



QAD Enterprise Applications

Installation Guide
QAD Enterprise Asset
Management

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Contents

QAD EAM Install Guide Change Summary	v
Chapter 1 Installation Overview	1
Installation Process Overview	2
EAM Installation Options	3
System Overview	3
Sizing and Capacity Planning	3
General Prerequisites	3
Supported Versions	4
Software and Hardware Prerequisites	4
Java SE Development Kit 7	4
Linux and UNIX Considerations	4
Database Server	6
Application Server	6
Web Server	7
EAM Add-On Files	7
Upgrading EAM 11 to EAM 12	7
Upgrading From a Previous Version of EAM	7
Chapter 2 Installing the QAD Deployment Toolkit	9
Overview	10
Download the Latest QDT	10
Installing QDT	11
Starting QDT	13
Configuring QDT	14
Setting System Defaults	14
Adding Users	15
Initiating the Installation	17
Next Steps	20
Chapter 3 EAM Environment Configuration	21
Overview	22
Configuring an Installation	22
Editing System Details	23

Configuring Databases	24
Interfacing to QAD SE and EE	31
Configuring Environment Settings	32
Manually Setting Up QAD EE Financial Components	35
Completing the Configuration	35
Multiple Environments	36
Next Steps	36
Chapter 4 Launching EAM	37
Starting EAM	38
Windows Installations	38
Linux and UNIX Installations	38
Log In to EAM	40
Exiting EAM	40
Backing Up the Database	40
Chapter 5 Post-installation Configuration	41
Overview	42
Set Up Progress Editor	42
Product Information Resources	45

QAD EAM Install Guide Change Summary

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

Date/Version	Description	Reference
May 2016/EAM 2015-Rev 3	Highlighted requirement for Java Development Kit 7.	page 4
	Updated Progress OpenEdge requirements.	page 6
	Expanded information on downloading QDT.	page 10
September 2015/EAM 2015-Rev 2 (v12.9)	Revised Figure 1.1	page 2
	Revised the Installation Process Overview section	page 2
	Revised the EAM Installation Options section	page 3
	Removed QXtend information from the EAM Add-on Files section	page 7
	Removed the Patch Installation section	page_12
	Removed the Configuring the Admin Environment section	page_22
	Revised the procedure in Interfacing to QAD SE and EE	page 32
	Revised step 32 of Manually Setting Up QAD EE Financial Components	page 35
	Removed the Applying the Fixed Asset Patch (EE Only) section	page_36
	Removed the Configure QXtend section and other QXtend-related content from Post-Installation Configuration	page 42
April 2015/EAM 2015-Rev 1 (v12.9)	Revised Figure 1.1 and the text in the Installation Process Overview	page 2
	Revised Database Server Requirements to include 2015 EE	page 6
	Revised Application Server Requirements to include 2015 EE	page 7
	Revised Initiating the Installation	page 18, page 19

Date/Version	Description	Reference
April 2015/EAM 2015 (v12.9)	Rebranded for EAM 2015 (v12.9)	---
	Numerous editorial changes	---
	Added Korn Shell section	page 4
	Revised the AIX requirements information	page 5
	Deleted Red Hat 6 section and merged content with the new Korn Shell section	page 5
	Updated Database Server Requirements	page 6
	Updated Application Server Requirements	page 7
	Updated Web Server Requirements	page 7
	Renamed the “Installing the Media to Linux/UNIX” section as “Initiating the Installation”	page 17
	Revised Initiating the Installation	page 17
	Documented Select Product Version window	page 18
	Revised Interfacing to QAD SE and EE	page 31
	Updated Figure 3.14 Configure EAM Application Screen	page 31
	Updated Figure 3.15 Edit Compiler Settings	page 32
	Added step 38 and Figure 3.19 for disable AIA connection	page 34
September 2014/EAM 12.8	Numerous editorial changes	---
	Reorganized the guide to remove the default installation option and to document a single installation work flow that includes interfacing to QAD EE and SE	---
	Revised Installation Process Overview	page 2
	Revised Installing the QAD Deployment Toolkit	page 9
	Removed the Installing a Complete EAM Configuration chapter	---
	Changed the name of the Installing a Custom EAM Configuration chapter to EAM Configuration	page 21
	Revised EAM Configuration	page 21
March 2014/EAM 12.7	Added section to set up Progress editor	page 42
	Added information on starting QDT in AIX environments	page 5
	Updated supported Java versions	page 6 page 7 page 7
	Updated the Tomcat Web server information	page 7
November 2013/EAM 12.6 Rev 1	Added note regarding users upgrading from QAD SE to EE	page 4
October 2013/EAM 12.6	Revised QDT Installation	page 11
	Moved Installing Media to Linux to Ch. 2	page 17
	Revised Custom EAM Configuration	page_25
	Added the Configure QXtend procedure	page_46
April 2013/EAM 12.5.2	Rebranded 12.5.2	--
	Added Upgrading From a Previous Version of EAM section	page 7
December 2012/EAM 12.5.1	Updated EAM 11 to EAM 12 conversion information.	page 7
September 2012/EAM 12.5.1	Updated Progress database server software requirements	page 6
	Updated Fixed Asset patch procedure.	page_36

Date/Version	Description	Reference
April 2012/EAM 12.5	Removed obsolete language-specific scripts information.	--
	Removed editing language details information.	--
September 2011/EAM 12.4	Updated installation media add-on files information.	page 7
	Added fixed asset patch installation procedure detailing upgrade procedures. Updated other version-specific information.	page_36

Installation Overview

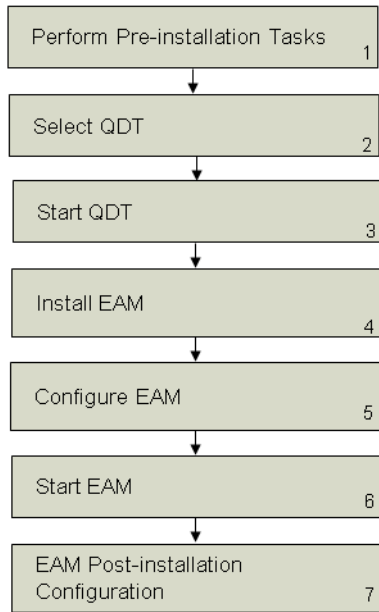
This chapter describes the Enterprise Asset Management installation process and provides system requirements and software prerequisites.

<i>Installation Process Overview</i>	2
<i>EAM Installation Options</i>	3
<i>System Overview</i>	3
<i>Sizing and Capacity Planning</i>	3
<i>General Prerequisites</i>	3
<i>Software and Hardware Prerequisites</i>	4
<i>EAM Add-On Files</i>	7
<i>Upgrading EAM 11 to EAM 12</i>	7
<i>Upgrading From a Previous Version of EAM</i>	7

Installation Process Overview

EAM is installed using the QAD Deployment Toolkit (QDT), which automates much of the installation process on properly set-up systems. The following figure represents the overall flow of the installation process.

Fig. 1.1
QAD EAM Installation Process



The procedure for installing EAM is as follows:

- 1** Determine if your system hardware, software, and configuration meet the requirements for EAM installation. Then set up your system according to the requirements defined in this chapter or with the assistance of QAD Services.
- 2** Select the QDT to use based on the type of intended EAM installation.
 - a** To install EAM 2015 against 2015 EE, use the QDT that was used to install 2015 EE.
 - b** To install EAM 2015 against SE or an EE version before 2015, or to install EAM 2015 as a stand-alone product, use the QDT from the QAD Store. As an alternative, you can also use the QDT provided on the release media.
- 3** Launch QDT.

QDT reads the product image and displays a choice of products and components to install. Select the appropriate components. QDT automatically discovers system information, such as the location of required software, by reading environment variable settings.
- 4** Install the desired EAM version.

QDT installs and configures the selected components using default configuration values generated during the auto-discovery process or using your custom configuration values.
- 5** Configure the EAM environment.
- 6** Start your new EAM installation and log in.

7 Perform post-installation EAM configuration.

EAM Installation Options

EAM 12.6 and earlier were installed separately from QAD Enterprise Edition as stand-alone applications.

Starting with EAM 2015, there are three EAM deployment options:

- Install EAM 2015 against an existing QAD 2015 Enterprise Edition environment. This creates an EAM installation that is more completely integrated with Enterprise Edition. To perform this type of EAM install, you must first install and configure QAD 2015 Enterprise Edition. Then use the QDT used to install 2015 EE to point to the EAM installation media to install EAM.
- Install EAM 2015 against Standard Edition or an Enterprise Edition release before 2015 EE.
- Install EAM 2015 as a stand-alone application

System Overview

An EAM system consists of:

- A Progress database server that contains EAM software
- A Progress Enterprise application server
- A Tomcat Web server
- Multiple client workstations (with QAD .NET User Interface software), as needed

The database server, application server, and Web server are all installed on the same machine in a single-tier environment. The QAD .NET User Interface clients are installed on machines that access the EAM environment.

Sizing and Capacity Planning

The database server contains EAM and Progress server software, as well as your production data. Before starting an installation, estimate the eventual size of your production database and the demands on the different database components. This information helps you to lay out your disks.

EAM requires a minimum of 12 GB to install and configure the product as-is for one environment. This memory requirement does not include the additional space needed for warehousing or sizable changes to the production databases.

For assistance with hardware sizing and capacity requirements planning, contact QAD Services.

General Prerequisites

The following general prerequisites apply:

- The system administrator must be an experienced Progress database administrator who can manage Progress client processes.
- A 100 Mbps or faster network is required.

Supported Versions

You can install QAD EAM 2015 with the following ERP application versions on a Progress database (Oracle is not currently supported):

- QAD 2009 Enterprise Edition or greater
- QAD 2008 Standard Edition or greater

Note The supported QAD Enterprise Edition and Standard Edition versions that integrate with QAD EAM 2015 are described in the Product Compatibility Guide in the QAD Store (<http://store.qad.com/content/compatibility-guide>). The *QAD Enterprise Asset Management Release Notes* and the drop-down menu of the QDT installation also provide this information.

Important If you are upgrading from QAD SE to EE, there is currently no migration tool for EAM. For further assistance, contact QAD Support.

Software and Hardware Prerequisites

The following sections describe the software and hardware requirements for QAD EAM installation.

Refer to the Product Compatibility Guide in the QAD Store for up-to-date requirements and compatibility information:

<http://store.qad.com/content/compatibility-guide>

Refer to the Progress documentation for the complete requirements for Progress components. When installing Progress components, always select a Complete installation, not a Typical or Custom installation. For information about EE Progress installation, refer to *QAD EE Progress Database Installation Guide*.

Important You must install these programs before beginning QAD Enterprise Asset Management installation.

Java SE Development Kit 7

Install Java SE Development Kit 7, also known as Java 1.7, using the documentation provided by your Java vendor.

Linux and UNIX Considerations

X terminal

Verify that X terminal is installed. It is required for QAD EAM Linux and UNIX installations.

Korn Shell

All of the scripts delivered on QAD media use Korn shell (ksh) syntax. The Korn shell must be installed in the default location (`/bin/ksh`) and available to the user account being employed to install QAD Enterprise Edition.

Some Linux and UNIX operating systems do not contain the Korn shell by default. This omission prevents use of `./install.ksh` to start up QDT and subsequent QAD Enterprise Edition installation. To use QDT and install Enterprise Edition in environments that lack the Korn shell, you run the appropriate command for your operating system as root and install the Korn shell in `/bin/ksh`. For example, for Linux, you would run the command:

```
yum install compat-libstdc++-296
```

Installation of QAD Enterprise Edition in Red Hat 6 and above environments requires use of the `qadinst_RH6_64bit` or `qadinst_RH6_32bit` executable.

AIX

If Concurrent I/O (CIO) is enabled, you cannot launch QDT on AIX. Disable CIO or move QDT to another file system on the server and launch QDT from the new location.

