



**Q-Checker for 3DEXPERIENCE  
Release 2.2**

**Installation Guide**



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## Conventions in this Manual

Markings



CAUTION marks an advice that performing an action may lead to unwanted consequences such as loss of data.



NOTE marks important information, such as dependencies or requirements of a function.



INFO marks supplementary information, e.g. with respect to a wider context.



TIP marks information for the practical use of the software.



This symbol marks step-by-step instructions.

### Syntax notation for command line input and configuration files

<b>Bold</b>	Boldface marks text to be typed as shown.
<i>Italic</i>	Italics mark text to be replaced by the required parameter value.
[ ]	Square brackets mark an optional parameter. Include this parameter, if required.
{   }	Braces mark a list of parameters, which are separated by vertical bars  . Include one of the given parameters.
...	The parameter before the ellipsis may be included more than once.

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# 1 System Requirements



NOTE: Q-Checker is supported only on systems certified for the corresponding CATIA release. For detailed software requirements, refer to the CATIA Program Directory that is included with CATIA software.

## Supported operating systems

Release	Supported operating systems
V6R2013	Microsoft Windows XP Professional x64 SP2 Microsoft Windows Vista Business/Enterprise x64 SP2 Microsoft Windows 7 Enterprise/Professional x64 SP1
V6R2013x	Microsoft Windows 7 Enterprise/ Professional x64 RTM (without SP) or SP1
3DEXPERIENCE R2014x	Microsoft Windows 7 Enterprise/Professional x64 SP1 Microsoft Windows 8 Pro x64 Enterprise/Pro
3DEXPERIENCE R2015x	Microsoft Windows 7 Enterprise/Professional x64 SP1 Microsoft Windows 8.1 x64 Enterprise/Pro Microsoft Windows 8.1 Update x64 Enterprise/Pro

## CATIA versions and releases

Q-Checker is available for CATIA V6R2013, CATIA V6R2013x, CATIA 3DEXPERIENCE R2014x or later.

## License server

Q-Checker requires a DSLS license server.

- DSLS (*Dassault Systèmes License Server*) V6R2015x or later.

To download DSLS, visit this website:

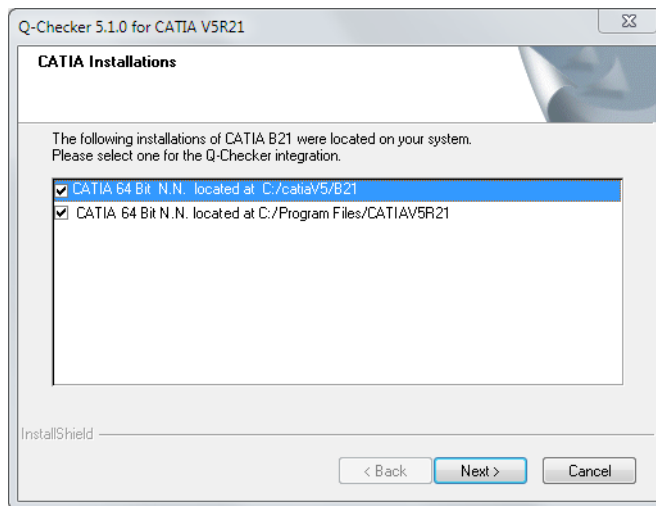
↗ <http://www.3ds.com/support/download/dassault-systemes-license-server/>

## Other required software

- HTML browser for viewing check reports in HTML format
- PDF viewer for viewing and printing the documentation in PDF format

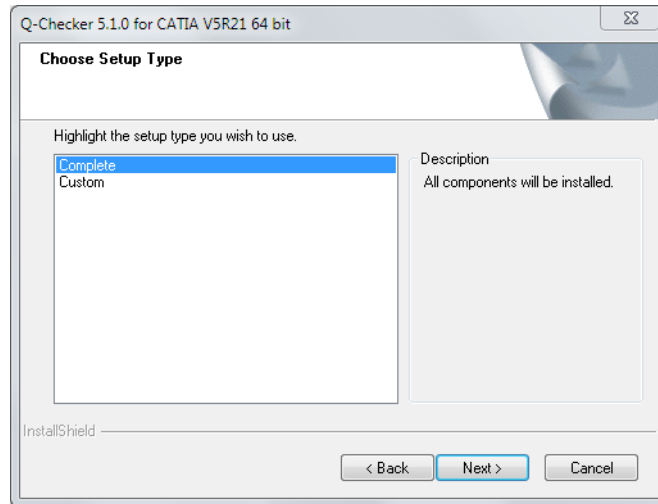
## 2 Installing on Windows using the installer

