Making a QC Custom Installation   AN 51

Application Note to the KLIPPEL QC SYSTEM (QC Version 4)

This application note deals with creating customized Klippel QC Installations to easily include custom data like modified scripts or test templates into a standard QC Setup.

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General information

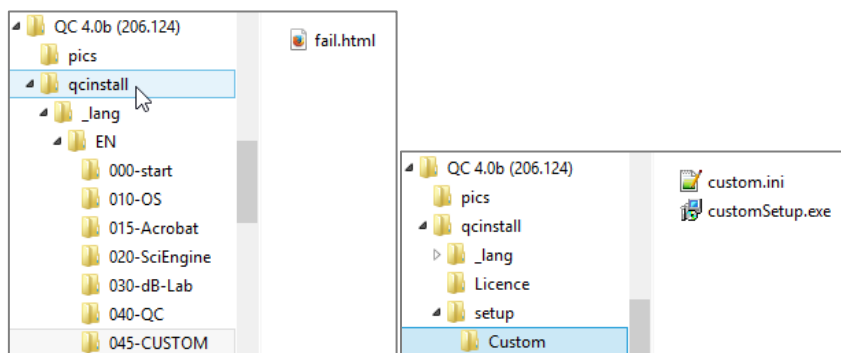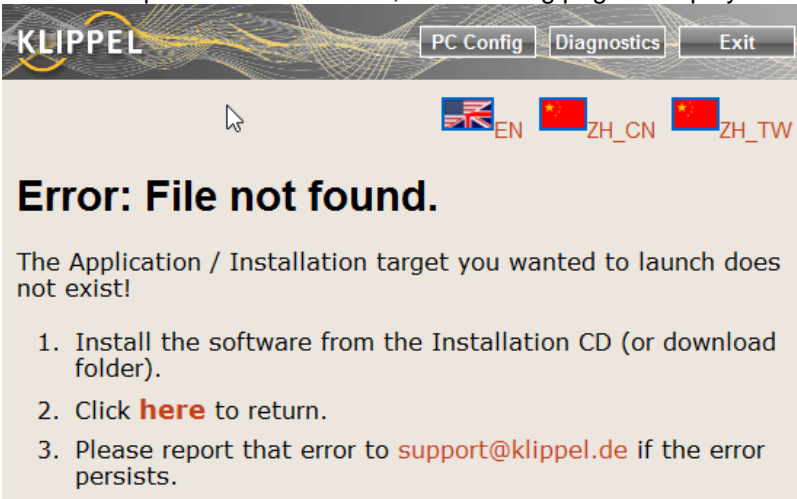|	
Overview	For any kind of user customization such as modified or additional scripts, documents or test templates the QC Install Guide offers including custom setups to be put on top of standard QC installation. The (standalone) setup file may be created based on a default setup script for the Inno Setup software. The resulting file can simply be added to a QC Setup or executed independently to update an existing QC installation. Additionally setup versioning offers consistency of multiple custom setups
Folder structure of a QC installation	The images below show an excerpt of the folder structure of a QC Installation.

Folders *qcinstall_lang\<language>\045-Custom* and *qcinstall\setup\Custom* are dedicated to custom setups.

To include a custom setup in a standard QC Installation the following files are required:

- customSetup.exe (Setup file)

- custom.ini (contains version information)

- fail.html (HTML page to be displayed in QC Install Guide) – default version already existing

As there are multiple languages available, it is recommended to store the *custom.ini* and *customSetup.exe* in the central *Custom* folder. This is the default location without modifying the setup link in fail.html. However, the custom.ini may also be located in the *045-CUSTOM* language subfolders, so different setups could be used for each language.

Conditions for execution of the custom setup	The QC Install Guide, which leads through the installation process, first installs the standard components of the QC System. The custom setup is executed afterwards if • *custom.ini* file is found • the required min version number in the custom.ini is higher than the version found in the registry
Disclaimer	• Don't use any QC Installation that already contains customizations made by Klippel. The customizations would be overwritten and/or this might lead to version conflicts (see Versioning). • Do not modify other parts (than described in this document) of the installation.
HTML page	The QC Install Guide will call *fail.html* in the custom installation folder the whenever the conditions stated above are fulfilled. The custom setup may be started via a link on this page. The default html code only requires minimal modification to display proper company name and setup version, if required. If no custom.ini file is available, this page is not displayed automatically during installation. However, if the custom setup is called manually or the customSetup.exe is not available, the following page is displayed.