By default, AIX limits user files to a maximum size of 1 GB. You must increase this limit to at least 2 GB for the user account used to install QAD Enterprise Edition on AIX.

Installation Group and User

Installations on Linux and UNIX platforms require a group called `qad` and a user called `mfg` on the database server. All installation and maintenance programs store pertinent information under the `mfg` user home directory. Using this installation group and user enables QAD scripts to automatically find data about installed products. You maintain your system without logging on as root.

Follow these steps to create the installation group and user:

- 1 Create a group called `qad` with a group ID (gid) of 65535 with your UNIX system administration utility (65535 is the user ID of the files on the QAD media).
- 2 Create a user called `mfg` with a user ID of 65535.
 - a Assign the Korn shell to this user. All of the scripts delivered on QAD media use Korn shell (`ksh`) syntax.
 - b For the `mfg` user, set the `$HOME` environment to a user directory where working and temporary files can be written.
 - c Use the standard `umask` of 022 to set permissions and security.

Environment Variables

Update the `mfg` user `.profile` to include the `DLC` and `PATH` variables. Set the variables as follows:

- `DLC`: Progress installation directory
- `JAVA_HOME`: Java directory location
- `CATALINA_HOME`: Tomcat installation directory
- `PATH`: To include `$DLC`, `$DLC/bin`, `$JAVA_HOME`, `$JAVA_HOME/bin`, `$CATALINA_HOME`, `$CATALINA_HOME/bin`

Depending on your flavor of Linux or UNIX, you may also need to set the following variables for the shared library path and ID library path:

- SHLIB_PATH
- LD_LIBRARY_PATH

Expat XML Parser (HP-UX Only)

If you are installing on an HP Platform running HP-UX, you must install a C library for parsing XML. The Expat XML Parser is a free, open source application that provides this functionality.

You can obtain the source code using the project's SourceForge page at:

<http://expat.sourceforge.net/>

Precompiled depot files for HP are available at:

<http://hpux.connect.org.uk/hppd/hpux/Development/Tools/expat-2.1.0/>

Because of a limitation of the QAD Deployment Toolkit on HP ia64 (Itanium) platforms, you should install depot files for both the Itanium 2 and PA-RISC 2.0 before installing QAD software.

Database Server

The following table lists the software and hardware requirements for the database server.

Table 1.1
Database Server Requirements

Software	Hardware	Notes
QAD Enterprise Edition or Standard Edition The Progress OpenEdge version your environment is using for QAD EE or SE, including the following: <ul style="list-style-type: none"> • Latest Progress version-specific patches • Enterprise DB Server for appropriate number of users • 4GL Development, one license • Progress Enterprise application server Progress language-specific releases for each language in multi-language installation Java Development Kit 7 Graphical Web browser Latest operating system patches	5 GB free disk space Operating system patches Approximately 10 GB of free disk space for data structures. This estimate is based on a 5-7 GB production database. 100 Mbps network card ISO 9660 DVD Two disk controller channels (minimum) Internet connection	Perform a Complete installation, not a Typical or Custom installation, of Progress components. If Progress installs its own Java version and it differs from the version that the Web server requires, do not remove the Progress-installed Java version when installing the Web server version. See "Web Server" on page 7 for more information.

Application Server

The following table lists the software and hardware requirements for the application server.

Table 1.2
Application Server Requirements

Software	Hardware	Notes
QAD Enterprise Edition or Standard Edition The Progress OpenEdge version your environment is using for QAD EE or SE, including the following: <ul style="list-style-type: none"> • Latest Progress version-specific patches • Enterprise DB Server for appropriate number of users • Application DB Server • 4GL Development, one license • Progress AdminServer. Java Development Kit 7 Latest operating system patches	At least 12 GB free disk space per environment (pilot, production, and so on)	Perform a Complete installation, not a Typical or Custom installation, of Progress components. If Progress installs its own Java version and it differs from the version that the Web server requires, do not remove the Progress-installed Java version when installing the Web server version. See “Web Server” on page 7 for more information. Depending on your Progress release, you may need to install Java before installing the Progress component. If so, use Java 7.

Web Server

The following table lists the software and hardware requirements for the Web server.

Table 1.3
Web Server Requirements

Software	Hardware	Notes
Tomcat 7 Java Development Kit 7	10 MB free disk space for Tomcat installation files 100 MB free disk space for QAD user interface client application (see below)	Tomcat is not included on the EAM installation media. Download Tomcat from www.tomcat.apache.org or obtain it from another source.

EAM Add-On Files

To complete your installation, you may need the `v12upgrade` subdirectory in the QDT EAM 12 installation media `add_ons` directory. The `v12upgrade` subdirectory contains instructions and tools to help upgrade older versions of EAM 12.

Upgrading EAM 11 to EAM 12

Upgrading an EAM 11.x installation to EAM 12.x requires use of a conversion utility. Contact QAD Support to obtain the latest version of the utility and for assistance with how to use it.

Upgrading From a Previous Version of EAM

If you are upgrading from a previous version of EAM, check your installation media for any additional upgrade instructions.

Installing the QAD Deployment Toolkit

The QAD Deployment Toolkit (QDT) is a streamlined, comprehensive set of tools for product installation and configuration. This chapter covers QDT installation, startup, and configuration.

Overview 10

Download the Latest QDT 10

Installing QDT 11

Starting QDT 13

Configuring QDT 14

Initiating the Installation 17

Next Steps 20

Overview

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

You must download and install QDT before installing EAM 2015 if you are installing EAM against SE, an Enterprise Edition version earlier than 2014 EE, or if you are installing EAM as a stand-alone product.

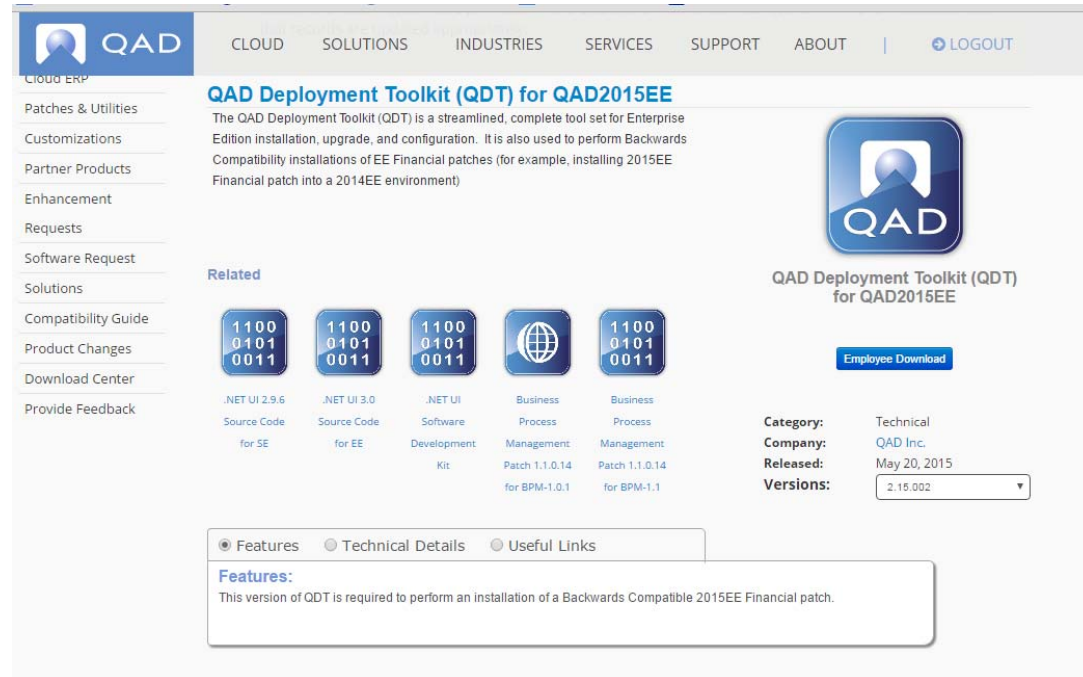
If you are installing EAM 2015 against 2015 EE, you do not need to download and install QDT. Instead, you use the QDT that was used to install 2015 EE. Proceed to “Starting QDT” on page 13

Important Before installing QDT and EAM, verify that the environment variables for the prerequisite Java and Tomcat installations on your target system are set. The user ID you use to complete the process must have permission to access the locations that you intend to use.

Download the Latest QDT

Go to the QAD Store (<http://store.qad.com>), select Patches & Utilities from the left-hand menu, and navigate to the QAD Deployment Toolkit (QDT) for QAD2015EE.

Fig. 2.1
QDT in the QAD Store



Download QDT by selecting the Download button.

Note QDT for QAD 2015EE is required for all EAM 2015 installations, regardless of the version of QAD Enterprise Edition or Standard Edition software against which you are installing.

Installing QDT

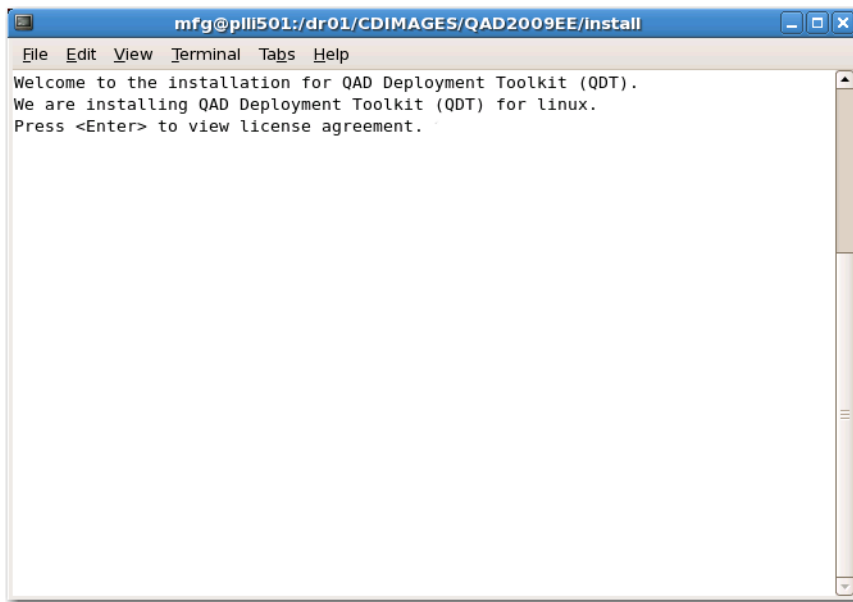
QDT is installed from the QAD application media. For example, if you are installing EAM, you perform the QDT install from the installation media. QDT uses a graphical user interface and requires X-Windows when installing on UNIX or Linux. In such cases, the install is performed from the server console.

Note You can view the Linux or UNIX QDT graphical user interface on a machine other than the machine on which QDT is installed. However, you must have a graphical environment with full X-Windows capability installed on that machine. One option is the TightVNC open source cross-platform remote desktop software. This requirement does not apply to servers being installed on Windows.

To install QDT:

- 1 Shut down any virus protection programs.
- 2 Open an x-terminal window.
- 3 Ensure that the OpenEdge Admin Server and Name Server are running.
- 4 Launch QDT installation by going to the `/install` directory and using the `./install.ksh` script for Linux/UNIX or `install.exe` script for Windows. The QDT welcome message appears.

Fig. 2.2
Installation Window for a Linux/UNIX Installation



- 5 Press Enter to view the license agreement.
- 6 The license agreement displays. Press the space bar or press `q` to skip the agreement and continue with the installation.
- 7 The installer prompts you to accept the agreement. Select `y` to continue or `n` to exit the installation.

8 You are prompted to enter the QDT installation location.

If you are not installing EAM 2015 against 2015 EE, accept the default location or enter a different directory. Write down this path for future reference. Press Enter.

