



# Installation Guide **QAD Planning and Scheduling Workbenches**

Installation Introduction  
Installation

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# Contents

<b>Change Summary</b> .....	<b>v</b>
<b>Chapter 1 Installation Introduction</b> .....	<b>1</b>
Overview .....	2
Prerequisites .....	2
Installation Package .....	3
Before You Begin .....	3
<b>Chapter 2 Installation</b> .....	<b>5</b>
Overview .....	6
Important Before You Install .....	6
Progress Installation .....	6
Install Server-Side Artifacts for Progress .....	6
Oracle Installation .....	12
Install Server-Side Artifacts for Oracle .....	12
Install Client-Side Artifacts for Progress and Oracle .....	17
Install Plug-Ins .....	17
Install .NET UI Performance Fix for Versions Lower than 2.9.4 .....	17
Install CAC Browse Collections .....	18
Install QAD Assist .....	18
QXtend QDocs Installation for Oracle and Progress .....	21
Run Update Utility for BOM/Routing Codes .....	21
System Setup .....	22
Update Test Databases .....	22
Update Related Program Help .....	22



# Change Summary

The following table summarizes significant differences between this document and the version released with previous Standard Edition releases.

<b>Date/Version</b>	<b>Description</b>	<b>Reference</b>
August 2013/version 3.2.4	Rebranded for August SE version 3.2.4	--
May 2013/version 3.2.3.2	Added a new section for updating existing records with BOM/routing codes.	page 21
April 2013/version 3.2.3	Rebranded for April 2013 SE version 3.2.3	--
October 2012 SE/version 3.2.2.1	Added new Oracle section, new CAC browse collection definition utility, updated instructions, files, programs, and more for version 3.2.2.1	various
September 2011/2011.1 SE, version 3.2.1.2	Rebranded for QAD 2011.1 SE.	--
April 2011 SE, version 3.2.1	First SE workbenches install guide	--



# 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 for SE eB2.1 SP4 through 2013. It also includes information to install the component availability check browse collections.

# Prerequisites

**Important** Before you install the workbenches, QAD strongly recommends that you allocate one processor (core) per production planner/scheduler. This is because the Planning and Scheduling Workbenches are powerful tools that summarize all your demand, supply, and capacity information across your planning/scheduling horizon, and allocating one processor per production planner/scheduler prevents performance degradation.

The following are prerequisites before you install this version of the Planning and Scheduling Workbenches:

- QAD eB2.1 SP4 through 2013
- NET UI 2.9.1, 2.9.4, and 2.9.6 and associated server-side code

**Note** If you run a .NET UI version lower than 2.9.4, you should install the Cancel All Requests fix. See “Install .NET UI Performance Fix for Versions Lower than 2.9.4” for more information.

- Progress databases
- Oracle databases, version 10g
- Progress OE10

**Note** To run the workbenches, ensure that you run a Progress OE10 version that is compatible with your SE and .NET UI 2.9.1, 2.9.4, or 2.9.6 release combination.

- Currently active QAD Maintenance license

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

[https://support.qad.com/license\\_keys/activemaintenance/](https://support.qad.com/license_keys/activemaintenance/)

In the Web URL, click the Generate License Key button to generate a license key, then follow the prompts to generate the license key. Once you select the Accept key, the system generates the key, displaying it on the Web URL screen, and e-mails the license key to you.

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** Be aware that even if you meet the prerequisites listed in this section, the installation package does contain both schema changes 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.

## Installation Package

There are two packages provided for the workbenches for:

- Encrypted 4GL
- Unencrypted 4GL

Your individual installation package depends upon the type of QAD SE source code license you have. Each installation package contains the following:

- Install guide (this document), located at the top level of the installation directory on the product CD
- Generic module installer
- Client-side artifacts:
  - Workbench .NET UI plug-in
  - Assist Panel
  - User guide, administration guide, and online help content for Assist Panel
  - Component Availability Check collection definitions
- Server-side artifacts:
  - 4GL (CHUI and GUI)
  - Schema delta
  - MFG/UTIL support files
  - System data

## Before You Begin

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

## 4 Installation Guide — Planning and Scheduling Workbenches

# Installation

This chapter discusses the following configuration information:

**Overview 6**

Provides an overview of the installation process.

**Progress Installation 6**

Tells you how to install Progress server-side artifacts; includes instructions to load data from the installation image, copy files, and run MFG/UTIL and the MSW/PSW data setup.

**Oracle Installation 12**

Tells you how to install Oracle server-side artifacts; includes instructions to load data from the installation image, copy files, and run SQL and the MSW/PSW data setup.

**Install Client-Side Artifacts for Progress and Oracle 17**

Provides step-by-step instructions to install client-side components; includes instructions to install plug-ins, a .NET UI performance fix, CAC browse collections, and QAD Assist. Also, tells you how to load content for QAD Assist.