- 1 Q-Checker installation packages are specific to CATIA releases. Choose the correct Q-Checker installation package for the installed version of CATIA.
- 2 Run the installer.
  - To proceed, make the required settings, then click “Next”.
  - To change settings in a previous step, click “Back” repeatedly until you reach the respective dialog.
  - To abort the installation, click “Cancel”.
- 3 The installer looks up installations of the respective CATIA release on your computer. Select the installation of CATIA for which Q-Checker will be installed.



If no matching CATIA installation is found, the installer displays an error message and aborts the installation.

- 4 Choose the type of installation:
  - “*Complete*”: Install all components of Q-Checker
  - “*Custom*”: Install only selected components of Q-Checker (see the next step).

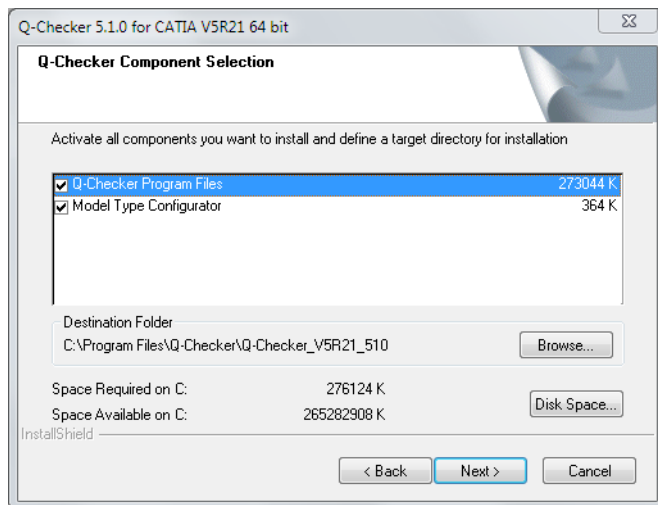


**5** If you have selected a “*Custom*” installation:

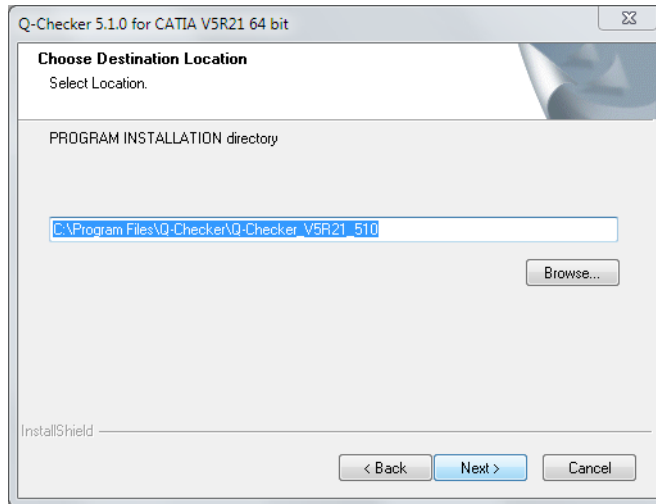
Select which components to install:

- “*Q-Checker program files*”: Main Q-Checker application
- “*Model type configurator*”: Utility for creating a root-feature attribute for model type recognition by Q-Checker.