Note It is common to select an alternate target location for the QDT installer files. Keeping in mind that this folder is not the EAM installation folder, but the EAM QDT installation folder, you might choose `<qad_apps_folder>/qdt-qadeam-pilot`, `<qadappsfolder>/qdt-qadeam-prod`, or something similar.

Verify that the QDT installation location has enough free space to uncompress and hold the QDT files.

9 You are prompted to enter the location for the log directory. Accept the default location or enter a different directory. Write down this path for future reference. Press Enter.

10 If the `logs` directory does not exist, you are prompted to create it. Press Enter to accept the default (y).

11 You are prompted to enter the location for installation of the QDT XML files. Accept the default location or enter a different directory. Write down this path for future reference. Press Enter.

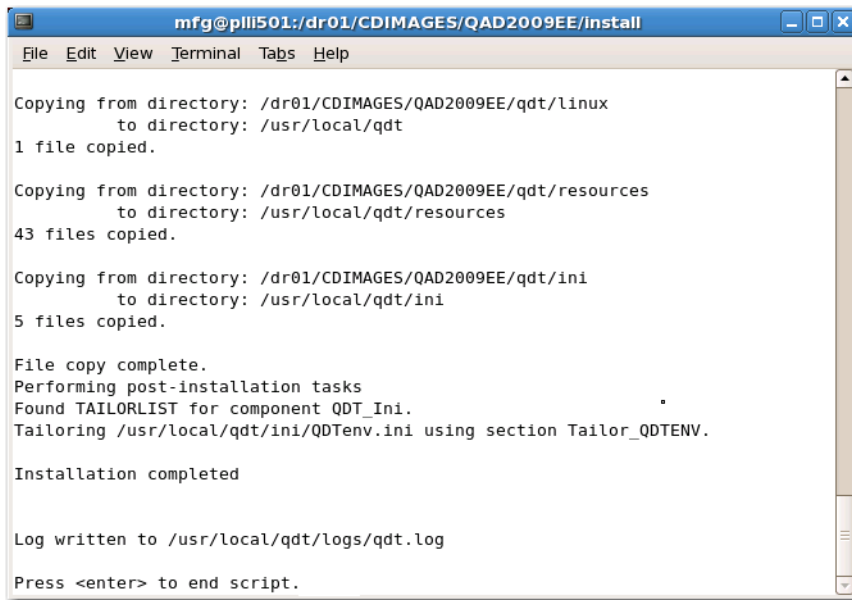
12 If the `xml` directory does not exist, you are prompted to confirm its creation. Press Enter to accept the default (y).

13 On Windows, the installer prompts you for a folder name for the QDT shortcut. The default is QAD Deployment Toolkit. Accept the default location or specify a different directory. Press Enter.

14 You are prompted to continue with the install. If you want to continue, press Enter.

15 The installation begins and install status messages are displayed.

Fig. 2.3
Installation Summary



```
mfg@plli501:/dr01/CDIMAGES/QAD2009EE/install
File Edit View Terminal Tabs Help

Copying from directory: /dr01/CDIMAGES/QAD2009EE/qdt/linux
to directory: /usr/local/qdt
1 file copied.

Copying from directory: /dr01/CDIMAGES/QAD2009EE/qdt/resources
to directory: /usr/local/qdt/resources
43 files copied.

Copying from directory: /dr01/CDIMAGES/QAD2009EE/qdt/ini
to directory: /usr/local/qdt/ini
5 files copied.

File copy complete.
Performing post-installation tasks
Found TAILORLIST for component QDT_Ini.
Tailoring /usr/local/qdt/ini/QDTenv.ini using section Tailor_QDTENV.

Installation completed

Log written to /usr/local/qdt/logs/qdt.log
Press <enter> to end script.
```

- 16 When the installation is completed, press Enter to exit the installation script.
- 17 You can verify that there were no errors during the installation by going to the QDT logs directory and reading the `qdt.log` file.
Look for any lines beginning with five stars (*****) or two stars (**). Five stars indicate QDT errors; two stars indicate Progress errors.
- 18 Correct any errors and attempt the QDT install again. Otherwise, proceed to the next section.

Starting QDT

To start QDT, do the following:

- 1 If you are using Windows, select Start|All Programs|QAD Deployment Toolkit|Start QDT. If you are using Linux or UNIX, go to `<qdt_install_directory>/qdt` and run the `./qadinst` installation script.
To start QDT in Red Hat 6 or 7 environments, run the `qadinst_RH6_64bit` or `qadinst_RH6_32bit` executable.
To start QDT on HP, run `qadinst.ksh`.
- 2 The QDT Deployment Toolkit displays. The toolkit contains information about the current host including the operating system and currently installed versions of Progress, Java, and Tomcat.

Fig. 2.4
QAD Deployment Toolkit Main Screen



QDT has two modules:

- Install. The Install function moves files from the product delivery media onto the target host drive.

- Admin. Admin completes the installation process and provides tools for updating and configuring the products that QDT installs. When the install is complete, you use the Admin function to create databases, compile application code, and create server start and stop scripts for the installed products.

Note The Admin function is similar to what was formerly called MFG/UTIL in previous QAD application versions. Although the process used with MFG/UTIL is similar, it is not valid for this install. Continue reading this guide for instructions.

Each module is accessed by selecting a button on the QDT main screen.

To view information about the host machine where QDT is installed, select Edit|System Default Settings.

Configuring QDT

You may need to perform the following actions to configure QDT:

- Setting system defaults (including port settings)
- Adding additional authorized users

Setting System Defaults

If the environment variables on your host machine were previously set at the operating-system level, QDT automatically discovers and displays relevant system information on its main screen.

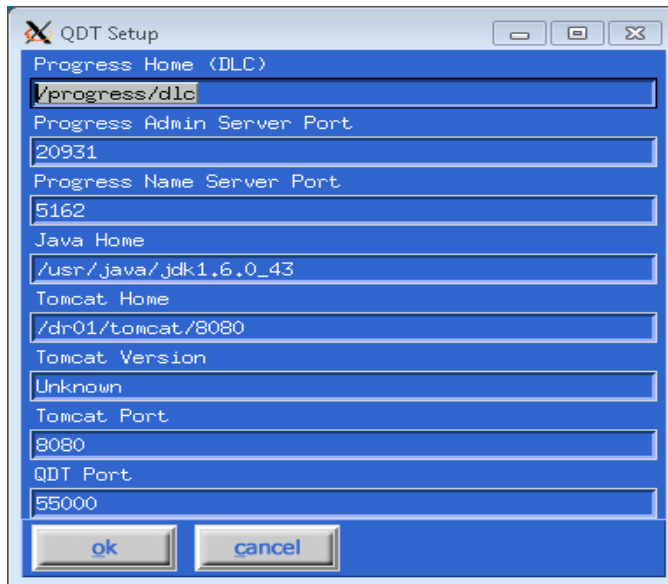
If system information is not displayed on the QDT main screen or incorrect information is displayed, set these system defaults through QDT's System Default Settings function.

Important Port settings, such as Tomcat and Progress AdminServer ports, are automatically set to default values within QDT. If you are not using the default values for these ports, or are installing multiple environments (which requires multiple Tomcat instances), use QDT's System Default Settings function to set the correct port values.

To set system defaults (including port settings), do the following:

- 1 On the QDT main screen, select Edit|System Default Settings. The QDT Setup screen displays.

Fig. 2.5
System Default Settings



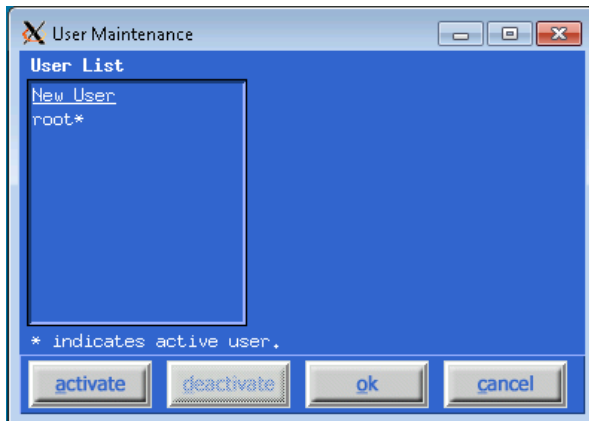
- 2 Enter changes to the appropriate settings.
- 3 Select OK to close the screen and save the changes.

Adding Users

The person who initially installs QDT is the only person who is able to use it. All others receive errors and cannot run the toolkit. To specify additional users to run QDT, do the following:

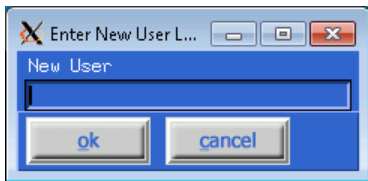
- 1 Select Edit|User Maintenance.
- 2 To add a user, make sure that New User is highlighted in the User Maintenance dialog box and click Activate.

Fig. 2.6
User Maintenance Dialog Box



3 In the Enter New User dialog box, enter the user ID and click OK.

Fig. 2.7
Enter New User Dialog Box



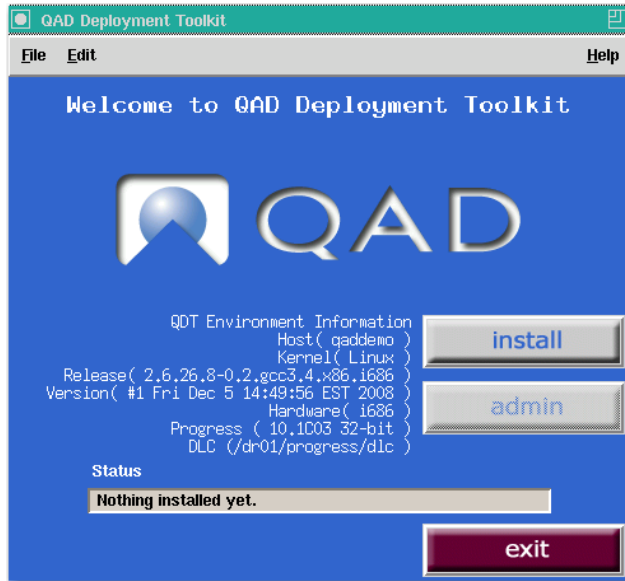
4 In the User Maintenance dialog box, select OK to close the screen and add the users.

Note Authorized user information is stored in the `<qdt_install_dir>/xml/users.xml` file. If you have several users to add, you can add them by directly editing the file.

Initiating the Installation

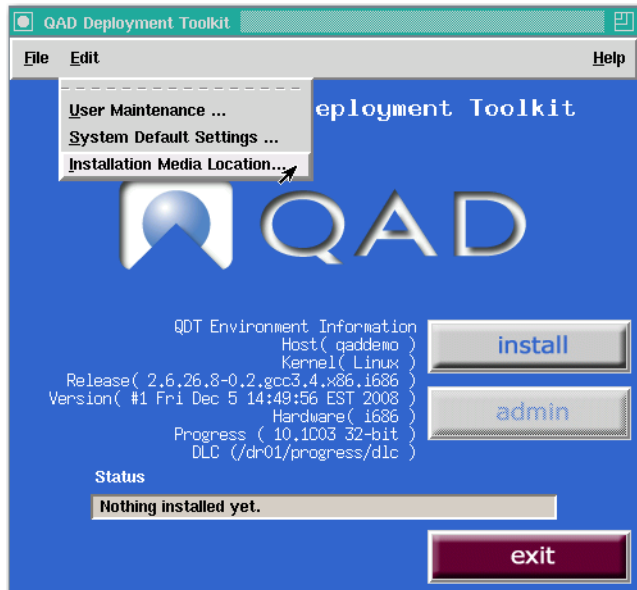
- 1 If the QDT welcome screen is not open, launch QDT. Go to `<qdt_install_directory>/qdt` and run `./qadinst`. For Red Hat 6 or 7 environments, run `qadinst_RH6_64bit` or `qadinst_RH6_32bit`. On HP, run `qadinst.ksh`.