**Run Update Utility for BOM/Routing Codes 21**

Tells you how to run the Production Line Item Update utility to set BOM/Routing codes in existing records.

**System Setup 22**

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

**Update Test Databases 22**

Tells you how to refresh your test databases from the databases in your production environment.

**Update Related Program Help 22**

Tells you how to load updated online help records.

## Overview

This section provides instructions to install the Planning and Scheduling Workbenches for the eB2.1 SP4-2013 SE releases.

After you unzip the contents of the package, you are ready to follow normal package installation instructions. Specifically, you:

- Install the server-side artifacts.
- Install the client-side artifacts.

## Important Before You Install

Read the following important information before you install.

### Requirement for Loading Schema File

If you installed a standard release of the Planning and Scheduling Workbenches (for example, 3.2.1, 3.2.1.2), it is not necessary to load the schema file contained in this release. This release is a full release of the Planning and Scheduling Workbenches and can be installed either on top of an existing standard release installation of the Planning and Scheduling Workbenches or on a QAD SE supported service pack with no prior installation of the Planning and Scheduling Workbenches.

### Code Merging Requirements

This release of the Planning and Scheduling Workbenches contains changes to programs that are shared between the workbenches and standard QAD code. Before installing this release, you should check each of these programs to determine if they contain any of the following:

- Customizations: Changes to your company's own internal customizations
- QAD patches: Fixes to QAD code delivered by QAD Support
- Other custom code: For example, third-party vendor code

If these programs do contain these types of changes, you should merge the changes into the versions of the programs delivered with this release of the Planning and Scheduling Workbenches. Ensure that the merged workbench versions of the programs are properly placed in the Progress execution PROPATH so that they run ahead of any other version of the program contained in your QAD installation.

## Progress Installation

For a Progress installation, use the steps in the following topics:

- “Install Server-Side Artifacts for Progress” on page 6
- “Install Client-Side Artifacts for Progress and Oracle” on page 17

### Install Server-Side Artifacts for Progress

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

- Load data from the installation image
- Copy certain files from the target location to your QAD SE instance
- Delete existing MSW/PSW and CAC browse collection definitions
- Run MFG/UTIL to load schema delta, load system data, and compile 4GL

**Note** If you installed earlier SE Planning and Scheduling Workbenches packages you do not need to load the schema delta; however, loading system data and compiling of the 4GL is still required.

- Run the MSW/PSW Data Setup

The following topics discuss each major step.

### Load Data from the Installation Image for Progress

- 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 Change to the installation's install directory by typing `cd InstallDir/install`.
- 4 Choose one of the following:
  - For UNIX, launch the installation script in that directory by typing `./install.ksh`.
  - For Windows, run `install.exe`.
    - From the Start menu, select Run, then enter the `install.exe` file.

The welcome screen displays showing you the product you are installing and the platform.

- 5 Press Enter to start the install.
 

The license agreement displays. Press CTRL-C to skip reading the agreement, or page down through the agreement. The system prompts you to accept the agreement.
- 6 Enter Y to accept the license agreement.
- 7 Select the location for the update installation log.
- 8 Accept or update the following information when prompted:
  - Progress installation directory.
  - Destination directory to install the MSW/PSW (`MSWPSWInstallDir`). This can be either inside or outside of the original QAD SE installation directory (`QADInstallDir`).
  - The version of QAD SE that you are using for this installation. It must be one of the following:
    - eb21sp4
    - 2007
    - 2007.1
    - 2008
    - 2008.1
    - 2009

## 8 Installation Guide — Planning and Scheduling Workbenches

- 2010
- 2011
- 2012
- 2013

- 9 Review the summary screen and enter Y to copy the update files or enter N to re-enter installation information.

The copy progress displays in the command window and is recorded in the file `mswpsw.log` in your log directory.

### Copy Supporting Files

Copy these files in `MSWPSWInstallDir/mswpsw` to `QADInstallDir`:

- `version.msw`
- `wkmswpsw.ini`

### Delete Existing MSW/PSW and CAC Browse Collection Definitions

If you installed an earlier release of the MSW/PSW, you must delete the MSW/PSW and CAC browse definitions prior to loading data files. If you customized any browses, you must reapply the customizations after the installation procedure is complete.