Auxiliary files

Editing the .ini file (Versioning)	The *custom.ini* file contains the required version of the customized installation. When running customSetup.exe the installed version is written to the windows registry. The QC Install Guide will force the execution of the *customSetup.exe* (via fail.html) if the required version is not installed on the system. Thus it is crucial to set consistent version numbers in the custom setup and the *custom.ini* file. The code below is the content of a *custom.ini* file. • Set the RegID according to your company's name (or setup feature name) • Set the version number *MinVersion* according to the registry version number set by the CustomSetup.exe (see "Create the CustomSetup.exe") • If required use DiagnosticsComment to add additional text to the diagnostics page of the QC install Guide

```
[Custom]
; Registry ID (required)
; Setup must store installed version number in the registry:
; key: HKLM:Software\Klippel\QC\Custom\<RegID>
; name: Version
; value type: DWORD
RegID = <Company>

; Minimum required version (required)
; installation is considered OK when version in registry is
>= ; MinVersion
MinVersion=1

; Additional Comment for diagnostics page (optional)
;DiagnosticsComment=This is additional version information.
```

Editing the fail.html page	The fail.html page may be modified in case customizing the general message is required or if the customSetup.exe is stored in a differing location. Only the following paragraphs shall be modified:

```
<h1>Customer specific installation</h1>
<p>The following component needs to be installed:</p>
<p class="action"><a href="exe:{090-
final/exeNotFound.html}setup/Custom/CustomSetup.exe">Custom
Setup</a></p>
```

Creating a Custom Setup

Overview

The CustomSetup.exe may be any windows executable file but it must set the registry key specified in the *custom.in* file to the corresponding *MinVersion* number. Otherwise the QC Setup (*QC Install Guide*) will not continue.

Klippel provides the template sources of a custom setup which was created using Inno Setup, a free but professional install maker tool.

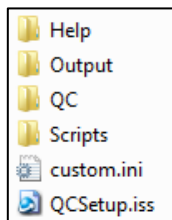You can download the basic Inno setup software and documentation from here:

http://www.jrsoftware.org/isinfo.php

Furthermore we strongly recommend using this tool as it makes life much easier:

http://www.istool.org/

Source data

The image below shows the folder structure of the customized setup sources (before being compiled into one exe file in the *Output* folder).

The *QCSetup.iss* file is a configuration script file for *Inno Setup*. It defines which files need to be copied to certain folders on the target PC.

Files that should be installed during the customized setup must be stored in the proper folder structure. An overview is given in the table below:

Manuals und Help files (*.pdf)	\Help\
Test Templates (Copy the whole Test Folder incl. Database (*.kdb), Testinfo.html etc.)	\QC\Templates\
Scripts (Scripts need to be located at the right place in the Folder structure, as found under: …\All Users\Application Data\Klippel\QC\Scripts\Klippel)	\scripts\

The files above will be copied to their associated subfolder in *"…\All Users\Application Data\Klippel\QC\"* on the target PC during the installation.

You can extend the type of content that is installed by modifying the ISS file. Please refer to the documentation of Inno Setup.

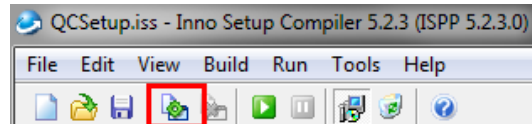|	
Editing QCSetup.iss	**Header** Update the Version numbers and names according to your requirements. ``` [Setup] AppName=Klippel QC System AppVerName=Customization for <Company> (v1.0) AppVersion=1.0 OutputBaseFileName=customSetup VersionInfoVersion=3.0.204.10 ``` **Files** In this section the source folders to be included are specified. All standard folders are already available and just have to be activated by removing the comment indicator ";;" according to the available data to be included in the setup. **Registry** Increment the version number to the same number as defined in the *custom.ini* file (MinVersion). *Subkey* must end with the same string as assigned to *RegID* in the *custom.ini* file. ``` [Registry] ;; Register this QC software installation ;; Store all version with date here: ;; version ;; 1 03.12.2010: Custom Setup for ... Root: HKLM; Subkey: "Software\Klippel\QC\Custom\<Company>"; ValueType:dword; ValueName:"version"; ValueData:1; Flags: uninsdeletevalue uninsdeletekeyifempty ```
Compiling the setup script	After editing the script the setup may be compiled by clicking on the compile button as indicated in the screenshot below. If the compilation succeeds the *customSetup.exe* file will be available in the "Output" folder. Copy the file to the corresponding folder of the QC installation as stated in section General information.

Summary

Step by step guide	1. Copy desired source files to be installed into the correct folder in the setup sources template
	2. Edit the QCSetup.iss file
	      a. Update Names and Version Numbers
	      b. Subkey should end with your companies name
	      c. Increment *ValueData* in the Registry section
	      d. (Update History to keep Track of changes)
	3. Compile QCSetup.iss file
	4. Copy CustomSetup.exe from the Output folder to the *qcinstall\setup\Custom* folder of the QC Installation.
	5. Edit the custom.ini and copy it to the same folder
	      a. Set RegID to the same string as the end of Subkey in the QCSetup.iss file
	      b. Set MinVersion to the same value as *ValueData* in the *QCSetup.iss* file
	6. Opt: edit fail.html file(s) in *qcinstall_lang\<lang>\045-CUSTOM* folder(s)
	7. Run a test
	      a. Is the customized installation requested?
	      b. Does the custom setup run correctly?
	      c. Does the QC Install Guide continue normally after the customized Installation?
	      d. Are the expected files installed?

updated April 24, 2014