Fig. 2.8
Select Install



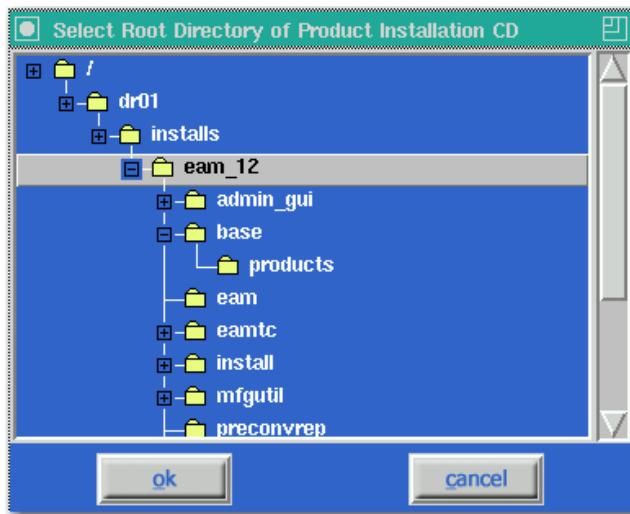
- 2 Select Edit|Installation Media Location.

Fig. 2.9
Select Edit|Installation Media Location



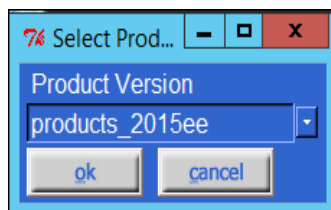
- 3 Browse to the `installs/EAM_<version>` directory in the install folder. Click OK.

Fig. 2.10
Select Edit|Installation Media Location



- 4 Click OK to install the environment.
- 5 The Select Product Version window appears.

Fig. 2.11
Select Product Version Window



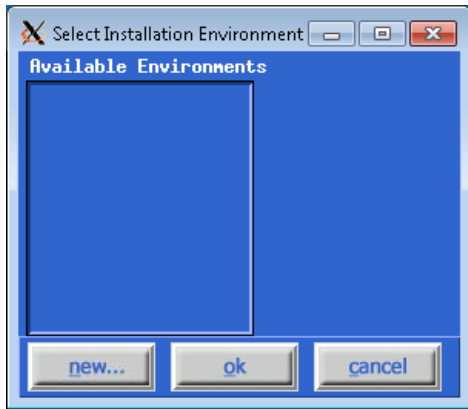
Select the product version to install based on the intended type of EAM installation. For example, to install EAM 2015 against QAD 2015 EE, select `products_2015ee`. To install EAM 2015 against SE, Enterprise Edition versions before 2015 EE, or to install EAM as a stand-alone product, select “products.”

Warning If you select the wrong product version, the wrong components are installed and configured, and you cannot correct your mistake.

Verify that you have made the correct selection. Then click OK.

- 6 The Select Installation Environment dialog box appears.

Fig. 2.12
Select Installation Environment

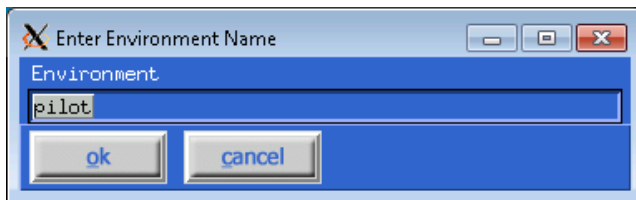


If you are installing EAM against QAD 2015 EE, select an existing EE environment, and click OK. For older releases of Standard Edition, Enterprise Edition, or stand-alone installs, create a new environment.

Note When installing EAM 2015, you must install into an existing 2015 EE environment.

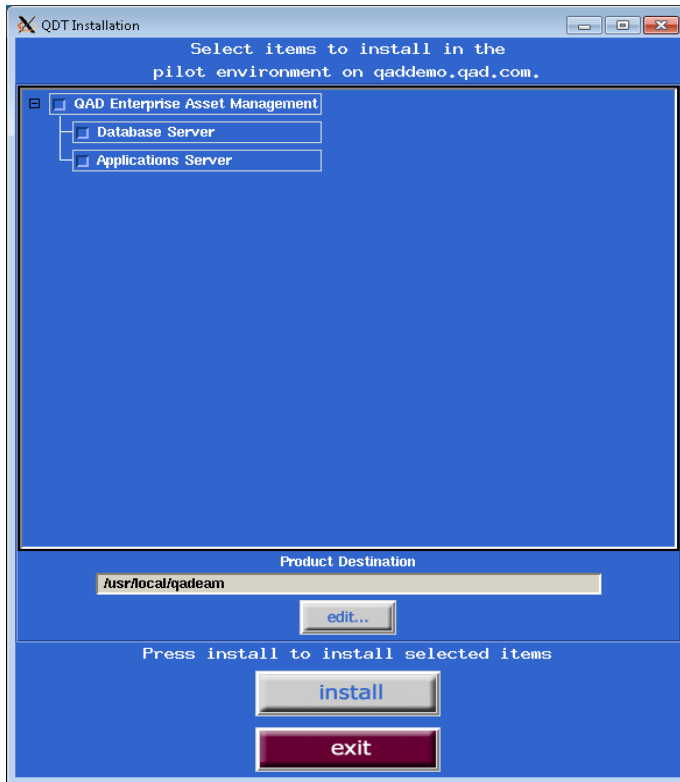
- 7 If you are installing against QAD 2015 EE, accept the default environment name or enter a name in the Enter Environment Name dialog box and click OK.

Fig. 2.13
Enter Environment Name



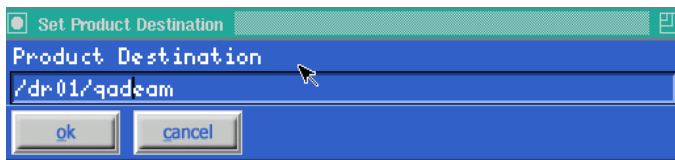
- 8 Click OK.
- 9 Verify that all of the products are selected.

Fig. 2.14
Verify Products to Install



- 10 Verify that the EAM destination is correct. To edit the destination, click Edit and enter the correct destination in the Set Product Destination window.

Fig. 2.15
Verify Path



Note It is common to pick an alternate destination. For example, assuming EAM’s copy of QDT was installed into `<qadappsfolder>/qdt-qadeam-pilot`, a logical choice would be `<qadappsfolder>/qadeam-pilot`.

- 11 Click OK.
- 12 On the QDT Installation Screen (Figure 2.14), click Install.
- 13 A window displays the log file. When the “End of install process” message appears, click Close.

Next Steps

After you install EAM, you configure the EAM installation. Refer to “EAM Environment Configuration” on page 21.

EAM Environment Configuration

This chapter describes how to configure the EAM environment following installation.

Overview 22

Configuring an Installation 22

Completing the Configuration 35

Multiple Environments 36

Next Steps 36

Overview

The QAD Deployment Toolkit (QDT) automatically finds the previously defined system information that is required to install EAM. However, you must modify the default configuration data for your EAM environment following installation.

Important Incorrect modifications can cause configuration problems. Proceed with care.

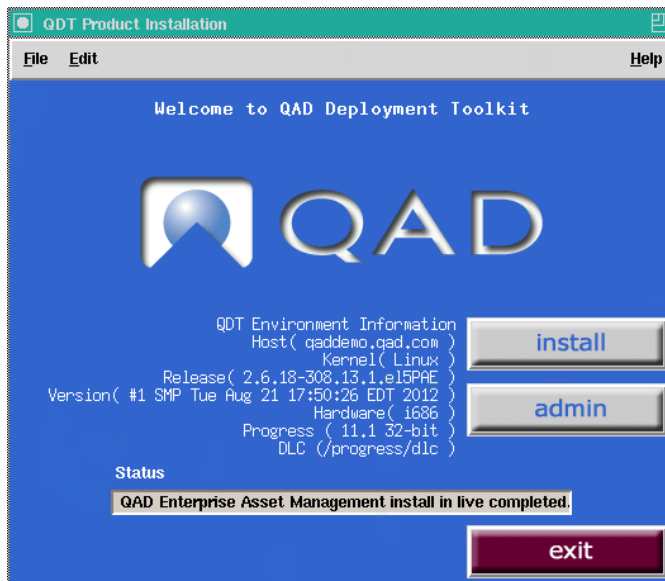
Configuring an Installation

After QDT installs the EAM files on your server, you configure the environment.

To configure the EAM environment, use the following steps:

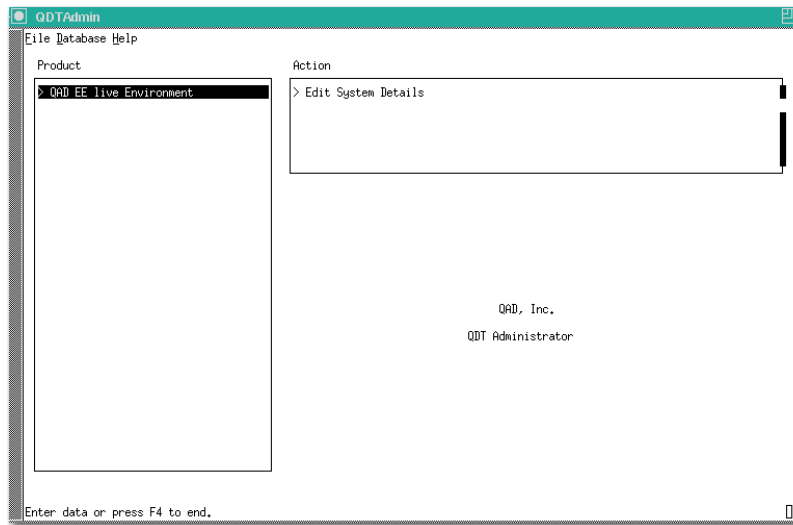
- 1 Click Admin on the QDT main screen. The QDTAdmin window opens.

Fig. 3.1
QDT Main Screen



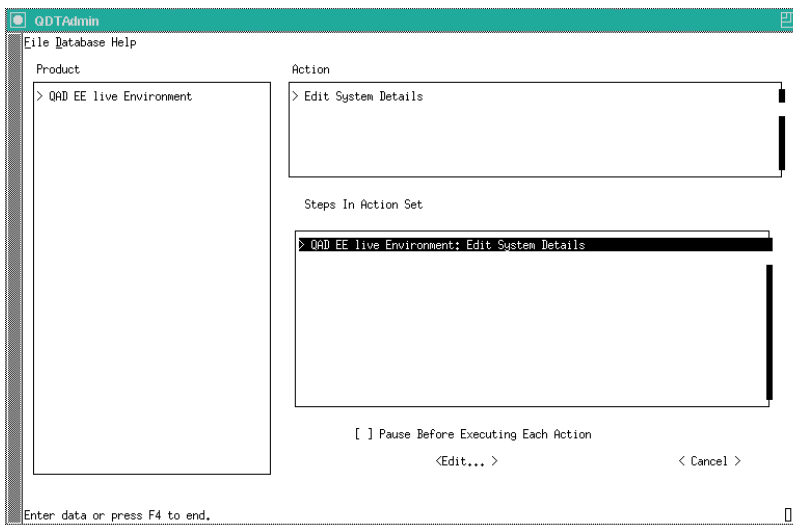
- 2 In the Product pane, highlight the environment that you are configuring by using the up and down arrows.

Fig. 3.2
QDT Admin Screen



- 3 Press Tab to navigate to the Action pane.
- 4 Highlight Edit System Details and press Enter.
- 5 The Steps in Action Set pane appears. Press Enter to edit the system details.