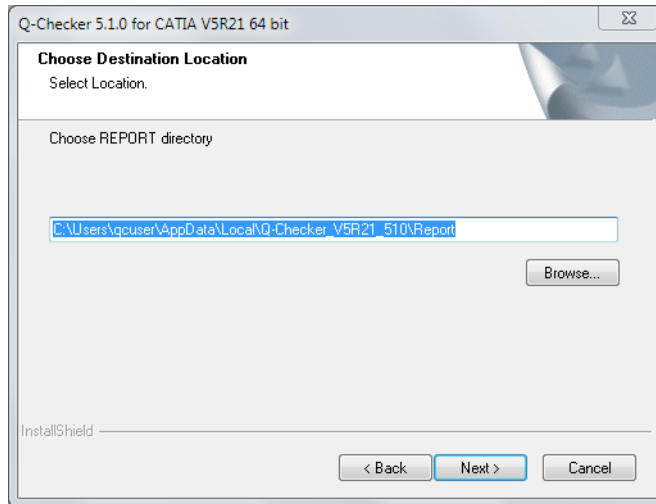
In the “*Destination folder*” field, select the path where Q-Checker will be installed.



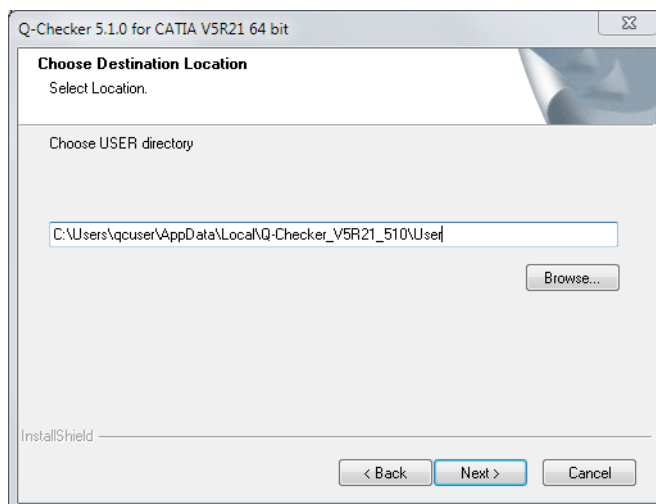
**6** In case of a complete installation, select the path where Q-Checker will be installed.



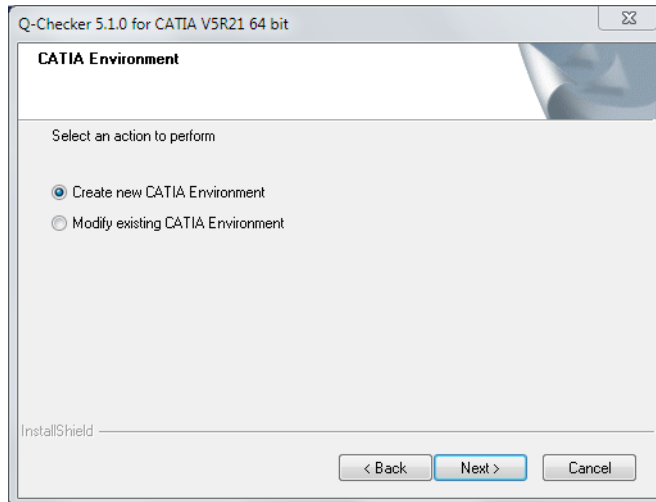
- 7 Select the path where Q-Checker will store the report files.



- 8 Select the path where Q-Checker will store user-defined environments and user settings files.



- 9 To make Q-Checker available in CATIA, a CATIA environment must exist where the application paths and other variables are defined. Select an option:

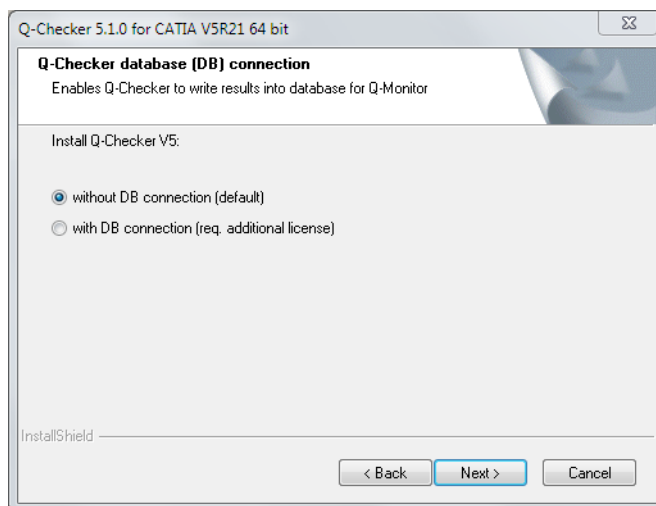


- *“Create a new environment”* (recommended): You are prompted to confirm the path and name of the new environment. The name of the environment must not contain blanks.
- *“Modify an existing environment”*. You are prompted to select a CATIA environment from the environment folder.

