



Installation Guide

QAD Planning and Scheduling

Workbenches

Installation Introduction
Installation

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Change Summary

The following table summarizes significant differences between this document and previous versions.

Date/Version	Description	Reference
May 2010.1 through 2012 EE enhancement bundle	New document for enhancement bundle.	

Installation Introduction

This chapter discusses the following configuration information:

Overview 2

Describes the chapter contents.

Prerequisites 2

Describes system and software prerequisites that must be met before you install the workbenches.

Installation Package 3

Describes the contents of the installation package.

Before You Begin 3

Provides tasks that you should perform before you begin installation.

Overview

This document provides instructions to install the Planning and Scheduling workbenches, version 3.3.3.1, a patch and enhancement release for Enterprise Edition versions 2010.1, 2011, 2011.1 and 2012.

Prerequisites

The following are prerequisites for this release of the Planning and Scheduling Workbenches:

- QAD EE 2010.1, 2011, 2011.1 or 2012 installed
- QAD Deployment Toolkit (QDT) installed and configured

Note QDT must be installed before QAD Enterprise Edition installation. For information on QAD EE and QDT installation, refer to the *Progress Database Installation Guide* for your EE version. You can find the *Progress Database Installation Guide* at [www.qad.com |Support| Document Library | Enterprise Edition | Your version | Installation-Conversion:](http://www.qad.com/Support/DocumentLibrary/EnterpriseEdition/Yourversion/Installation-Conversion)

<http://www.qad.com>

Where *Your version* is EE version 2010.1, 2011, 2011.1 or 2012.

- NET UI required for your QAD EE installation
- Progress OpenEdge required for your QAD EE installation
- **Note** Oracle databases are supported for QAD EE 2012 only
- Currently active QAD Maintenance license

You obtain the Maintenance license key through the following Web site:

<http://www.qad.com/erp/Support>

In the Web URL, select the Tools tab, then Downloads | Term License Key Request. Click the request, then follow the instructions to generate a license.

Once you obtain the license key, you must register the Maintenance license with the system through License Registration (36.16.10.1).

If you attempt to run either the MSW or PSW and you do not have an active Maintenance license, the system displays an error message. The system displays a warning if the active Maintenance license is close to the license expiration date.

Important Please be aware that even if you meet prerequisites listed in this section, the installation package does contain both schema changes (2010.1EE only) and modifications to existing QAD ERP programs. Consequently, if your company has applied QAD patches or customizations, for example, to any of the modified programs, it is your company's responsibility to merge the QAD patch changes, customizations, and any other changes once this installation package has been applied. QAD does not support customized programs.

Important Because the Planning and Scheduling Workbenches are powerful tools that summarize all your demand, supply, and capacity information across your planning/scheduling horizon, you should allocate one processor (core) per production planner/scheduler to help prevent performance degradation.

Installation Package

There are two types of installation packages provided for the workbenches:

- Encrypted 4GL
- Unencrypted 4GL

Your individual installation package depends upon the type of QAD EE source code license that you have.

Before You Begin

Before installing the package, you should back up your databases and supporting environments.

Installation

This chapter discusses the following information:

Overview 6

Provides an overview of the installation process and the two approaches to installation.

Beginning the Installation 8

Provides step-by-step instructions to load and unzip the installation zip file.

Using the Module Installer 8

Provides step-by-step instructions on how to use the Module Installer.

Manual Load of Schema Definitions (2010.1 only) 10

Provides step-by-step instructions on how to load schema definitions and perform a recompile of the base ERP.

Install Server-Side Artifacts 11

Provides instructions on how to manually install server-side components such as 4GL, system data, and language translation data.

Manual Installation of Client-Side Artifacts 15

Provides step-by-step instructions to on how install client-side components such as the plug-in and collections.

System Setup 16

Describes system setup and tells you how to find information on the setup.

Overview

This section provides instructions on how to install the Planning and Scheduling Workbenches 2010.1EE-2012EE maintenance package version 3.3.3.1. Your installation package consists of the following zip file:

```
netui-module-mswpsw-ee-ga-sourceLevel-3.3.3.1.zip
```

Where *sourceLevel* is either *unencrypted* or *encrypted*, depending on your source licensing agreement.