- 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 MSWPSWInstallDir/chui/utility/mswutil.p
```

The system displays a list of options.

- 3 Select `Delete existing MSW/PSW browse definitions`.

The system displays a list of the MSW/PSW and CAC browse collections.

- 4 Use the up/down arrows to position on a row; then, press `Enter` to select/deselect an entry. The default is that all entries are selected.

**Note** QAD recommends that you select all entries so that you can load replacements during the installation without causing browse definition corruption.

You can select from any of the following:

Browse	Description	Selected
qp001	SearchPath	yes
qp002	Production Order Component List	yes
qp003	Component Check By Order/Production	yes
qp004	Supply/Demand Summary	yes
qp005	Component Chk By Order/Work Center	yes
qp006	Component Chk By Item/Work Order	yes
qp007	Supply/Demand Details	yes
qp011	Item Planning	yes

Browse	Description	Selected
qp012		yes
qp013		yes
qp014	Item Master	yes
qp016	Resource Type	yes
qp017	Resources	yes

- 5 Press [F1] or Go to proceed with deleting the selected browse definitions.  
The utility presents a list of your selected entries to delete, then prompts you to continue.
- 6 Select OK.  
The system displays the existing browse definitions.

### Run MFG/UTIL

Use MFG/UTIL to load schema delta, load data files, and compile 4GL.

**Note** If you use the Enhanced Controls module, refer to the QAD SE Update Installation Instructions document for information on unprocessed Enhanced Control records before installing the workbenches. This is because MFG/UTIL requires that certain Enhanced Controls records in the database be processed. The link below displays the QAD SE Update Installation Instructions document for 2008SE.

[http://www.qad.com/Documents/qad\\_se/2008/updates/EnterpriseApplications\\_IG\\_v2008SE.pdf](http://www.qad.com/Documents/qad_se/2008/updates/EnterpriseApplications_IG_v2008SE.pdf)

- 1 Launch MFG/UTIL.
- 2 Select QAD ERP Guided Setup from the Configure menu.
- 3 Select Install MSW/PSW in the Operation Set drop-down list.

This step executes the following substeps. For each step it may be necessary to enter data, such as a database, directory, or file name. These are indicated for each substep where required.

- a Load schema delta into your production database. Identify the schema delta file by entering MSWPSWInstallDir/mswpsw\_delta.df when prompted for the Data Definition File. Skip this step if you are reinstalling, or you previously installed an earlier SE version of the workbenches.

**Note** You may need to indicate the full directory path name where you have installed the MSW/PSW.

- b Truncate the before-image of your empty database. Skip this step if you are reinstalling, or you previously installed an earlier SE version of the workbenches,
- c Load schema delta into your empty database. Identify the schema delta file by entering MSWPSWInstallDir/mswpsw\_delta.df when prompted for the Data Definition File. Skip this step if you are reinstalling, or you previously installed an earlier SE version of the workbenches.

**Note** You may need to indicate the full directory path name where you have installed the MSW/PSW.

- d Truncate the before-image of your production database. Skip this step if you are reinstalling, or you previously installed an earlier SE version of the workbenches.
- e Load system data:
  - In the Domain text box, enter a domain identifier that is in your production database.
  - In the Data Directory text box, enter `MSWPSWInstallDir/data/languagecode` where `languagecode` represents the language translation directory; for example, `us` for US English, `ch` for Chinese, and so on. The following lists the language codes of the languages that are supported at this time:
    - `cs` (Castilian Spanish)
    - `ls` (Latin Spanish)
    - `us` (US English)
    - `du` (Dutch)
    - `fr` (French)
    - `ge` (German)
    - `it` (Italian)
    - `jp` (Japanese)
    - `pl` (Polish)
    - `po` (Portuguese)
    - `ch` (Simplified Chinese)
    - `tw` (Traditional Chinese)
    - `cz` (Czech)
    - `ko` (Korean)
    - `ru` (Russian)
  - In the database list, select your Mfg Production and Adm Production databases by using the up-and-down arrows through the entries and pressing the space bar.
  - Press the Ok button.

The process prompts you to connect to your Mfg Production and Adm Production databases, then to connect again to the Mfg Production database to finish the data installation. This last prompt may show a blank where the database path would normally be specified. Specify the path to your Mfg Production database.

**Note** You must repeat the above for each additional language that you use.

#### f Compile 4GL.

There are two compile steps to perform. For both steps, you include the directories `MSWPSWInstallDir/chui/xrc` and `MSWPSWInstallDir/mswpsw/chui/src` as the first directories in the Compile Propath textbox. Select the R-Code Destination option, Staggered ERP Default.

- Compile step 1: Compile QAD SE using the standard supplied compile list file `QADInstallDir/utcompil.wrk`. This compile is required because there are schema definition changes and some modified 4GL files (.p and .i).
- Compile step 2: Compile the MSW/PSW program files using the supplied compile list file `MSWPSWInstallDir/utcompilmswpsw.wrk`.