An existing environment must not contain Q-Checker variables; otherwise the installer cannot modify this environment.

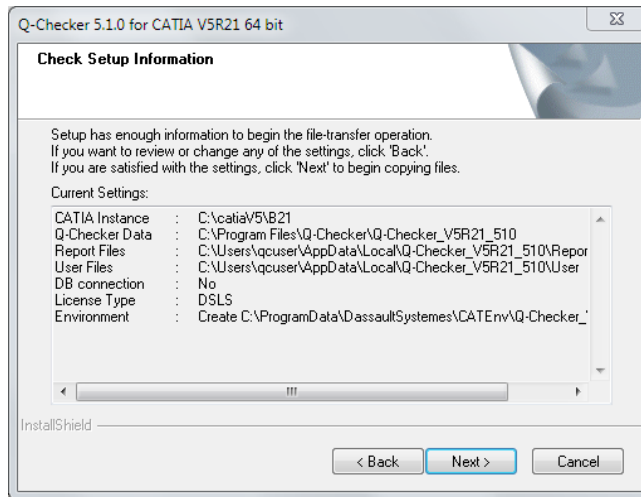
**10** Choose whether to use Q-Checker with or without database connection.

Database connection can send results to a database for analysis with QMonitor. A separate license is required to use database connection.



**11** The installer is now ready to install Q-Checker with the settings that you have specified.





To install Q-Checker, click “Next”. To review a setting, click “Back”.

▶▶ When the installation has finished, shortcuts to CATIA with Q-Checker and to the Q-Checker environment editor are created on the Windows Desktop. Use these shortcuts to start the respective applications.

### 3 Silent installation

The Windows installer allows for silent installation. This means, the installation of the software can be recorded on a reference computer and repeated on further computers without user input.

#### Preparations

To prepare for silent installation, run the installer once on a reference computer to record the chosen settings in a response file.

To do this, start the installer at the command line.

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#### Command line syntax

```
<install_exe> /r [/f1"<response_file>"]
```

---

**<install\_exe>** Path and file name of the installer.

**<response\_file>** Path and file name of the response file where the installation is recorded.

If you leave out parameter /f1, the response file is written to %SYSTEMROOT%\setup.iss.

#### Running a silent installation

To install the software with the recorded settings, run the installer from the command line and specify the location of the response file:

---

#### Command line syntax

```
<install_exe> /s [/f1"<response_file>"] [/f2"<log_file>"]
```

---

**<install\_exe>** Path and file name of the installer.

**<response\_file>** Path and file name of the response file to which the installation has been recorded.

If you leave out parameter /f1, the response file is written to %SYSTEMROOT%\setup.iss.

**<log\_file>** Path and file name of the log file in which the results of the silent installation have been recorded.

If you leave out parameter /f2, the log file will be written to a file with the same path and name as the response file, but with the extension log.

The result of a silent installation can be determined from the result code in the log file. Result code 0 means that the installation has finished successfully:

```
...  
[ResponseResult]  
ResultCode=0  
...
```

➤ A complete list of result codes can be found in the Installshield documentation. Search the internet for “Installshield Checking for Errors Using the Setup.log File ”

### Example

- Install and write settings to a response file:

```
product_setup.exe /r /f1"c:\temp\setup.iss"
```

- Installation with identical settings (command in a single line):

```
product_setup.exe /s /f1"c:\temp\setup.iss"  
/f2"c:\temp\setup.log"
```

## 4 Uninstalling on Windows using the installer

- 1 In Windows, go to “Start” > “Settings” > “Control Panel” > “Add or Remove Programs”.
- 2 In the “Software” dialog, select the version of Q-Checker to uninstall.
- 3 Click “Remove” and follow the instructions on screen.
- 4 After the installer has finished, you can delete manually directories and files created by Q-Checker.

## 5 Environment Variables



NOTE: If an optional environment variable is not set, the value marked as “default” is applied.

