

QA·C INSTALLATION NOTES

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This document describes the procedures required for installing QA·C on both Windows and UNIX computers. It also contains instructions for the installation of the Reprise licensing scheme.





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CONTACTING PROGRAMMING RESEARCH LTD

For technical support, contact your nearest Programming Research Ltd authorized distributor or you can contact Programming Research's head office:

by telephone on	+44 (0) 1 932 888 080
by fax on	+44 (0) 1 932 888 081
or by e-mail on	support@programmingresearch.com www.programmingresearch.com





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1. INSTALLING QA·C

This document describes the procedures required for installing QA·C on both Windows and UNIX computers. It also contains instructions for the installation of the Reprise licensing scheme.

Your attention is drawn to the following documents located in the `help/pdf` directory where QA·C is installed:

- **Release Notes:** This document describes the features that are new in this version of QA·C and will be of particular interest to users who are familiar with previous versions of the product.
- **User's Guide:** A PDF formatted user's manual which is supplied with QA·C.

Full documentation of the Reprise licensing system is provided in the Reprise End Users Guide which can be found in the location where the license server software is installed.

Note that this version of QA·C will be installed into its own directory, and will not affect the functionality of any prior version.

The Windows and UNIX Installers are smart in that they first detect the architecture of the operating system (OS) before installing any executables.

On a 32-bit OS, only 32-bit binaries will be installed (along with other architecture independent files). Likewise, on a 64-bit OS, only the 64-bit binaries will be installed (along with other architecture independent files).

An installation of QA·C requires up to 200 MB of disk space. During the operation of the program, extra space will be required to accommodate the output files that are generated.

Please note that this version of QA·C operates with a Reprise license Server and a valid license file as described in Chapter 2: Installing the License Server.

1.1 Windows Installation

You must be logged on with administrator privileges in order to install QA·C onto your PC. To install QA·C, just run the self-extracting installer supplied from our web-site.

1.1.1 Special Note for Windows 7 Installation

Due to Windows 7's additional security features, care must be taken when installing into the 'Program Files' folder. The virtual store feature applies to this location, which is relocated to a hidden folder, normally:

`C:\Users\<username>\AppData\Local\VirtualStore`

Specific issues associated with the virtual store are as follows:

When UAC is off (not recommended):

- the `qac.ini` file must be enabled for full control by all users,
- the product temp folder must be enabled for full control by all users, alternatively the `qac.ini` can be edited to specify a different writable location.

When UAC is on:

- Viewing metric analysis output files (*.met) through Notepad or Wordpad will not work when the output location for these files is specified under 'Program Files'. This is due to these applications not being UAC-aware, and will affect the examples projects and any output written to the temp folder within the product.

A preferable way to avoid the virtual store issues is to install the product outside of the 'Program Files' area.

1.1.2 Silent Installation

During this installation, the User is not shown any windows or presented with any dialogs. The installation however is still carried out, just silently.

A silent installation can be performed by launching the supplied Installer on the command line with the following options:

```
/s /v"/qn"
```

E.g.:

```
QAC-8.1.2-R-Win.exe /s /v"/qn"
```

1.1.3 License Access

When you first run QA·C, you will be brought to a window where you are prompted to enter the name of the license server as <port>@<servername> and where you can also test the license server connection. See Operating as a Client to the License Server in Chapter 2: Installing the License Server.

If your computer is designated to be the license server, you will need to start the license server. See Starting the License Server (Windows) in Chapter 2: Installing the License Server.

QA·C can be run as an Administrator or as a Standard User. The Standard User cannot however change the command line options for Baselining and Structure 101. Changes to these options will only be effective when running the application as an Administrator.

1.2 UNIX Installation

First, create a new directory in which to install. It is suggested that Programming Research tools should be installed in directories beneath a directory called /usr/prqa.

Execute the run file to install QA·C. From the directory where your run file is, e.g. /usr/prqa, execute the .run file, for e.g.:

```
./QAC-8.1.2-R-Linux-RHEL5.run
```

All files will be extracted to a new sub directory, for e.g. /usr/prqa/qac-8.1.2-R.

Some files will be updated during the installation in order to reflect the location of the installation.

You can modify the location of the installation by supplying a --target option with a [PATH] such as /usr/prqa/qac-8.1.2-R:

```
./QAC-8.1.2-R-Linux-RHEL5.run --target /usr/prqa/qac-8.1-R
```

In this case however, a new sub directory is not created under [PATH], but instead the product will be installed directly under [PATH].

The installation process creates example .cshrc and .profile scripts which set up the environment variables and search paths required to run QA·C.



If your computer will be a client to a Reprise license server, you will need to change the `PRLDHOST` entry of your `.profile` or `.cshrc` file. See Operating as a Client to the License Server in Chapter 2: Installing the License Server.