**Note** If you use the GUI version of QAD SE, repeat the above compile steps but use the directories `MSWPSWInstallDir/gui/xrc` and `MSWPSWInstallDir/mswpsw/gui/src` as the first directories in the Compile Propath textbox. Be sure to place the GUI compiled code into a separate directory that is referenced only by GUI clients.

**Note** It is recommended that you take a layered approach when compiling and running the code. For example, the output of the above compile steps should be placed in new, separate directories and referenced by client PROPATHs as follows:

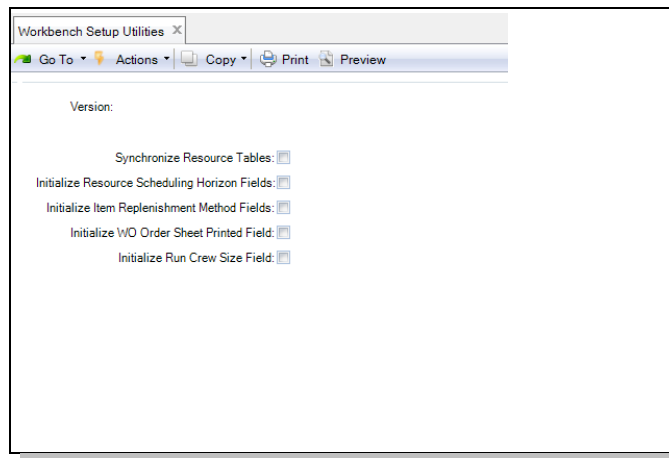
- Directory containing output from compile step 2
- Directory containing output from compile step 1
- Existing QAD SE compile directory

### Run the MSW/PSW Data Setup

If you use the workbenches with an existing database that is already populated with data, you should initialize certain data before using the workbenches. Use Workbench Setup Utilities (22.20.23) to do this.

**Note** If you use QXtend Outbound, you may need to disable it to avoid generating extraneous messages.

**Fig. 2.1**  
Workbench Setup Utility



*Synchronize Resource Tables.* Specify Yes to have the system create the necessary resource and resource/item records for the workbenches to retrieve and process planning and scheduling data. You typically set this field to Yes only once; however, you may need to rerun periodically. For example, over a period of time extraneous resource detail records may accumulate for work centers. Running this utility will clear up this issue.

*Initialize Resource Scheduling Horizon Fields.* Specify Yes to have the system initialize the scheduling horizon for each resource in the system to be five days. Each resource (work center/machine and production line) has a scheduling horizon that the workbenches use. To adjust these values for specific resources, use the existing maintenance functions within the workbenches for the resource you want to modify.

*Initialize Item Replenishment Method Fields.* Indicate how you want the system to set the item replenishment method field in item master and item planning tables to record how a specific item is normally replenished. The system uses this information in reports and update functions. When set to Yes, the system performs the following:

- If an item is actively processed using the QAD SE kanban module—that is, items exist on records created in Kanban Master Maintenance—the system sets the Item Replenishment Method field to Kanban.
- If the item is not processed by the kanban module, the system sets the Item Replenishment Method field to Orders.

*Initialize WO Order Sheet Printed Field.* Specify Yes to set the WO Order Sheet Printed field in the production order table that records when a production order is printed. When you set Initialize WO Order Sheet Printed Field to Yes, the following occurs:

- If the production order is a repetitive scheduled production order (type S), the production order table field that records printing is set to Y.
- If the production order is a discrete production order (type blank) and the status of the production order is Released or Closed, the system sets the production order table field that records printing to Y.

In all other situations, the system sets the production order table field that records printing to No.

*Initialize Run Crew Size Field.* Specify Yes to set the Run Crew field in Production Line Maintenance (18.22.1.1) to 1 (one) when the current value is zero. In required capacity calculations in the workbenches, the Run Crew field cannot contain a zero. This utility reads all production line detail records (Ind\_det) and sets the Run Crew Size field to 1 (one) when it is zero. If the current value is non-zero, the system does not change the Run Crew field.

## Oracle Installation

For an Oracle installation, use the steps in the following topics:

- “Install Server-Side Artifacts for Oracle” on page 12
- “Install Client-Side Artifacts for Progress and Oracle” on page 17

### Install Server-Side Artifacts for Oracle

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

- Load data from the installation image.
- Copy certain files from the target location to your QAD SE instance.
- Delete existing MSW/PSW and CAC browse collection definitions.
- Run MFG/UTIL to load the delta SQL file.

**Note** If you installed an earlier SE version of the workbenches, you do not need to load the schema delta; however, loading system data and compiling of the 4GL is still required.

- Run the MSW/PSW Data Setup

The following topics discuss each major step.

## Load Data from the Installation Image for Oracle

The instructions to load data from the installation image for Oracle are identical to those for progress installations; see “Load Data from the Installation Image for Progress” on page 7.

### Copy Supporting Files

Copy these files in *MSWPSWInstallDir*/mswpsw to *QADInstallDir*:

- version.msw
- wkmswpsw\_ora.ini

### Delete Existing MSW/PSW and CAC Browse Collection Definitions

If you installed an earlier release of the MSW/PSW, you must delete the MSW/PSW and CAC browse definitions before loading data files. If you customized any of these browse definitions, you must reapply the customizations after the installation procedure is complete.

- 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 MSWPSWInstallDir/chui/utility/mswutil.p
```