### 5.1 Q-Checker application path variables

Environment variables for installation paths of the Q-Checker application and its components

Variable name	Value	Description
TCAQC_PATH	One directory path	Path where Q-Checker is installed. Required.
TCAQC_LOAD	One directory path	Path to the Q-Checker load module. Required.
TCAQC_ADMIN	One or more directory paths separated by semicolon.	Path where Q-Checker admin environments are stored. Required. When more than one path is specified, the names of environments and other subdirectories must be unique across all specified paths.
TCAQC_USER	One directory path	Path where Q-Checker user settings and user-defined check environments are stored, for example in the home directory of the respective user. Required.
TCAQC_RESOURCES	One or more directory paths separated by semicolon.	Path where Q-Checker resource files are stored. Required. Resource files includes translation files for the environment editor GUI and report templates. If more than one path is specified, Q-Checker will use the first path or file where the required information is available. All subsequent paths and files are ignored.
TCAQC_DOC	One directory path	Path to the Q-Checker manuals. Required.
TCAQC_HTML	One or more directory paths separated by semicolon.	Path to the Q-Checker HTML online help.
TCAQC_REPORT	One directory path	Path where Q-Checker check reports are stored. Required.

## 5.2 Q-Checker application settings variables

Environment variables for Q-Checker application settings

Variable name	Value	Description
TCAQC_LANG_CAT	YES, NO	<p>This setting controls the dependency of the Q-Checker language setting from the CATIA session language.</p> <p>YES: Use the CATIA session language (only English, German or French). For other CATIA session languages, use English in Q-Checker.</p> <p>NO: Users can select the Q-Checker language setting in the Q-Checker user settings.</p>
TCAQC_SHOW_TOOLS	One or more of the following keywords, separated by comma: PLUGINSTOQCENV, SPECTREETOXML	<p>Show additional buttons on the Q-Checker toolbar (until V6R2013x) / action bar section (3DEXPERIENCE). Specify the keywords for the buttons to be shown, separated by comma.</p> <p>PLUGINSTOQCENV: “Install current plugin set to a Q-Checker environment” button</p> <p>SPECTREETOXML: “Convert spec tree to XML” button</p>
TCAQC_HIDE_TOOLS	One or more of the following keywords, separated by comma: InternalReport, AnalysisViewer, SealViewer, DeleteQCElements, ModelTypeConfigurator	<p>Hide certain buttons from the Q-Checker toolbar (until V6R2013x) / action bar section (3DEXPERIENCE). Specify the keywords for the buttons to be hidden, separated by comma.</p> <p>InternalReport: “Display browser for internal check reports” button</p> <p>AnalysisViewer: “Start analysis viewer” button</p> <p>SealViewer: “Start check seal viewer” button</p> <p>DeleteQCElements: “Delete all permanent marking elements” button</p> <p>ModelTypeConfigurator: “Start model-type configurator” button</p> <p><b>Example</b> To hide the “Start analysis viewer” button and the “Start model-type configurator” button, define the variable like this:</p> <p>TCAQC_HIDE_TOOLS=AnalysisViewer,SealViewer</p>

Environment variables for Q-Checker application settings (continued)

Variable name	Value	Description
TCAQC_CALL_BROWSER_FOR_BATCH_OUTPUT	YES, NO	<p>YES: After a batch check, open the batch check survey in HTML format in a browser.</p> <p>NO (default): After a batch check, open the batch check survey in plain text format.</p> <p>This setting only applies to checks in batch mode with the Q-Checker user interface. For batch checks started at the command line, see OVERVIEW MANUAL, <i>Running a batch check at the command line</i>.</p>
TCAQC_REPORTS_IN_SPECTREE	YES, NO, SPECTREE_ONLY	<p>YES: The internal check report is available in the CATIA specification tree (for certain document types only) and in the “Internal checks reports” dialog.</p> <p>NO (default): The internal check report is not available in the CATIA specification tree, only in the “Internal check reports” dialog.</p> <p>SPECTREE_ONLY: The internal check report is only available in the CATIA specification tree. If the document type does not allow to display the check report in the specification tree, the check protocol is displayed in the “Internal check reports” dialog.</p>
TCAQC_LIC_EXPIRY_ALERT	Integer	<p>Set this variable to display an alert when the Q-Checker license will expire soon. The value specifies the number of days before expiry when the alert will be displayed. To disable the alert, set the value to 0.</p>
TCTRACE	Path and filename	<p>Set this variable to activate the Q-Checker trace mode. The value specifies path and filename of the trace file.</p> <p>When TCTRACE is set, significant processing steps executed during Q-Checker checks are written to the trace file. The trace file can help to identify problems occurring while a Q-Checker check is performed.</p>