Important Please be aware that even if you meet prerequisites listed in Chapter 1, the installation package does contain both schema changes (2010.1EE only) and modifications to existing QAD ERP programs. Consequently, if your company has applied QAD patches or customizations, for example, to any of the modified programs, it is your company's responsibility to merge the QAD patch changes, customizations, and any other changes once this installation package has been applied. QAD does not support customized programs.

There are two approaches available to install the workbenches:

- Use the Module Installer Utility

This automates and streamlines much of the installation process.

- Use the manual installation approach

This is similar to the installation process in previous Planning and Scheduling Workbenches EE and SE installation packages.

These approaches can be used in combination depending on the requirements of your installation. The following table summarizes the general requirements:

Table 2.1
General Requirements

Component Type	Module Installer	Manual Installation	Remarks
Server side			
• Install schema changes	No	Yes	Required for first-time 2010.1EE installations only
• Install and compile 4GL	Yes	Yes	Manual installation is necessary if using a layered PROPATH for source or compiled code
• Copy supporting files	Yes	Yes	
• Load system data	Yes	Yes	
• Load language translation data	No	Yes	
• Install QXtend QDocs	No	Yes	Required if you are using a version of QXtend prior to 1.7.1. See Kbase entry regarding the Planning and Scheduling Workbenches QXtend QDocs.
Client side			
• Install plugin	Yes	Yes	
• Install collections	Yes	Yes	
Other			
• System setup	No	Yes	

Installation Examples

The following present two examples of target environments and what you might use to install. The first example illustrates a very simple environment, and the second example illustrates a more complex environment.

Example 1: Simple Environment

Assume the following target environment:

- 2011.1EE.
- Layered PROPATH is not used.
- US English only.
- QXtend is not used.

Use the Module Installer to do the following all at once:

- Install and compile 4GL.
- Copy supporting files.
- Load system data.
- Install plug-in.
- Install collections.
- Use a manual installation for system setup.

Example 2: Complex Environment

Assume the following target environment:

- 2010.1EE
- Layered PROPATH
- Languages other than US English are used.
- QXtend

There are two approaches that you can take. The first approach makes use of the Module Installer as much as possible:

- Use a manual installation to install the schema changes.
- Use a manual installation to install and compile 4GL.
- Use the Module Installer to do the following all at once:
 - Copy supporting files.
 - Load system data.
 - Install plug-in.
 - Install collections.
- Use a manual installation to load language translation data.
- Use a manual installation to install QXtend QDocs.
- Use a manual installation for system setup.

The second approach utilizes **only manual installation**:

- Install the schema changes.

- Install and compile 4GL.
- Copy supporting files.
- Load system data.
- Load language translation data.
- Install plug-in.
- Install collections.
- Install QXtend QDocs.
- System setup.

Beginning the Installation

To start the installation process, perform the following:

- 1 Log in as an administrative user with read, write, and execute permissions for your production environment. On UNIX systems, this is typically mfg.
- 2 Mount the MSW/PSW installation media.
- 3 Copy the installation package zip file to a directory of your choice.
- 4 Unzip the installation package zip file to a directory of your choice (hereafter termed the *InstallDir*).
- 5 Change the working directory to *InstallDir*.
- 6 Within the *InstallDir*, find and unzip the `manualinstall.zip` file.
The system creates the `manualinstall` subdirectory (hereafter termed the *ManualInstallDir*).

Using the Module Installer

With the Module Installer, you can quickly install 4GL, system data, the `version.msw` file, the client plug-in, and browse collections.

Whether you can install all of these components using the Module Installer depends upon your requirements. For example, if you need to maintain a layered PROPATH, or are installing into a 2010.1EE environment for the first time, then you install the 4GL using the manual approach described in this topic; however, you can still use the Module Installer to install other components, such as system data, the `version.msw` file, the client plug-in, and the browse collections.

To launch the Module Installer, invoke the following command at a command line prompt:

```
InstallDir/mswinstall.sh
```

The system presents a series of prompts. The following table presents the prompts and provides information to help you respond to the prompts.