Fig. 3.3
QDT Admin Screen

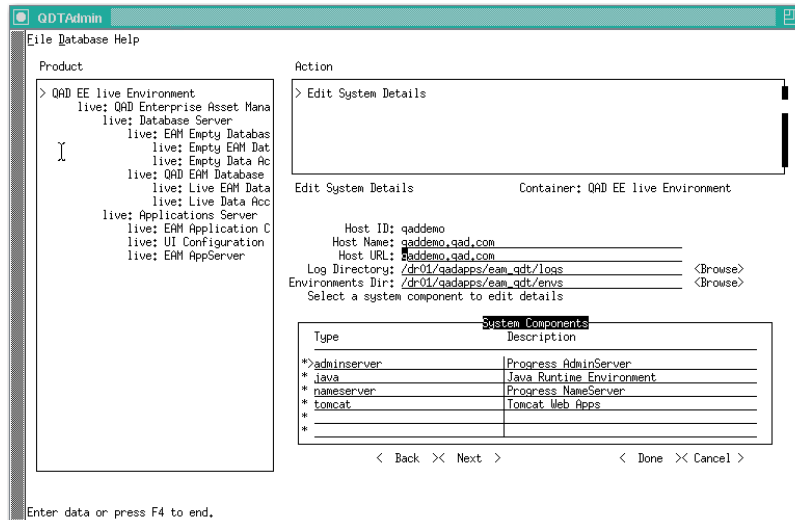


Editing System Details

The Edit System Details function allows you to specify the versions and locations of prerequisite third-party software. Under normal circumstances, the system automatically gathers this information and no changes are required.

You can edit system details for an entire environment by highlighting the environment or an individual component by highlighting the component. For example, selecting EAM allows for the sequential editing of all system details. However, highlighting `<env>:database server` just edits the database settings.

Fig. 3.4
Edit System Details



6 Highlight `<environment_name>`: Edit System Details in the Steps In Action Set pane.

7 In the Edit System Details window, verify that the following settings are correct:

- Host ID
- Host Name
- Host URL
- Log Directory
- Environments Directory
- Progress AdminServer
- Java Runtime Environment
- Progress NameServer
- Tomcat Web Apps

To change a setting, highlight the setting and press Enter.

8 After you have verified the system details, select Done.

Configuring Databases

There are four EAM databases: the empty and live EAM databases and the empty and live DATAACC databases. For each database, verify the following settings:

- Database Location
- Database Properties
- Structure File Information

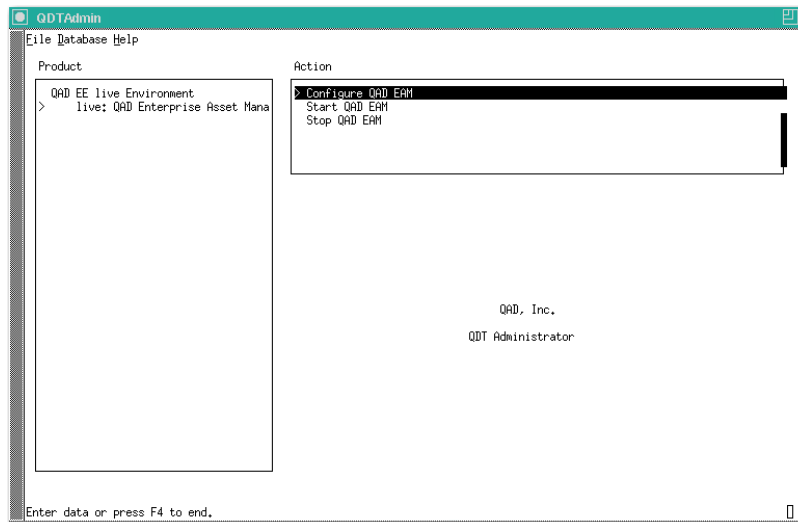
- Schema File Information
- BI Truncation Information
- Data Load Options

Once you verify the settings for a database, cycle through the settings again for the next database. Continue until you have verified these settings for all four databases.

9 In the Product pane, press Enter to expand the tree menu.

10 Highlight QAD Enterprise Asset Management.

Fig. 3.5
Edit System Details

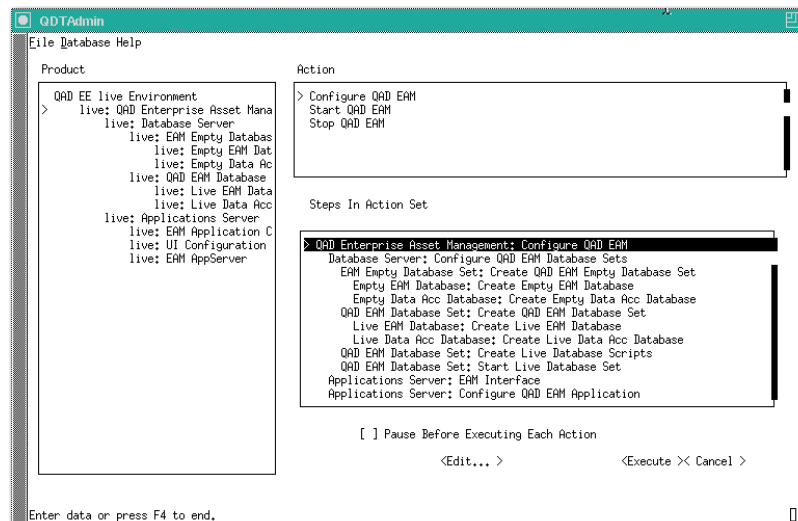


11 Press Tab to highlight Configure QAD EAM in the Action pane.

12 Press Enter.

13 The Steps in Action Set pane appears.

Fig. 3.6
Configure EAM Database Action Steps

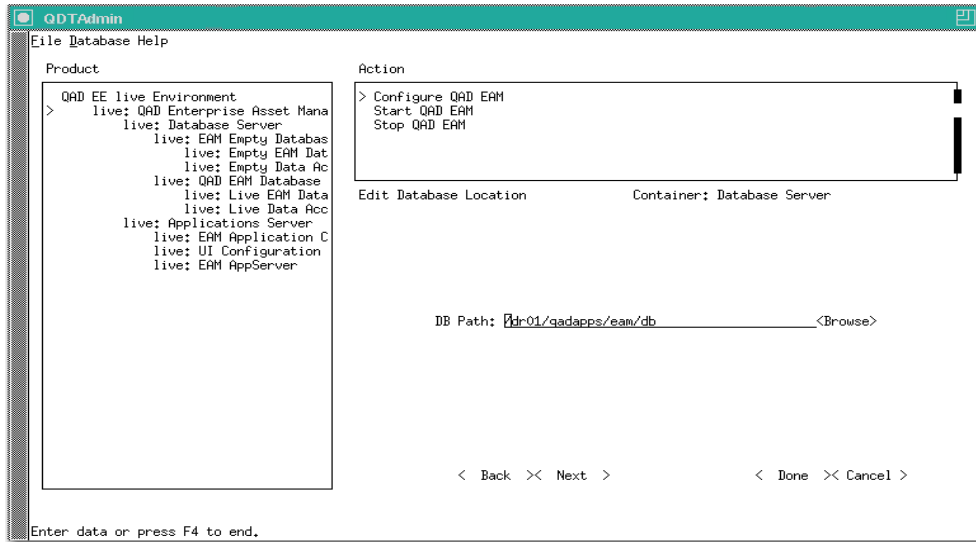


14 Highlight the first step in the Step in Action Set pane. Press Enter.

Note If Pause Before Executing Each Action is selected, the system waits after each action is performed. This option is primarily used to create conversion restore points.

15 Verify that the Database Location is correct. Select Next.

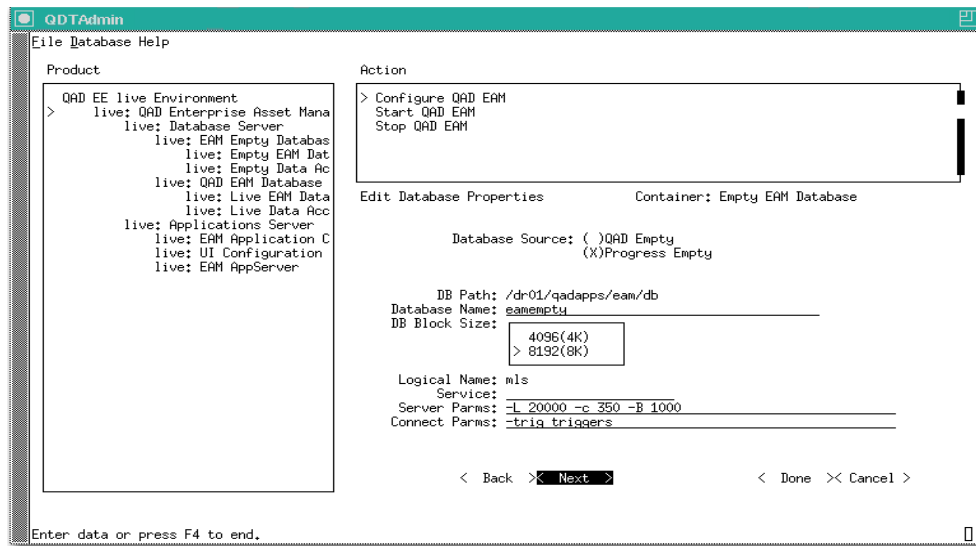
Fig. 3.7
Edit Database Location



16 Verify that the following Database Properties are correct:

- Database Source
- DB Path
- Database Name
- DB Block Size
- Logical Name
- Service. For the EAM and DATAACC databases, verify that Service Numbers are available. For the empty EAM and DATAACC databases, the Service Number is blank.
- Server Parm
- Connect Parm

Fig. 3.8
Edit Database Properties



- 17 Once you verify that the Database Properties are correct, select Next to go to the Edit Structure File Information screen.

Structure File Information

The Edit Structure File Information screen defines how databases are created on the disk—the storage areas, their sizes, locations, and whether they are of fixed length.

The Structure File Information Detail screen lets you edit the Storage Area Path and the Extent Size for fixed-length extents.

- Use the Extent Pathname to distribute your database onto drives to maximize performance and optimize disk access.
- Use the Extent Size on fixed-length extents to control the size of each storage area. This field does not appear for variable-length extents.

Note Most storage areas consist of two extents: one fixed length and the other of variable length to allow for growth. For performance reasons, the goal is to keep all of the data in fixed database extents. QAD Services can aid in the optimal configuration of the structure file.

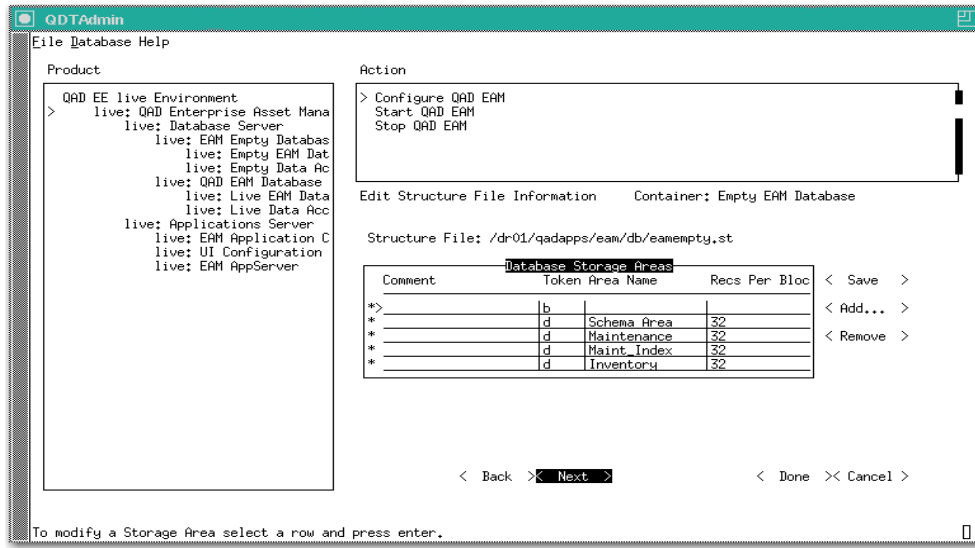
Warning Do not edit the Comment line in a storage area. Editing this line converts the storage area definition to a comment and nullifies it. To add a comment to the file, select a comment line (#) from the Database Storage Area's selection list and press Enter.