Environment variables for Q-Checker application settings (continued)

Variable name	Value	Description
TCAQC_SEAL_VAL	One or more of the following keywords, separated by comma:	<p>This variable controls in which modes of operation an internal check seal is validated, and which action is performed if a model contains no check seal or an invalid check seal. Set no more than one value for each mode of operation.</p> <p><b>Validation when starting an interactive check</b></p> <ul style="list-style-type: none"> <li>• INTERACTIVE+RECHECK: If no valid check seal exists, the model is checked again.</li> <li>• INTERACTIVE+INTERRUPT: If no valid check seal exists, the validation result is displayed.</li> <li>• None of these values: No validation in this mode of operation.</li> </ul> <p><b>Validation when starting a batch check with the Q-Checker user interface:</b></p> <ul style="list-style-type: none"> <li>• INTERACTIVE_BATCH+RECHECK: If no valid check seal exists, the model is checked again.</li> <li>• INTERACTIVE_BATCH+INTERRUPT: If no valid check seal exists, the validation result is displayed.</li> <li>• None of these values: No validation in this mode of operation.</li> </ul> <p><b>Validation when starting a batch check at the command line:</b></p> <ul style="list-style-type: none"> <li>• COMMAND_LINE_BATCH+RECHECK: If no valid check seal exists, the model is checked again.</li> <li>• COMMAND_LINE_BATCH+INTERRUPT: If no valid check seal exists, the validation result is displayed.</li> <li>• None of these values: No validation in this mode of operation.</li> </ul>



### 5.3 Database connection variables

Environment variables for database connection

Variable name	Value	Description
TCAQC_DB_CONNECT	One or more of the following keywords, separated by comma: INTERACTIVE, INTERACTIVE_BATCH, COMMAND_LINE_BATCH	INTERACTIVE: Connect to database for checks in interactive mode. INTERACTIVE_BATCH: Connect to database for batch checks started from the Q-Checker user interface. COMMAND_LINE_BATCH: Connect to database for batch checks started at the command line. Database connection requires a special license.
TCAQC_DB_FILE_PATH	Directory path	Path to the QCHECKER.db database definition file.

### 5.4 PDM Save variables

Environment variables for PDM Save

Variable name	Value	Description
TCAQC_PDM_SAVE_ACTIVATE	YES, NO, SUPPRESS_DIALOG_AND_SAVE	Only for checks in interactive mode: YES: Display a list of all checked models. The user can confirm to save all checked models to the PDM database, or cancel. NO (default): Do not display the prompt and do not save the models. SUPPRESS_DIALOG_AND_SAVE: Save all checked models to the PDM database without confirmation. ↗ For checks in batch mode, see OVERVIEW MANUAL, *PDM_SAVE_BATCH_ACTIVATE.
TCAQC_PDM_SAVE_ACTIVE_AFTER_MODIFICATION	YES, NO	Only for checks in interactive mode: YES (default): Display a list of all checked models. The user can confirm to save all checked models to the PDM database, or cancel. NO: Display a list of models for which a healing has been performed, which will not be saved. The user can confirm to save the other models, for which no healing has been performed, or cancel.

Environment variables for PDM Save(continued)

Variable name	Value	Description
TCAQC_QPLM_LIB	See the Q-PLM documentation.	Q-PLM module which is called from Q-Checker PDM Save.

↗ For setting up a connection between Q-Checker and Q-PLM, see the Q-PLM Installation Guide.