Table 2.2
Module Installer Prompts and Responses

Prompt	Information for Response
Enter QDT Home full path directory [/dr01/qadapps/qdt]	This is the directory where QDT is installed
Enter environment name [live]	Enter the QDT environment name into which the selected components install.
Enter installer file name	Enter the name of your installation package zip file. This can be either a relative file path or an absolute file path.
Install 4GL? [yes]	Answer Yes or No to install this component.
Install system data? [yes]	Answer Yes or No to install this component.
Install client plugin? [yes]	Answer Yes or No to install this component.
Install collections? [yes]	Answer Yes or No to install this component.
Ok to proceed? [no]:	Answer Yes to proceed with the installation. Answer No to re-enter the values listed above.

Once complete, review the `mswinstall.log` file for successful completion.

Adding Additional Directories to the Compile PROPATH

To add additional directories to the compile PROPATH, make the following change before launching the Module Installer:

- 1 Edit the file `QDT_HOME/xml/QDT_serverName_environmentName.xml` where `QDT_HOME` is the home directory of your QDT installation, `serverName` is the name of the server on which QDT is installed, and `environmentName` is the QDT environment name.
- 2 Add the additional directories to the `directoryList` in the following `<compilePropath>` element:

```
<container name="mfg-code" env="environmentName" type="codeset">
...
<compilePropath>directoryList</compilePropath>
```

For example:

```
<compilePropath>/dr01/qadapps/qa/xrc,/dr01/qadapps/qa/xrc/proxy,/dr01/qadapps/qa/xrc/validation</compilePropath>
```

Manual Load of Schema Definitions (2010.1 only)

If you are installing the workbenches in a 2010.1EE environment for the first time, you must load a schema definition file. The schema definition file adds field definitions needed by the workbenches to the Work Order Master (wo_mstr), Production Line Master (ln_mstr), and Production Line Detail (ln_det) tables.

Load the Schema

For each mfg database (and associated empty databases), load the schema delta with the following procedure.

Note Before you do this, you may need to stop the other database clients, such as the AppServers, NetUI background telnet clients, and character clients, or access the database in single-user mode.

- 1 Start a Progress editor on the mfg database.

Note The mfg database is qaddb.

- 2 Type the following in the editor; then, press Go:

```
run ManualInstallDir/EE/2010.1/utility/mswutil.p
```

The system displays a list of options.

- 3 Select the Load schema delta df (2010.1 only) option.

The system prompts you for the name of the df file. The name of the df file defaults to *ManualInstallDir/EE/2010.1/schema/mswpsw_delta.df*.

- 4 Press the [F1] key to start the schema load.

The system completes the schema load.

Compile Your QAD Enterprise Edition 4GL

You use the QDT Deployment Toolkit (QDT) to install your version of QAD EE 4GL.

QDT is used to install QAD Enterprise Edition and other QAD products, like the Planning and Scheduling Workbenches. QDT streamlines the installation process by automatically finding system information (such as component locations) and modifying the QAD Enterprise Edition configuration profile appropriately.

QDT is installed from the application media shipped by QAD. For example, when you installed QAD Enterprise Edition, you performed the QDT install from the installation media.

QDT contains information about the current host including the operating system and currently installed versions of Progress, Java, and Tomcat.

Note You must have a graphical environment with full X-Windows capability.

- 1 Choose one of the following:

- To start QDT on Windows, select Start | All Programs | QAD Deployment Toolkit | Start QDT.
- To start QDT on Linux or UNIX, run the appropriate installation script for your version in the qdt_install_directory.

For example: `./qadinst` or `./qadinst.ksh`

The QDT main window displays.

- 2 In the QDT main window, select the Admin button.

- 3 Navigate to the Character Client Generate R-code pane as follows.

Note `environmentName` represents the name of the installed EE environment.

- a In the left pane, expand the QAD EE `environmentName` Environment selection.
- b In the expanded selections, expand the `environmentName: QAD EE` selection.
- c In the expanded selections, expand the `environmentName: QAD EE Application` selection.

- d In the expanded selections, select `environmentName: Character Client`.

- e In the top right pane, select Generate R-code.

For Character Client, the system indicates when the R-code generation is complete in the Steps in Action Set frame.

- f Press the Reset button.

- 4 Press the Edit button, then compile the 4GL, using the following compile steps.

- a Add the directories `ManualInstallDir/EE/2010.1/chui/src` and `ManualInstallDir/EE/2010.1/chui/xrc` as the first directories in the Compile Propath text box.