Warning Do not change the storage Area Name. This name matches the Area definition in the data definition (.def) files for the database. When Progress encounters data files without defined storage areas, it creates them in the system storage area, which is also used to maintain the structure of the database.

- 18 Verify that the Structure File Information is correct.

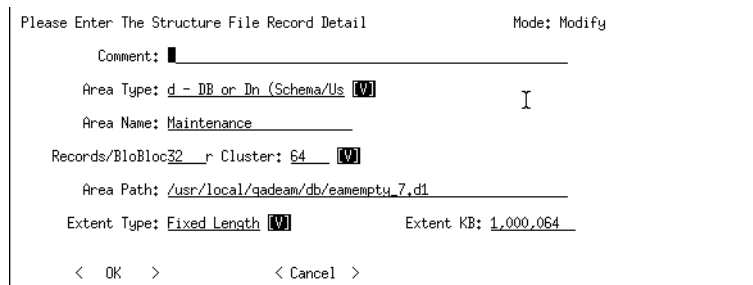
Scroll through the Progress structure file line-by-line and make any necessary modifications. You can add lines by selecting Add or edit the content of any line by selecting the line so that the line detail displays.

Fig. 3.9
Edit Structure File Information



If you select a line, the Structure File Record Detail Screen appears.

Fig. 3.10
Structure File Record Detail Screen



If necessary, modify the following parameters:

- Comment
- Area Type
- Area Name
- Records/BloBloc
- Cluster
- Area Path
- Extent Type
- Extent KB

Select OK to save the changes and return to the Edit Structure File Information screen.

Note If error messages are generated during this process, you can usually disregard them. Continue with the process. If you are unable to continue, contact QAD Support for assistance.

19 Once you verify that the Structure File Information is correct, select Next.

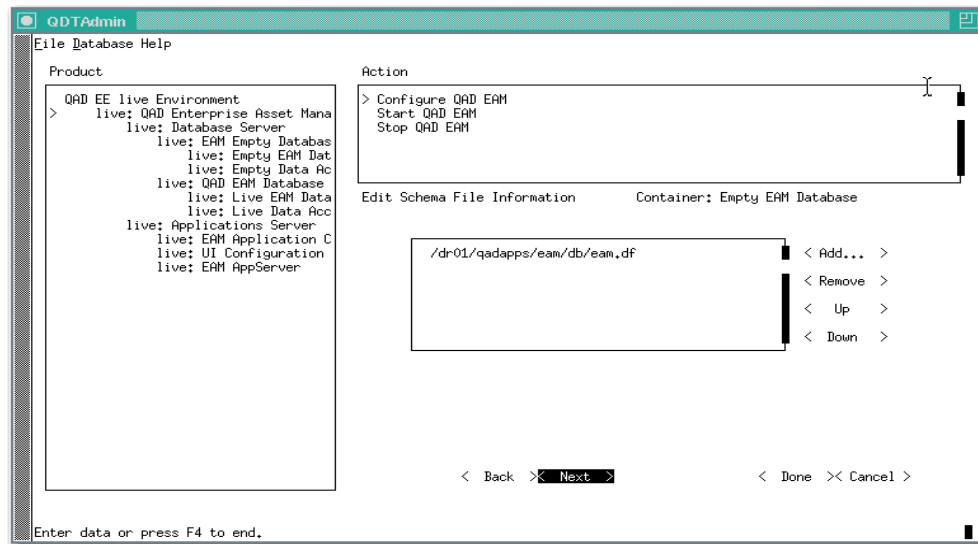
- 20 The QDT may ask if you want to save changes to the structure file. Choose whether to save the changes and select Next.

Schema File Information

- 21 Verify that the Schema File Information is correct. Select Next.

Fig. 3.11

Edit Schema File Information



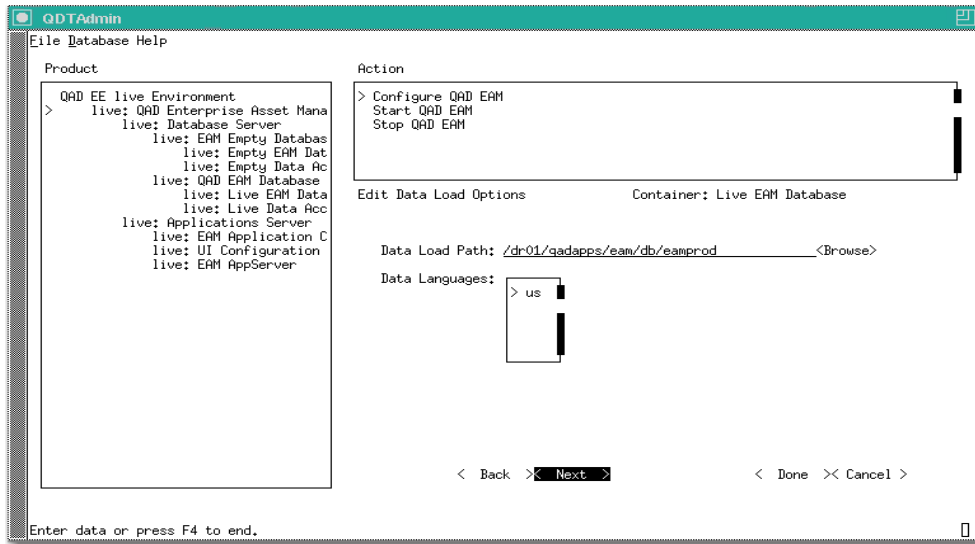
Editing Data Load Options

This screen only appears when you are configuring the Live EAM Database and Live Data Acc Database. If this screen does not appear, proceed to “BI Truncation Parameters” on page 30.

- 22 Verify the Data Load Options. Select Next.

Note Not all databases have data load options. If a database does not have data load options, the Edit Data Load Options screen does not display.

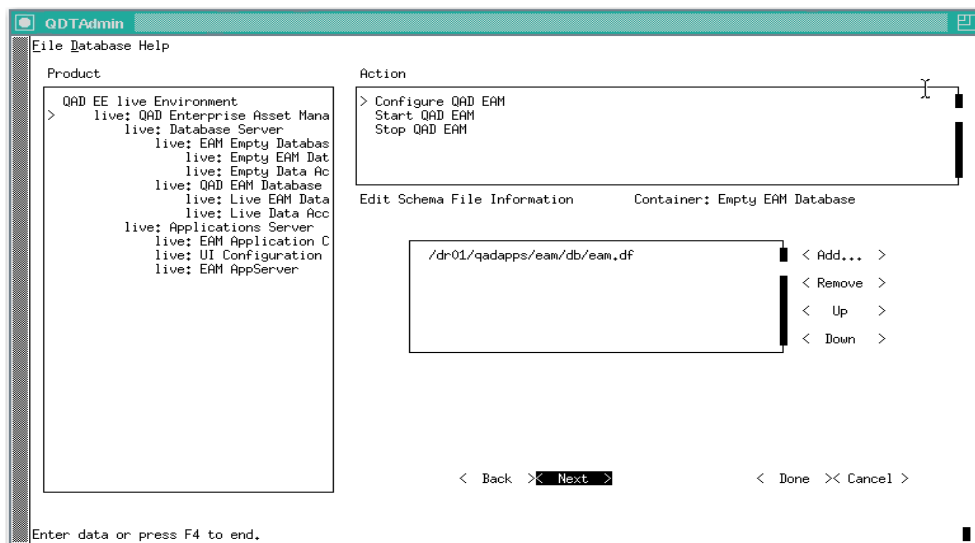
Fig. 3.12
Edit BI Truncation Parameters



BI Truncation Parameters

23 Verify that the BI Truncation Parameters are correct. Select Next.

Fig. 3.13
Edit BI Truncation Parameters



Configure the Settings for the Remaining Databases

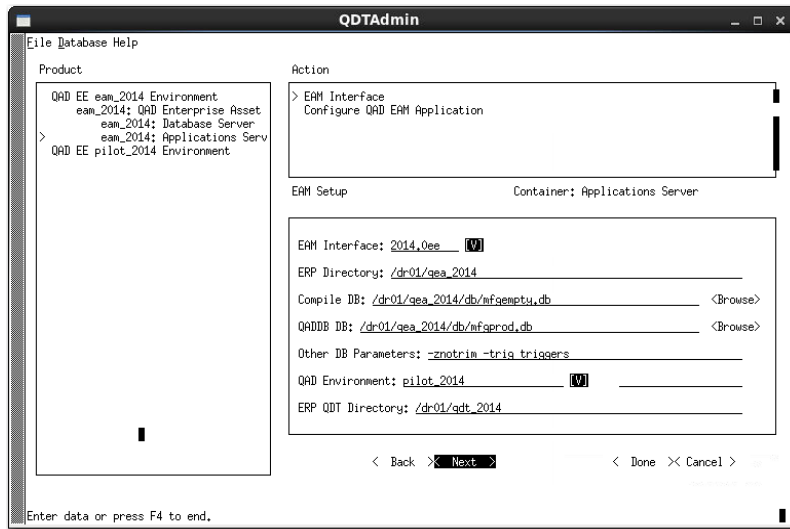
24 After you verify the BI Truncation Parameters, select Next. You are brought to the Edit Database Properties screen for the next database. Return to step 16 and repeat the configuration steps for the remaining databases.

Interfacing to QAD SE and EE

Use the following steps to interface EAM with QAD Standard or Enterprise Edition.

- 25 If the EAM Setup screen is not already open, select Configure EAM Interface from the Steps In Action Set pane.

Fig. 3.14
Configure EAM Application Screen



- 26 Select the appropriate QAD installation from the drop-down EAM Interface menu. This menu lists the available QAD environments compatible with EAM. Standalone is the default selection.
- 27 Edit the Compile DB field as needed. This entry is the QAD (qaddb) empty database that is used to compile the Progress code.
- 28 Edit the QADDB DB field as needed. This entry is the Production QAD (qaddb) database that contains the production data that needs to be connected to EAM for business transactions to work properly.
- 29 Edit the Other DB Parameters field as needed. Values in this field are added to the qaddb.pf database connection file.

Note You can use any valid Progress database parameter in this field.

If you are interfacing with QAD SE, skip the following steps and proceed to “Completing the Configuration” on page 35.

For QAD Enterprise Edition (EE) interfaces only, follow these steps:

- 30 The default EAM Interface is 2015.0ee. The rest of the fields default to the correct values. Ensure that they are correct.

The ERP Directory field specifies the location of the QAD EE code. If this code resides on another server, leave this field blank.