The system displays a list of options.

- 3 Select Delete existing MSW/PSW browse definitions.

The system displays a list of the MSW/PSW and CAC browse collections.

- 4 Use the up/down arrows to position on a row; then, press Enter to select/deselect an entry. The default is that all entries are selected.

**Note** QAD recommends that you select all entries so that you can load replacements during the installation without causing browse definition corruption.

You can select from any of the following:

Browse	Description	Selected
qp001	SearchPath	yes
qp002	Production Order Component List	yes
qp003	Component Check By Order/Production	yes
qp004	Supply/Demand Summary	yes
qp005	Component Chk By Order/Work Center	yes
qp006	Component Chk By Item/Work Order	yes
qp007	Supply/Demand Details	yes
qp011	Item Planning	yes
qp012		yes
qp013		yes
qp014	Item Master	yes
qp016	Resource Type	yes
qp017	Resources	yes

- 5 Press [F1] or Go to proceed with deleting the selected browse definitions.  
The utility presents a list of your selected entries to delete, then prompts you to continue
- 6 Select OK.  
The system displays the existing browse definitions.

### Run MFG/UTIL to Load the Delta SQL File

Use the following procedure to load data files, including the the delta .sql file.

**Note** If you use the Enhanced Controls module, refer to the QAD SE Update Installation Instructions document for information on unprocessed Enhanced Control records prior to installing the workbenches. This is because MFG/UTIL requires that certain Enhanced Controls records in the database be processed. The link below displays the QAD SE Update Installation Instructions document for 2008SE.

[http://www.qad.com/Documents/qad\\_se/2008/updates/EnterpriseApplications\\_IG\\_v2008SE.pdf](http://www.qad.com/Documents/qad_se/2008/updates/EnterpriseApplications_IG_v2008SE.pdf)

- 1 Launch MFG/UTIL.
- 2 Select QAD ERP Guided Setup from the Configure menu.
- 3 Select Install MSW/PSW on Oracle in the Operation Set drop-down list.  
This step executes the following substeps. For each step it may be necessary to enter data, such as a database, directory, or file name. These are indicated for each substep where required.
  - a Load schema delta into your empty schema holder. Identify the schema delta file by entering `mswpsw_sh_delta.df` when prompted for the Data Definition File. Skip this step if you are reinstalling, or you previously installed version 3.2.2.1 of the workbenches.  
**Note** You may need to indicate the full directory path name where you have installed the MSW/PSW.
  - b Truncate the before-image of your empty schema holder. Skip this step if you are reinstalling, or you previously installed version 3.2.2.1 of the workbenches.  
**Note** When the foreign db reference embedded in the schema is different from `qaddb`, then you should modify the `MSWPSWInstallDir/mswpsw_sh_delta.df` to set the db name to match the one in the production schema holder. For example, if you built the production schema holder using the `ORACLE_SID eb21ora` as foreign db reference, then the first statement in the delta .df should be changed to `UPDATE DATABASE eb21ora`.
  - c Load schema delta into your production schema holder. Identify the schema delta file by entering `MSWPSWInstallDir/mswpsw_sh_delta.df` when prompted for the Data Definition File. Skip this step if you are reinstalling, or you previously installed version 3.2.2.1 of the workbenches.  
**Note** You may need to indicate the full directory path name where you have installed the MSW/PSW.
  - d Load the `MSWPSWInstallDir/mswpsw_delta.sql` when MFG/UTIL prompts you to run `SQL*Plus` to load the delta .sql file.  
**Note** You must be logged in to the system with the Oracle user ID to run the SQLscript.

You can use the following sample command to load this file:

```
$ cd MSWPSWInstallDir
$ sqlplus qad/qad@eb21ora < mswpsw_delta.sql
```

- e Remove backup tables that the installation process stores before it modifies them with new schema.

The installation process stores the tables it will modify to a table `_backup` file; for example, `ln_mstr_backup`. The following backed-up tables are not accessible through the application or the Progress editor; however, you can access them through Oracle or SQL:

- `ln_mstr`
- `lnd_det`
- `pt_mstr`
- `ptp_det`
- `si_mstr`
- `wc_mstr`
- `wo_mstr`
- `wr_route`

Once you are satisfied with the updates and this backup data is no longer required, you should remove the backup tables by loading `MSWPSWInstallDir/mswpsw-drop-backup.sql`.