## 6 Directory structure of a Q-Checker installation

Directory structure of a Q-Checker installation

Relative path in a default installation	Environment variable	Description
.	TCAQC_PATH	<p>Q-Checker installation directory.</p> <p>Depending on the operating system, this directory contains the following scripts:</p> <ul style="list-style-type: none"> <li>• qcheckerV5: Unix startup script</li> <li>• qcheckerV5.vbs: Windows startup script</li> <li>• QCheckerEnv.csh: C-Shell script to extend an existing CATIA environment with variables for Q-Checker</li> <li>• QCheckerEnv.sh: Shell script to extend an existing CATIA environment with variables for Q-Checker</li> <li>• QCheckerSetEnv.sh: Shell script to create a new CATIA new environment</li> </ul>
admin	TCAQC_ADMIN	<p>Admin environments.</p> <p>When more than one path is specified in the environment variable, the names of environments and other subdirectories must be unique across all specified paths. Otherwise the environment editor cannot start.</p>
doc	TCAQC_DOC	<p>Q-Checker online documentation in PDF format, accessible from the Q-Checker start window and from the environment editor. The criteria help is available in various languages. Each language has its own subdirectory.</p>
html	TCAQC_HTML	<p>Q-Checker criteria help in HTML format, accessible from the environment editor and from the analysis window. The criteria help is available in various languages. Each language has its own subdirectory.</p>

## Directory structure of a Q-Checker installation(continued)

Relative path in a default installation	Environment variable	Description
load	TCAQC_LOAD	Q-Checker load modules (program components). Depending on the operating system, the load modules are located in one of the following subdirectories. <ul style="list-style-type: none"> <li>win_b64: Microsoft Windows 64 bit</li> <li>intel_a: Microsoft Windows 32 bit</li> </ul> In the documentation, these directories are referred to by the placeholder OSDS.
Report	TCAQC_REPORT	Report files generated by Q-Checker: <ul style="list-style-type: none"> <li>Check reports in various formats</li> <li>Batch check surveys</li> <li>Product component surveys</li> </ul> As an exception, the log file for batch checks using a master process (*.out.log) is written to the working directory from which the batch check has been started.
resources	TCAQC_RESOURCES	Resource files, including report templates in the templates subdirectory and language files for custom localization of the Q-Checker environment editor user interface in the nls subdirectory.
samples	No variable	Sample files, including scripts and a command file for running batch checks
User	TCAQC_USER	User environments and user settings files.

## 7 Q-Checker startup script

In the Q-Checker startup script, you can configure the following settings:

- Paths and data submission method for Q-Checker Database Connection.
- External applications that are called from within Q-Checker, for example the browser for check reports.
- The PDQ help resource linked to the “PDQ help” button in the Q-Checker start window.

↗ ADMINISTRATION MANUAL, 12 *Q-Checker startup script*

↗ Instructions for the configuration of Q-Checker Database Connection can be found in the Q-Monitor Installation Guide.

## 8 Enrolling licenses

For enrolling a license key for Dassault Systèmes License Server (DSLS), please note the instructions in the CATIA Program Directory.

↗ Requirements for a license server see *License server*, page 4

## 9 Adding Q-Checker environments to the installation

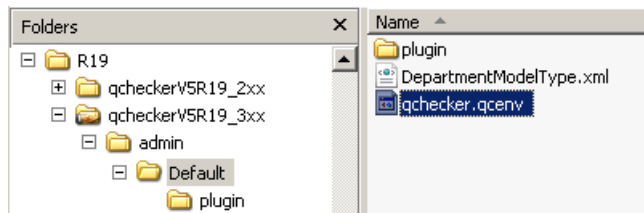
An environment is a complete configuration of Q-Checker. You can work with any number of environments in the same Q-Checker installation.

### Installing an environment

- 1 If you receive the environment as an archive file, unpack the archive.
- 2 Place the environment folder in the admin or user directory of your Q-Checker installation.

**Example** In the image below, the folder named `admin` is the Q-Checker admin directory. The folder named `Default` contains the environment of the same name.

You can recognize an environment folder by a file named `qchecker.qcenv` located in the folder.



**Fig. 1:** An admin environment named “*Default*”, as shown in Windows Explorer

- 3 Open the Q-Checker start window and verify that the environment is available in the “Environment” list box.

New environments are available in the Q-Checker start window immediately after they have been added.



**INFO:** To check CAD data for conformity, suppliers can usually receive the current check environment from their contractor.