- b Select the R-Code Destination option, Staggered ERP Default.

- c Compile QAD EE using the standard supplied compile list file, `QADInstallDir/utcompil.wrk`.

Note This compile is required because there are schema definition changes and some modified 4GL files (.p and .i).

- d Compile the MSW/PSW program files using the supplied compile list file, `ManualInstallDir/EE/2010.1/utcompilmswpsw.wrk`.

Note QAD recommends that you take a layered approach when compiling and running the code. For example, you should place the output of the above compile steps in new, separate directories and reference them by client PROPATHS as follows:

- Directory containing output from compile step 2
- Directory containing output from compile step 1

Install Server-Side Artifacts

Installation of the server-side components is very similar to installing a QAD EE service pack. The server-side installation consists of these steps:

- Copy Supporting File
- Compile 4GL
- Load System Data

The following topics discuss each major step. Depending on which artifacts you were able to install using the Module Installer, you may not have to install those artifacts here.

Copy Supporting File

Copy the *ManualInstallDir/EE/[servicepack]/version.msw* file to QADInstallDir where *[servicepack]* is either 2010.1, 2011, 2011.1 or 2012.

Compile 4GL

Note When you install into a 2010.1EE environment, this section is not required because the compilation was performed as part of the schema load section.

The QAD Deployment Toolkit (QDT) is used to install QAD Enterprise Edition and other QAD products, like the Planning and Scheduling Workbenches. QDT streamlines the installation process by automatically finding system information (such as component locations) and modifying the QAD Enterprise Edition configuration profile appropriately.

QDT is installed from the application media shipped by QAD. For example, when you installed QAD Enterprise Edition, you performed the QDT install from the installation media.

QDT contains information about the current host including the operating system and currently installed versions of Progress, Java, and Tomcat.

Note You must have a graphical environment with full X-Windows capability.

Use the following QDT procedure to compile 4GL:

1 Choose one of the following:

- To start QDT on Windows, select Start | All Programs | QAD Deployment Toolkit | Start QDT.
- To start QDT on Linux or UNIX, run the appropriate installation script for your version in the `qdt_install_directory`.

Example `./qadinst` or `./qadinst.ksh`

The QDT displays.

2 In the QDT main window, select the Admin button.

3 Navigate to the Character Client Generate R-code pane as follows.

Note `environmentName` represents the name of the installed EE environment.

- a** In the left pane, expand the QAD EE `environmentName` Environment selection.
- b** In the expanded selections, expand the `environmentName: QAD EE` selection.
- c** In the expanded selections, expand the `environmentName: QAD EE Application` selection.
- d** In the expanded selections, select `environmentName: Character Client`.
- e** In the top right pane, select `Generate R-code`.

For Character Client, the system indicates when the R-code generation is complete in the Steps in Action Set frame.

- f** Press the Reset button.
- 4** Press the Edit button, then compile the 4GL using the following compile steps:
 - a** Add the directories `ManualInstallDir/EE/[servicepack]/chui/xrc` and `ManualInstallDir/EE/[servicepack]/chui/src` as the first directories in the Compile Path text box where `[servicepack]` is either 2010.1, 2011, 2011.1 or 2012.
 - b** Select the R-Code Destination option, Staggered ERP Default.
 - c** Use the supplied compile list file, `ManualInstallDir/EE/[servicepack]/utcompilmswpsw.wrk` where `[servicepack]` is either 2010.1, 2011, 2011.1 or 2012.

Load System Data

System data dump files and a data load utility are included in the MSW/PSW installation package. To load the data, you must run the data load utility:

- 1** Start a Progress client session connected to the databases (for example, `qaddb` and `qadadm`) into which the data loads. You can use your normal QAD ERP session start-up for this purpose.
- 2** Enter the Progress Editor. If you started via a normal QAD ERP start-up, you can enter the editor by typing `mgeditor` at the menu prompt.
- 3** Type `run ManualInstallDir/EE/[servicepack]/utility/mswutil.p` where `[servicepack]` is either 2010.1, 2011, 2011.1 or 2012 and press Go.
- 4** Select 3 Load System Data.
- 5** In the Data Directory prompt, enter `ManualInstallDir/EE/[servicepack]/data` where `[servicepack]` is either 2010.1, 2011, 2011.1 or 2012.
- 6** Press Go.
- 7** For 2010.1 only, to load language translation data for languages other than US English, perform the following:
 - a** In the Progress Editor, type the following; then, press Go:
`run ManualInstallDir/EE/2010.1/utility/mswutil.p`
 - b** Select option 2 Delete non-US English language detail records (2010.1 only) and follow the instructions displayed.
- 8** To load language translation data for languages other than US English, invoke Operational Language Data Load (36.24.6) from within a QAD ERP session; then, repeat the following for each language to be loaded:
 - a** Enter the two-character language code in the Language Code field. The following lists the language codes of supported languages:
 - cs (Castilian Spanish)

- cz (Czech)
 - ls (Latin Spanish)
 - us (US English)
 - du (Dutch)
 - fr (French)
 - ge (German)
 - it (Italian)
 - jp (Japanese)
 - ko (Korean)
 - pl (Polish)
 - po (portuguese)
 - ch (Simplified Chinese)
 - tw (Traditional Chinese)
- b** Enter `new` in the Update Mode field.
- c** In the Input Directory field, enter `ManualInstallDir/EE/[servicepack]/data` where `[servicepack]` is either 2010.1, 2011, 2011.1 or 2012.
- Note** It may be necessary to copy the contents of `ManualInstallDir/EE/[servicepack]/data` to a temporary directory as the maximum directory size that can be entered is 40 characters.
- d** Check the Load Menu Title Detail check box.
- e** Check the Load Message Master check box.
- f** Uncheck the Master Comments check box.
- g** Check the Load Language Detail check box.
- h** Check the Load Label Master check box.
- i** Press Go.

QXtend Requirements

If you use QXtend Inbound with any of the functions listed below, you may need to install updated QDocs. See the KBase entry describing QDocs for use with the workbenches.

- Site Maintenance (1.1.13)
- Item Master Maintenance (1.4.1)
- Item-Site Planning Maintenance (1.4.17)
- Work Center Maintenance (14.5)
- Work Order Maintenance (16.1)
- Production Line Maintenance (18.1.1)
- Production Line Maintenance (18.22.1.1)

Manual Installation of Client-Side Artifacts

The following topics discuss tasks to complete when installing client-side artifacts, including:

- Install the Client Plug-In
- Install CAC Browse Collections

Install the Client Plug-In

Use the following procedure to install the client plug-in.

- 1 Log in as an administrative user with read, write, and execute permissions for your production environment. On UNIX systems, this is typically `mfg`.

- 2 Change to the Tomcat home server webapp packages directory by typing:

```
cd TomcatInstallDir/webapps/HomeWebAppDir/packages
```

- 3 Unzip `ManualInstallDir/client/plugins/QAD.Plugin.PlanningScheduling-x.x.x.x.zip`

Where `x.x.x.x` represents the installation package version number.

- 4 Edit the plug-in manifest file by typing:

```
vi plugins/manifest.qpkg
```

- a If the following line does not already exist in the list of `<package>` elements, then add it:

```
<package path="" ref=
"${Repos}/plugins/QAD.Plugin.PlanningScheduling/manifest.qpkg" />
```

Install CAC Browse Collections

Use the following steps to install the component availability check browse collections:

- 1 Copy the collections definitions files to your home server:

```
cp ManualInstallDir/client/collections/[servicepack]/*
TomcatInstallDir/webapps/HomeWebAppDir/configurations/~
configurationname/storage/browse-collections
```

Where `configurationname` represents all configuration directories that you have created, including the default directory.

- 2 In the browse-collections directories to which you copied the collections definitions, rename the following files, if present (for example, rename to `filename.xml.bak`):

- 79e92e85-5edb-4f56-8760-3a2e4058a8ce.bc.xml
- 7ed73756e-fd3f-4645-876f-e595dbaed436.bc.xml

System Setup

Your user documentation for the Planning and Scheduling Workbenches describes setup steps that you should complete before you begin using the workbenches. For example, you must enable the workbenches in QAD EE programs before you can use them.

For setup, the user guide tells you how to:

- 1 Enable the workbenches.
- 2 Synchronize resource tables.
- 3 Set up production lines.