To do so, you can use the following commands:

```
cd MSWPSWInstallDir
sqlplus qad/qad@eb21ora < mswpsw-drop-backup.sql
```

- f Truncate the before-image of your production schema holder. Skip this step if you are reinstalling, or you previously installed version 3.2.2.1 of the workbenches.
- g Load system data:
  - In the Domain text box, enter a domain identifier that is in your production database.
  - In the Data Directory text box, enter `MSWPSWInstallDir/data/languagecode` where `languagecode` represents the language translation directory; for example, `us` for US English, `ch` for Chinese, and so on. The following lists the language codes of the languages that are supported at this time:
    - `cs` (Castilian Spanish)
    - `ls` (Latin Spanish)
    - `us` (US English)
    - `du` (Dutch)
    - `fr` (French)
    - `ge` (German)
    - `it` (Italian)
    - `jp` (Japanese)
    - `pl` (Polish)

- po (Portuguese)
  - ch (Simplified Chinese)
  - tw (Traditional Chinese)
  - cz (Czech)
  - ko (Korean)
  - ru (Russian)
- In the database list, select your databases by using the up-and-down arrows through the entries and pressing the space bar.
  - Press the Ok button.

The process prompts you to connect to your Mfg Production and Adm Production databases, then to connect again to the Mfg Production database to finish the data installation. This last prompt may show a blank where the database path would normally be specified. Specify the path to your Mfg Production database.

**Note** You must repeat the above for each additional language that you use.

#### h Compile 4GL.

There are two compile steps to perform. For both steps, you include the directories *MSWPSWInstallDir/chui/xrc* and *MSWPSWInstallDir/chui/src* as the first directories in the Compile Propath textbox. Select the R-Code Destination option, Staggered ERP Default.

- Compile step 1: Compile QAD SE using the standard supplied compile list file *QADInstallDir/utcompil.wrk*. This compile is required because there are schema definition changes and some modified 4GL files (.p and .i).
- Compile step 2: Compile the MSW/PSW program files using the supplied compile list file *MSWPSWInstallDir/utcompilmswpsw.wrk*.

**Note** If you use the GUI version of QAD SE, repeat the above compile steps but use the directories *MSWPSWInstallDir/gui/xrc* and *MSWPSWInstallDir/mswpsw/gui/src* as the first directories in the Compile Propath textbox. Be sure to place the GUI compiled code into a separate directory that is referenced only by GUI clients.

**Note** It is recommended that you take a layered approach when compiling and running the code. For example, the output of the above compile steps should be placed in new, separate directories and referenced by client PROPATHs as follows:

- Directory containing output from compile step 2
- Directory containing output from compile step 1
- Existing QAD SE compile directory

#### Run the MSW/PSW Data Setup

This step is similar to the same step for Progress installation; see “Run the MSW/PSW Data Setup” on page 11.

## Install Client-Side Artifacts for Progress and Oracle

The following topics discuss tasks to complete when installing client-side artifacts for either Progress or Oracle, including:

- Install Plug-Ins
- Install .NET UI Performance Fix for Versions Lower than 2.9.4
- Install CAC Browse Collections
- Install QAD Assist for the First Time
- Load QAD Assist Content
- Update Content for Already Installed QAD Assist

### Install Plug-Ins

Use the following procedure to install the plug-ins.

- 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 `MSWPSWInstallDir/client/plugins/QAD.Plugin.PlanningScheduling-x.x.x.zip`

Where `x.x.x` represents the installation package build number.
- 4 Edit the plug-in manifest file as follows by typing:
 

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

  - a Add the following line to the list of <package> elements:
 

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

### Install .NET UI Performance Fix for Versions Lower than 2.9.4

This fix is for .NET UI, versions lower than 2.9.4 only and is necessary to ensure that AppServer agents are properly released in the event that certain workbench actions are cancelled. For more information about this, see the KBBase entry for the .NET UI performance fix for the Planning and Scheduling Workbenches.

- 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 the performance fix zip file contained in the installation directory by typing:
 

```
unzip MSWPSWInstallDir/client/plugins/base.code-2.9.1.36.6245.zip
```
- 4 Edit the plug-in manifest file by typing:

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

Add the following line to the list of <package> elements:

```
<package path="" ref="{Repos}/plugins/base.code/patch/UIG-6245/manifest.qpkg" />
```

### Install CAC Browse Collections

The installation package contains the following browse collection definition files:

- Manage Materials for Production Line  
(210cc806-a72e-4c4b-a30b-7457c3b745af.bc.xml)
- Manage Materials for Work Center  
(c6018a5d-8bbd-413c-98ba-5b1d17a405ab.bc.xml)
- Monitor Material Shortages  
(221e54fc-53ba-47f0-93c0-420a31a11d9d.bc.xml)
- Purchase Direct Materials  
(38d7f042-87e3-46e7-b1cd-5128c79e51fd.bc.xml)
- Release Production Orders by Production Line  
(d6d7f6f5-28c8-4db2-a42d-a90c4087392c.bc.xml)
- Release Production Orders by Work Center  
(4ad3793c-06b0-453d-9cf5-28005219bae2.bc.xml)

You will copy browse collection definition files to the following directories on your home server:

```
TomcatInstallDir/webapps/HomeWebAppDir/configurations/~  
configurationname/storage/browse-collections
```

Where *configurationname* represents each configuration directory that you created, including the default directory.