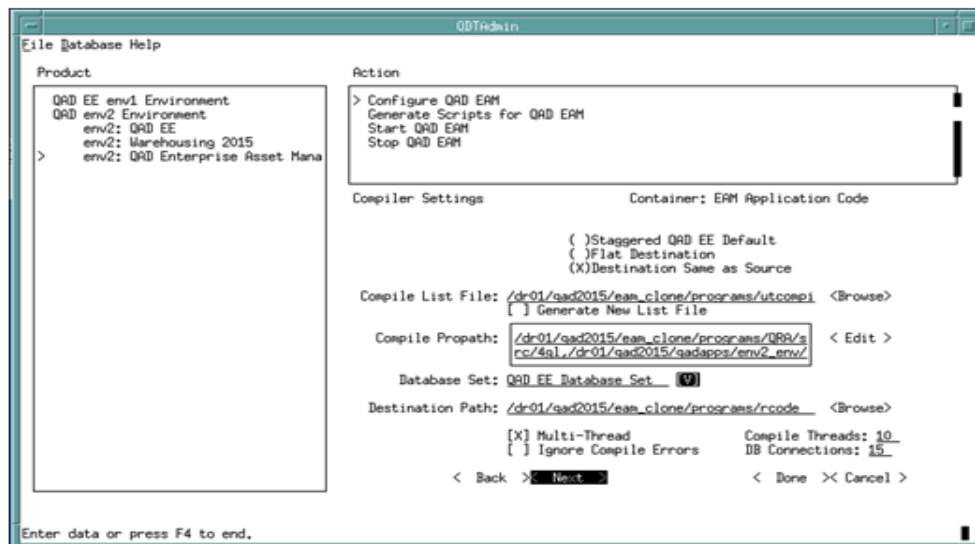
32 QAD Enterprise Asset Management Installation Guide

- 31 The QAD EE environment usually defaults to the correct value. If this menu is blank or does not contain the preferred environment, you can use the field next to the menu to enter the appropriate value.
- 32 The ERP QDT Directory field defaults to the directory containing the QAD EE (not EAM) installation code. This value cannot be the same as the EAM QDT installation code directory.
- Note** QDT tries to extract the QAD EE Financials configuration from the ERP Directory and ERP QDT Directory fields. To interface EAM with QAD EE, specify the ERP Directory or ERP QDT Directory. If possible, specify both directories.
- 33 Select Next.

Configuring Environment Settings

- 34 Verify that the Compiler Settings are correct. Select Next.

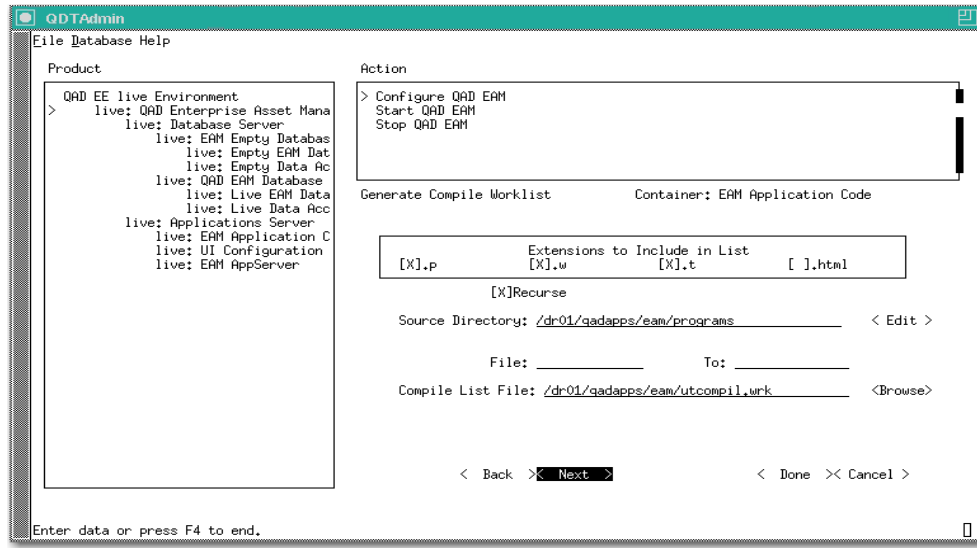
Fig. 3.15
Edit Compiler Settings



If required, set Multi-Thread to True and update the Compile Threads and DB Connections to the desired values.

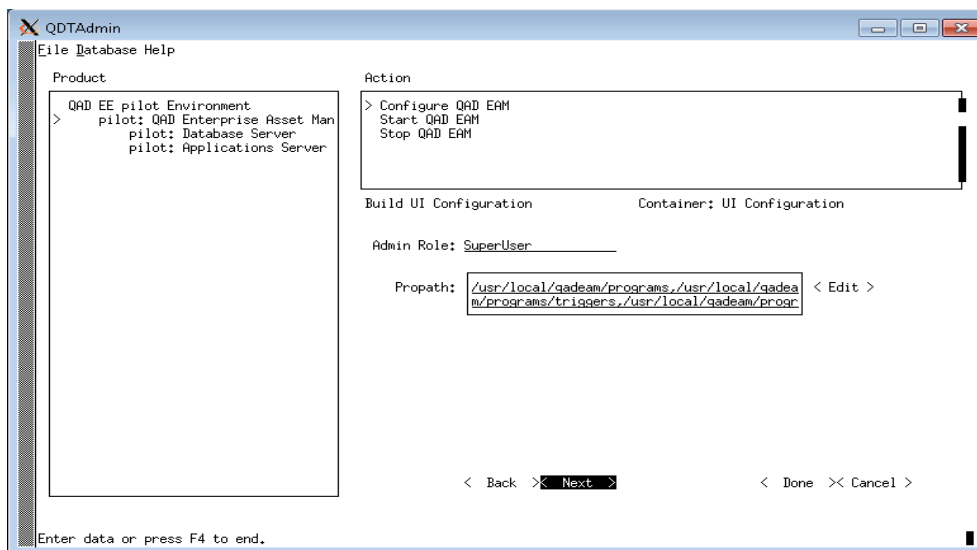
- 35 Verify that the settings on the Generate Compiler Worklist screen are correct. Select Next.

Fig. 3.16
Generate Compiler Worklist



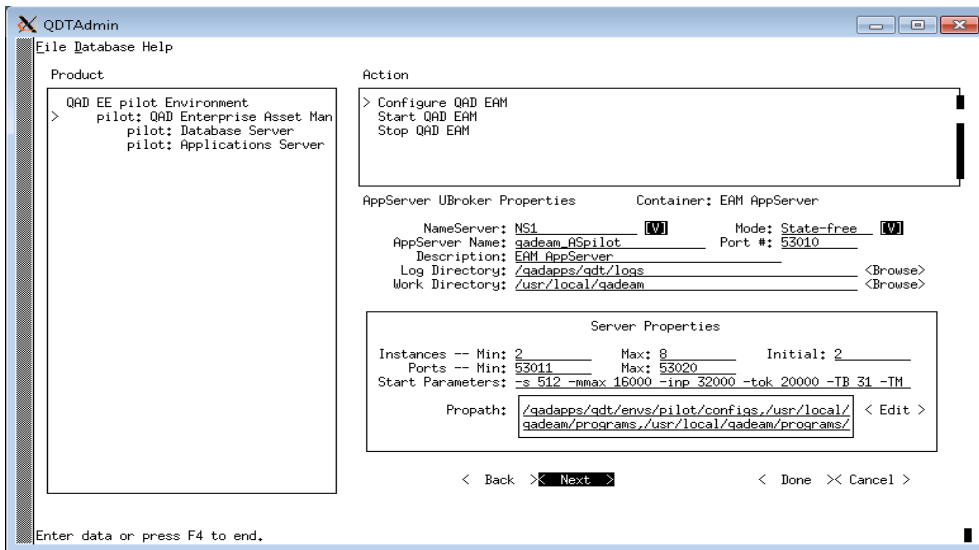
36 Verify that the settings on the Build UI Configuration screen are correct. Select Next.

Fig. 3.17
Build UI Configuration



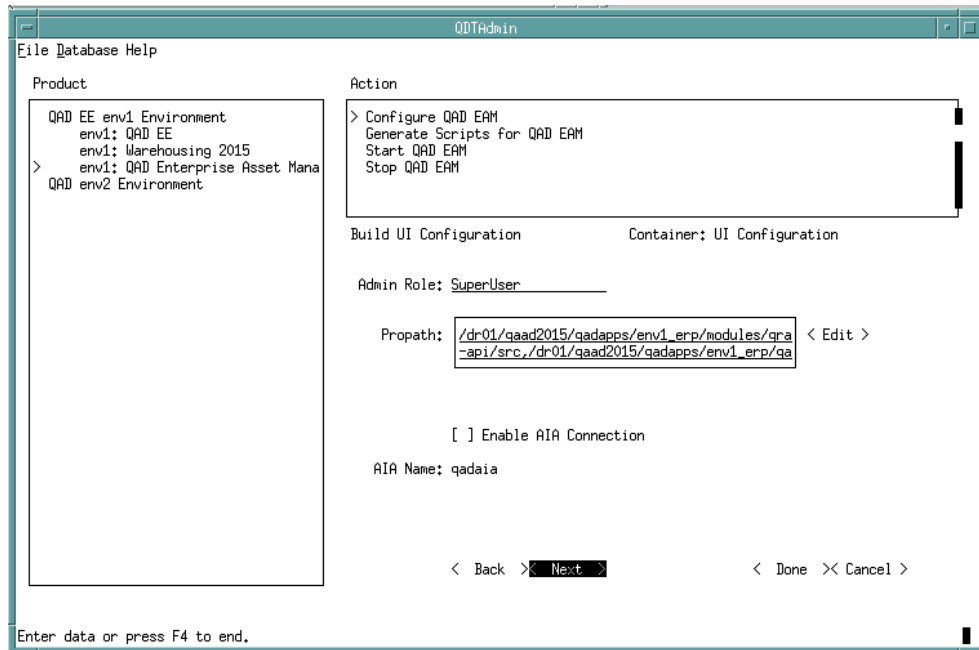
37 Verify that the App Server UBroker Properties are correct.

Fig. 3.18
App Server UBroker Properties



38 In the Build UI Configuration Screen, be sure to disable AIA Connection before completing the installation.

Fig. 3.19
Disable AIA Connection



39 If you are installing EAM to work with Standard Edition, go to “Completing the Configuration” on page 35. Otherwise, proceed to the next section.

Manually Setting Up QAD EE Financial Components

Modification of QAD EE financial component files may be required to interface EAM with QAD EE. When EAM and QAD EE are installed on the same server and QDT is configured correctly, QDT automatically makes these modifications.

However, if EAM is installed on a different server than QAD EE, or the EE and EAM installation directories are not entered correctly, follow the procedure in this section to manually modify the financial component files.

To manually set up the QAD EE financial components files, do the following:

- 1 If you are installing EAM against a 2015 EE environment, go to step 2. Otherwise, locate `cbserver.xml` in the existing QDT or QAD EE directory and copy the file to `<QAD_directory>/envs/<EAM_environment>/configs`.
- 2 Copy `<EAM_directory>/programs/fin_src/<QAD_EE_version>/env.p` to `<EAM_directory>/programs/fin`.
- 3 Locate the `proxy.pl` file in the QAD EE environment. For example, in a 2015 EE environment, this file should be in `<QAD_directory>/fin`. Copy this `.pl` file to `<EAM_directory>/programs/fin`.
- 4 Locate the `proxy` sub-directory in `<QAD_directory>` or one of its sub-directories. If there are multiple directories, find the one that contains a `bPosting` directory. For example, in a 2015 EE installation, the `proxy` directory is usually located in `<QAD_directory>/xrc`.
 - a Create a `proxy` sub-directory in `<EAM_directory>/programs/fin`.
 - b Copy the following directories to `<EAM_directory>/programs/fin`:
 - `<EE_environment's_proxy_folder>/bjournalentry`
 - `<EE_environment's_proxy_folder>/bposting`
 - `<EE_environment's_proxy_folder>/datasets`
- 5 Recompile EAM using QDT.

Completing the Configuration

To complete the custom configuration, do the following:

- 1 If you have no further configuration changes, go to the QDTAdmin screen and select Execute.
- 2 The system prompts you to confirm execution of the configuration process. Select Yes.
- 3 You are prompted to clear the log. Select Yes. The configuration process begins. The installation script launches.
- 4 Select Close. A window displays the `qdtadmin.log` file, which records the configuration progress.

Note A message displays during full synchronization that says a default set of roles was not provided for the installation. Use of this capability is optional. The message is for information purposes only and does not affect the system.

