactivate a license, choose **Parasoft> License> Deactivate License**. To reactivate it, choose **Parasoft> License> Activate License**.

If you want your license to automatically deactivate after 30 minutes of inactivity, enable the **Start deactivated, release automatically when idle** option. When the license is deactivated:

- The C/C++test license token is released on License Server and can be retrieved by another user.
- The C/C++test views are disabled and results are cleared from the Quality Tasks view in your IDE.

> ✅ **Tip - Waiting for a License in Command Line Mode**
>
> You can configure C/C++test to wait for a license token to be released if there is no C/C++test license token is currently available on License Server. Configure the following option in the localsettings file: `cpptest.license.wait.for.tokens.time=[time in minutes]`
>
> In the following example, C/C++test will wait 3 minutes for License Server to provide a license token: `cpptest.license.wait.for.tokens.time=3`
>
> For details on the command line mode and localsettings options, see Configuring Localsettings as well as Testing from the Command Line Interface.

Setting the Local License in the GUI

To receive a local license, you need to provide your Parasoft representative with your machine ID. You can obtain the Machine ID in one of the following ways:

- In the GUI, choose **Parasoft> Preferences> License** and enable the **Local** option. Your Machine ID will be displayed in the **Machine id** field.
- In the command line, run the following command: `cpptestcli -machineid`. Your Machine ID will be displayed in the output message.

Once you have your license key, you can configure your license:

1. Choose **Parasoft> Preferences** to open the Preferences dialog.
2. Select the **License** category in the left pane.
3. Select the **Local** option.
4. Enter your your license key in the **Password** field.
5. Click **Apply**. The License preferences page will display the features that you are licensed to use and the expiration date for your license.
6. Click **OK** to set and save your license.

Setting the License with Localsettings

You can configure your license by specifying licensing settings in the `key=value` format. You can specify the settings in one of the following places:

- In a text file. This may be particularly helpful when you perform testing from the command line interface or want to apply different settings to different projects.
- In the parasofttest.ini file; see Configuring the License in the parasofttest.ini File.
- In a project stored in DTP. The settings specified directly in a DTP project can then be used to configure the network license in the GUI (see Setting a Network License in the GUI).

See Configuring Localsettings for the list of available licensing settings and the information on how to create a text file with localsettings.

> ⓘ **Connecting via OpenID Connect**
>
> If OpenID Connect is enabled for your secondary DTP server or standalone License Server, configure the connection to the OpenID Connect server; see Configuring OpenID Connect in the Command Line.

Configuring the License in a parasofttest.ini File

You can save the time and effort of manual license configuration in the GUI by configuring the licensing settings in a parasofttest.ini file. C/C++test will read that file on startup when launched in the GUI mode and update the GUI settings accordingly.

1. Create the parasofttest.ini file. in the following location:
   `[PARSOFT _TEST_INSTALL_DIR]\[VERSION]\parasofttest.ini`
   Your file path may resemble the following:
   `C:\Program Files\Parasoft\Test\10.4\parasofttest.ini`
2. Configure the license with the licensing settings; see Licensing Settings.

Examples

Example 1: Network license from the primary DTP

```
dtp.enabled=true
dtp.server=onya.mycompany.com
dtp.port=443
dtp.user=user1
dtp.password=mypassword
cpptest.license.use_network=true
```

Example 2: Network license on a standalone License Server

```
cpptest.license.use_network=true
license.network.use.specified.server=true
license.network.host= https://aurelia.mycompany.com
license.network.port=8080
license.network.connection.type=http
```

Example 3: Network license from the secondary DTP

```
cpptest.license.use_network=true
license.network.use.specified.server=true
license.network.host= https://dtp2.mycompany.com
license.network.port=443
license.network.connection.type=http
license.network.auth.enabled=true
license.network.user=userA
license.network.user=myStrongPassword!
```

Example 4: Network license from a legacy License Server

```
cpptest.license.use_network=true
license.network.use.specified.server=true
license.network.host= https://abc.mycompany.com
license.network.port=2002
license.network.connection.type=tcp
```

Example 5: Local license

```
cpptest.license.use_network=false
cpptest.license.local.
password=PARASOFT_353E2A4B2FF142B0A262AF62B9DEC3449C124773BAF0B4B508FF21139E867D9772F3702716FCE6D8EA16ACE668DE0E
E629D1571359920 3BD85CE1213_7937E7ED374E70FDD62EE841EB465019E64BF3EF3A87DE6B67FB10
BBCAFF70D9420AC574FC5B3E5EB7241B20506DE2C60B0D80462CBEDBD
```

The password determines the license features that are enabled.