- 1 When these files are present in the directories to which you copy the collections definition files, rename them (for example, rename to *filename.xml.bak*):
  - 221e54fc-53ba-47f0-93c0-420a31a11d9d.bc.xml
  - 79e92e85-5edb-4f56-8760-3a2e4058a8ce.bc.xml
  - ed73756e-fd3f-4645-876f-e595dbaed436.bc.xml

- 2 Copy the collections definitions files to your home server

```
cp MSWPSWInstallDir/client/collections/*  
TomcatInstallDir/webapps/HomeWebAppDir/configurations/~  
configurationname/storage/browse-collections
```

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

### Install QAD Assist

QAD Assist is a QAD .NET UI application that hosts user guide and related content for the QAD .NET UI and for QAD Enterprise Applications. QAD Assist features a search engine that you can use to search across user guides, field help, program help, and process maps.

For QAD .NET UI for QAD SE, installing QAD Assist is optional. For QAD EE, QDT installs QAD Assist automatically.

### Install QAD Assist for the First Time

If you do not have QAD Assist installed in your QAD SE, refer to the .NET UI Release Notes for your SE version. Instructions to install QAD Assist are included in the .NET User Interface, version 2.8.1, release notes found on this page:

<http://www.qad.com/documentlibrary/QAD+.NET+UI/2+9+2/Release+Notes+2.9.2/QAD+NET+UI+2+8+1+Release+Notes>

**Important** When you install QAD Assist on a version of QAD SE earlier than QAD 2009 SE, you do not need to complete the QAD Assist installation steps 5 and 6 that load QAD Enterprise Applications content. This is because QAD Assist was introduced with QAD 2009 SE and content does not exist for QAD SE versions earlier than QAD 2009 SE. However, QAD Assist can still be installed and the workbenches user documentation can be loaded into it.

### Load QAD Assist Content

The following procedure assumes that QAD Assist has already been installed.

- 1 Unzip the Assist Panel content file:
 

```
cd TomcatInstallDir/webapps/epub/
unzip assistance-help-msw-psw-se-ga-en-3.2.4.0.zip
```
- 2 Add the Assist Panel content `index.xml` file to the search engine:
 

```
cp msw-psw/en/links-msw-psw-en.xml
TomcatInstallDir/webapps/search/WEB-INF/indexes/default
```

Once you copy the file, the search engine webapp processes it, then removes it.
- 3 Restart the search engine, if necessary, if content does not display in the Assist Panel. To do this, use the Tomcat Web Application Manager to restart the Search Web application.

### Update Content for Already Installed QAD Assist

If you installed QAD Assist and loaded content for the workbenches, you can update QAD Assist content with the workbenches zipped package. Since you are overwriting previous SE workbenches data with this newest SE workbenches version data into the same directory, there is no need to remove data first.

- 1 Copy `assistance-help-msw-psw-se-ga-en-3.2.4.0.zip` from the `MSWPSWInstallDir/client/documentation` directory on the workbenches release media to the `/webapps/epub` directory on the QAD .NET UI home server.
- 2 Unzip the content using the `unzip` command.
 

Unzipping creates an `/msw-psw/en` directory under the `/webapps/epub` directory. The `/msw-psw/en` directory contains the content and index file for the MSW/PSW content for QAD Assist.

### 3 Refresh the search engine index:

- a Open `http://<homeserver>/search/`.
- b Stop the default search index by selecting `stop`.
- c Delete the default search index by selecting `delete`.
- d Create a new search index, named `default`, by clicking the `New Index` button and entering `default` as the index name.
- e In the .NET UI home server environment, go to `/tomcat/webapps/epub`.
- f Enter the following:  

```
cp `find . -name "links-*.xml"` ../search/WEB-INF/indexes/default
```

The search engine automatically loads the `links-*.xml` files once copied to `/search/WEB-INF/indexes/default`.  
After the files are loaded, the system removes them from `/search/WEB-INF/indexes/default`.
- g Go to `http://<homeserver>/search/` for the default index; then select `optimize`.
- h From QAD .NET UI, choose `Help`, then `Search`. `Help` should display.

### Access Help

Once the MSW/PSW content is installed on QAD Assist, you can search for help by selecting `Help`, then `Search` and entering a topic.