When operating in a C-shell, type

```
source .cshrc
```

In a Bourne or Korn shell, type

```
. .profile
```

If you wish to have access to QA-C from a user's own home directory, you should merge the contents of the `.cshrc` or `.profile` file with the corresponding file in the user's home directory.

If your computer is designated to be the license server, you will need to start the license server. See Starting the License Server (UNIX) in Chapter 2: Installing the License Server.





2. INSTALLING THE LICENSE SERVER

At various points during operation, QA·C checks its Reprise licensing scheme. These checks must be successful before QA·C continues.

The licensing scheme consists of a license server, installed on the computer hosting the license, and a license file that is generated by Programming Research. The license file is based on an identifier called a *hostid* that uniquely identifies this host computer.

Note:

For more detailed description of the Reprise licensing software see the Reprise End User Guide (RLM_Enduser.html) in your Reprise license server installation.

2.1 Obtaining your hostid

The licensing schemes supported by QA·C all require a license file that is based on a *hostid*. This license file is obtained by emailing your *hostid* to Programming Research. For floating licenses, the *hostid* of the computer running the Reprise license server is required. For fixed station licenses, the *hostid* of each client machine is required.

The *hostid* is displayed by running the Reprise utility `rlmutil` which can be found in the Reprise directory of the installation CD, or from the PRL website. To display the Reprise *hostid*, run the command "`rlmutil rlmhostid -ether`". The *hostid* will be output in the format:

```
Hostid of this machine: "00000000000000"
```

The *hostid* must be emailed to support@programmingresearch.com so that a license file can be generated. When you receive your license file, copy it to your Reprise directory.

2.1.1 Displaying the hostid for Laptops with Docking Stations

If you are running QA·C on a laptop that is connected to a docking station there will be two valid *hostids* returned from the `rlmutil rlmhostid -ether` command, one for the laptop itself, and one for the docking station.

In order to ensure correct operation when disconnected from the docking station, you will need to ensure that the license file is generated for the *hostid* of the laptop and not the docking station. To display the correct *hostid*, you should disconnect from the docking station prior to running `rlmutil rlmhostid -ether`. The license file that is generated for this *hostid* will allow QA·C to be run when either docked or standalone.

2.2 Starting the License Server (Windows)

On Windows, the license server is controlled by the licensing administration program, `rlm.exe`. This is installed as part of the Reprise License Server installation.

Set up licensing with the following command:

```
rlm -ws <port> -c <lic file path> -dlog <debug log path> -install_service  
-service_name <service name>
```

where:

`-ws <port>` indicates the port number for a web-server that supplies usage and status information



- c <lic file path> indicates the server license file in use (otherwise it will look for all .lic files in the current directory)
- dlog <debug log path> identifies the log output file to use (otherwise license activity is sent to stdout).
- install_service -service_name <service name> is to configure licensing to operate as a Windows service.

Note:

When installing the license server as a service, the service is not started until next reboot. To start the service immediately you will need to browse to the service name used and start it manually.

2.3 Starting the License Server (UNIX)

To start the UNIX license server, copy your license file to your Reprise directory and run the following command:

```
rlm -ws <port> -c <lic file path> -dlog <debug log path>
```

where:

- ws <port> indicates the port number for a web-server that supplies usage and status information
- c <lic file path> indicates the server license file in use (otherwise it will look for all .lic files in the current directory)
- dlog <debug log path> identifies the log output file to use (otherwise license activity is sent to stdout).

2.4 Operating as a Client to the License Server

On Windows, when you are prompted for the name of the license server, enter the name of the license server as 5055@<servername>. This information is then stored in the following path:

```
%ALLUSERSPROFILE%\PRQA\Licence.ini
```

On UNIX, before you can run QA·C, set the environment variable `PRLDHOST` to the name of your license server as 5055@<servername>.

You may wish to set this environment variable by editing your `.profile` or `.cshrc` file.



3. LICENSE UPGRADES

When you receive a license file for a newer version of QA·C, you will need to ensure that your license server accesses the new license.

If you are not running any other Programming Research products (such as QA·C++), you can replace the old license file with the new one. This file will then be called whenever you run QA·C and will work for all previous versions of QA·C that use Reprise licensing.

If you have another Programming Research product installed, you can copy the LICENSE lines from the new QA·C license file and add them to your current license file. These lines will apply to earlier versions of QA·C and all old LICENSE lines should be deleted, in order to avoid contention in these licensed features.

Once you have copied the license file or replaced the LICENSE lines, the license server will need to reread the license file to confirm the licensing changes, which can be accomplished through the web interface to the Reprise license manager.