You can also use the `qadsh://URL` mechanism. On machines where the QAD .NET UI client is installed, you can use `qadsh://` to direct QAD Assist to open specific pages or perform a specific search on a particular topic for you. You can then save the `qadsh://` links as Favorites in the QAD .NET UI.

For example, if you create the following `qadsh://` search then save it as a favorite, when you click on it, the system opens the table of contents of the *Planning and Scheduling Workbenches User Guide* on any machine running the QAD .NET UI:

```
qadsh://help/ug/msw-psw/en/html/userguide/index.html
```

Or, if you create the following `qadsh://` search, QAD Assist automatically searches for MSW Display Preferences and displays the results in the Help window.

```
qadsh://help/search?q="MSW Display Preferences"
```

Finally, you can link directly to a topic within the user guide that displays in QAD Assist by linking directly to the HTML file for the topic. For example, to link to the user guide topic about User Preferences, you can enter the name of the HTML for that topic:

```
qadsh://help/ug/msw-psw/en/html/userguide/MSWDisplayPreferences.html
```

## QXtend QDocs Installation for Oracle and Progress

If you are using QXtend, you may need to install the following:

- If you use QXtend Inbound with the functions listed below, install updated QDocs. See the KBase entry describing QDocs for use with the MSW/PSW Workbenches. The KBase entry number is AA-57079.
  - 1.1.13 Site Maintenance
  - 1.4.1 Item Master Maintenance
  - 1.4.17 Item-Site Planning Maintenance
  - 14.5 Work Center Maintenance
  - 16.1 Work Order Maintenance
  - 18.1.1 Production Line Maintenance
  - 18.22.1.1 Production Line Maintenance
- If you use QXtend Outbound with QAD 2008SE (service pack 7) or earlier, and you have applied the ECO P6GT patch code to `ppptmta.p`, apply the P6GT patch code to the version of `ppptmta.p` that is supplied in the MSW/PSW installation package. This affects the following functions:
  - Item Master Maintenance (1.4.1)
  - Item Data Maintenance (1.4.3)
  - Item Inventory Data Maintenance (1.4.5)
  - Item Planning Maintenance (1.4.7)
  - Item Cost Maintenance (1.4.9)

## Run Update Utility for BOM/Routing Codes

After you install the workbenches and all artifacts, you can run Production Line/Item Update (18.22.1.21) so that the system defaults the appropriate data to existing records.

The update program includes the Update BOM/Routing selection field. When you specify the BOM/Routing in the update program, the system defaults existing BOM/routing codes from either Item-Site Planning detail records or Item Planning Maintenance master records to existing production line records. Once the Update program completes, you can update individual records on an as-needed basis and adjust the defaults when needed.

**Important** You complete this step only one time when installing any release of the planning and scheduling workbenches. If you performed this step as part of a previous installation, then you do not need to complete it again.

For information on how the system defaults BOM and routing codes to orders, refer to the section on Production Line BOM and Routing in QAD Planning and Scheduling Release Notes for August 2013.

For more information on the update utility, refer to the MSW Setup section of *User Guide: QAD Planning and Scheduling Workbenches*, version 70-3127-3.2.4.

## 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 SE programs before you can use them.

For setup, the user guide tells you how to:

- Set up production lines
- Enable the workbenches

## Update Test Databases

Periodically you may need to refresh your test databases from the databases in your production environment. To do this, use this subset of steps from the original installation:

- 1 Reload database schema:  
For Progress, see “Load Data from the Installation Image for Progress” on page 7.  
For Oracle, see “Load Data from the Installation Image for Oracle” on page 13.
- 2 Reload system data:  
For Progress, see “Run MFG/UTIL” on page 9.  
For Oracle, see “Delete Existing MSW/PSW and CAC Browse Collection Definitions” on page 13.
- 3 Rerun workbench setup utilities. See “Run the MSW/PSW Data Setup” on page 11.
- 4 Repeat system setup.

## Update Related Program Help

QAD SE core programs have additional fields that help them process and prepare data for use with the workbenches. You can load the online help for these programs into a Unix character environment by loading an FHD file, supplied on the workbenches release media.

The following procedure tells you how to load character-mode online field and procedure help. It does not affect custom help.

- 1 From a single-user QAD eB2.1 or SE character session, open Field Help Load (36.4.19).
- 2 Leave Field, Procedure, Status, and Text Type blank.
- 3 Complete the other fields:
  - Language: Enter an appropriate two-letter language code (such as US for English).
  - Field Help Load File: Enter the full path to the help data file `WBHelp_August2013_SE.fhd`.
- 4 Skip loading help with lower status: Enter Yes.
- 5 Press Go to begin the load.
- 6 Exit Field Help Load when the load is finished.