- 5 When the configuration process finishes, go to the logs directory and review the `qdtadmin.log` file for errors.
- 6 Correct any errors and attempt the configuration again. Otherwise, select Close to exit.

Multiple Environments

You can install EAM in multiple environments (for example, test and production). Repeat the installation process described in this chapter for each environment. Use separate Tomcat Web server directories and ports for each environment. For example, the original webapp could be `qadhome_eam` (for use in production) and a second might be `qadhome_eam_pilot`.

If you install EAM in multiple environments, perform the applicable configuration procedures in this chapter separately for each environment. Then launch the application and perform post-installation configuration for each environment.

Next Steps

Proceed to “Launching EAM” on page 37. If you have installed EAM in multiple environments, launch the application and perform post-installation configuration for each environment.

Launching EAM

This chapter describes how to launch the EAM product.

Starting EAM 38

Exiting EAM 40

Backing Up the Database 40

Starting EAM

The applications server build creates launch scripts for UNIX and Linux or icons and Start menu links for Windows. Test your startup scripts with the following steps. You can use these same steps to start Progress database servers and character clients.

Note Before starting EAM, completely exit from the QDT. Exiting QDT updates the EAM prerequisites in the QDT XML files.

Windows Installations

To start EAM, select EAM from the Start menu.

Linux and UNIX Installations

Follow these steps for Linux and UNIX installations:

- 1 Verify that Tomcat, Progress, and Java have started. If they have not started, launch them using the following scripts:

Note You must have permission to run these scripts.

Linux/UNIX:

Progress Admin Server: `$DLC/bin/proadsv -start`

Progress Name Server: `$DLC/bin/nsman -i NS1 -start`

Tomcat: `/dr01/tomcat/8080/bin/startup.sh`

Windows:

Tomcat: `/dr01/tomcat/8080/bin/startup.bat`

Progress: Use Progress Explorer to start the Progress Admin Server and Progress NameServer.

- 2 Navigate to the `QDT/eam/envs/<EnvironmentName>/scripts` directory and launch the server script:

Databases: `./start.EnvironmentName`

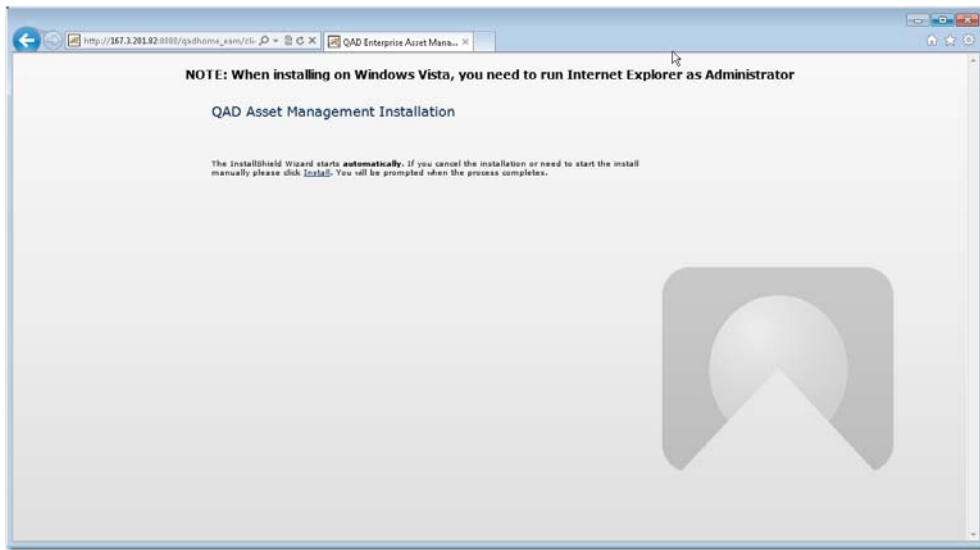
AppServer broker: `./startqadeam_AS.ksh`

- 3 For non-2015 EE environments, install the client by opening the following URL:

http://tomcat_server:port_number/qadhome_eam

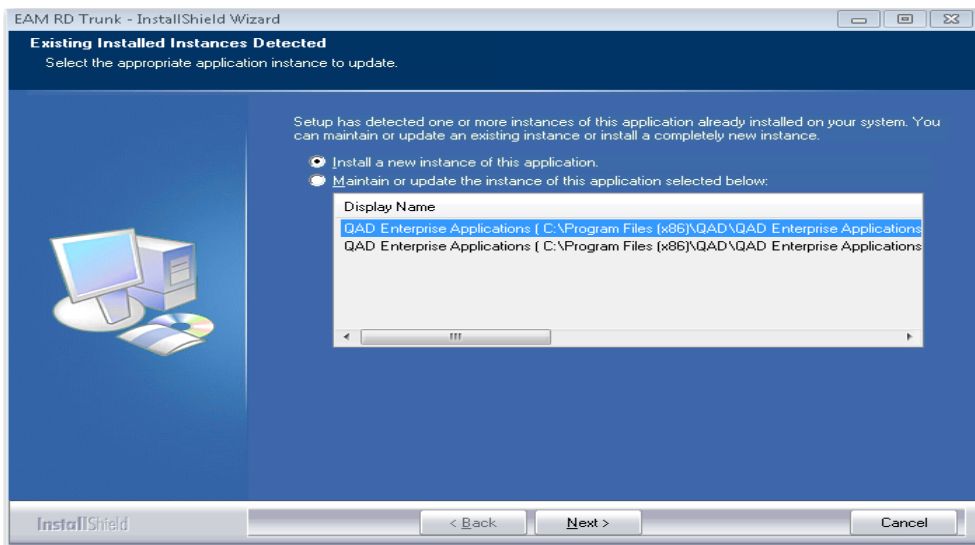
Note Multiple environments require multiple installation URLs. For example, if a `qadhome_eam_pilot` environment was created in addition to a `qadhome_eam_production` environment, the installation URL for the pilot environment would be http://tomcat_server:<port number>/qadhome_eam_pilot.

Fig. 4.1
Installing the Client



- 4 A window appears that asks if you want to run this setup. Select “I understand” and click OK.
- 5 Select Install New Instance of this Application. Click Next.

Fig. 4.2
Install New Instance



- 6 Verify that the install location is correct. Click Next.
- 7 Select that you want a shortcut on the desktop and in the programs folder. Click Next.
- 8 Enter the shortcut name. Click Next.
- 9 The Client starts loading.

Log In to EAM

Verify that you can log in to EAM using the following username and password:

- Username: sysadm

Note If 2015 EE is loaded with demo data, the sysadm user cannot access the EAM screens. User mfg can access the EAM screens, but cannot modify them.

- Password: Leave this field blank
- Log On To: qadeam

Exiting EAM

To exit EAM, select End on the EAM Main Menu.

Backing Up the Database

Perform a complete backup of the entire database and directory structure.

Post-installation Configuration

This section describes activities to perform after completing an installation to ensure that the application is ready for use.

Overview 42

Set Up Progress Editor 42

Overview

This section describes the tasks that you perform after EAM installation to ensure that the application is ready for use.

Set Up Progress Editor

EAM features a Progress editor similar to QAD SE's and EE's mgeditor menu option. The editor uses SSH (Secure Shell) rather than standard telnet. SSH is a protocol that can create a secure connection between the EAM .NET UI client and the server. The safeguards that SSH provides include:

- User authentication and key exchange
- Negotiated encryption, compression, and message integrity verification
- All data is encrypted using a symmetric key algorithm and verified against a keyed-hash message authentication code (HMAC)

Follow these steps to set up SSH:

- 1 Download Granados 2.0 (`granados200.tar.gz`) from the following link:

<http://www.routrek.co.jp/en/product/varaterm/granados.html>

Note This file is not included with QAD software because of encryption export control laws.

- 2 Save the file to a temporary directory on the Tomcat server.
- 3 Extract `Routrek.granados.dll` from the archive using `gunzip` and `tar`.
The `gunzip` and `tar` programs are Linux/UNIX utilities. Some WinZip versions support `*.tar.gz` files.

- a Create `granados200.tar`:

```
gunzip granados200.tar.gz
```

- b Extract the tar archive:

```
tar -xf granados200.tar
```

The DLL file is located in the temporary directory's `/bin` directory.

- 4 Copy the DLL to `<tomcat_install_directory>/webapps/<qadhome_eam>`.
- 5 Open the EAM client's `client-session.xml` file. The client session file defines the client session characteristics of the QAD .NET UI. By default, the file is located in:

```
<tomcat_install_directory>/webapps/<qadhome_eam>/configurations  
/qadeam/client-session.xml
```

Make the following changes:

- a Locate the `SshProviderUrl` tag in `client-session.xml`. If the tag does not say the following, update it:

```
<SshProviderUrl>${HomeServer}/Routrek.granados.dll</SshProvider  
Url>
```

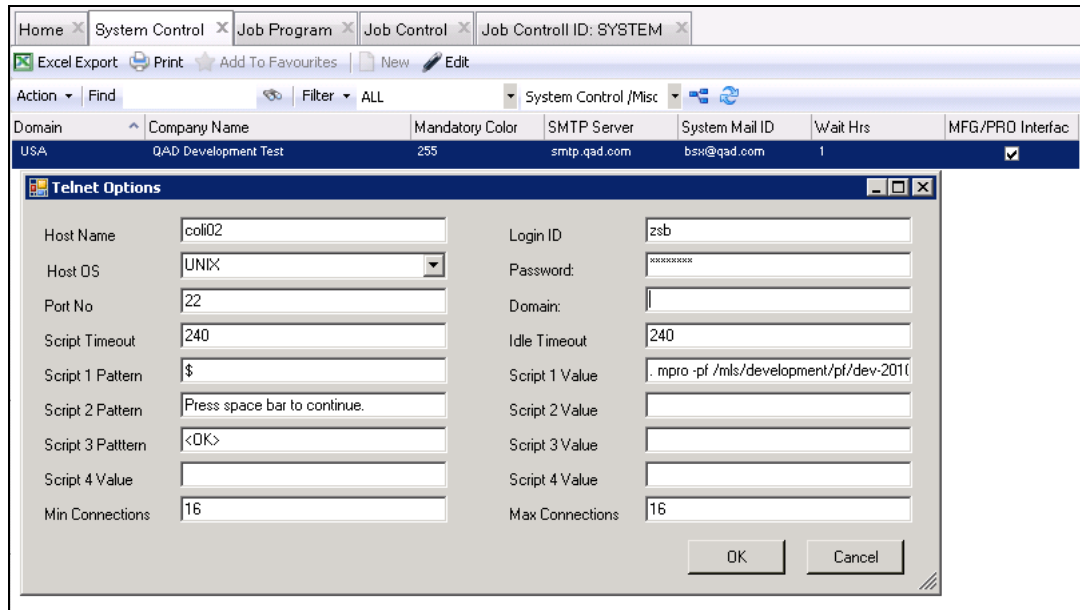
b Change the terminal protocol entry from telnet to SSH2:

```
<TerminalProtocol>SSH2<TerminalProtocol/>
```

6 Save the .xml file.

7 In EAM, open the System Control browse and select Telnet Options from the Actions drop-down.

Fig. 5.1.
Telnet Options



Note If the Action is not available, review the Role security settings.

Table 5.1
Role Security Settings

Field Name	Setting
Host Name	DNS name or IP address of the EAM DB server
Login ID	ID used to log in to the EAM DB server (for example, mfg)
Host OS	Verify that UNIX is selected
Password	Password used to log in to the DB server. Note: The password is encrypted before it is stored in the database.
Port No	DB Server's SSH port (usually 22)
Domain	Reserved for future use
Script Timeout	Reserved for future use. Leave this value at 240
Idle Timeout	Reserved for future use. Leave this value at 240
Script 1 Pattern	This entry is the pattern EAM is looking for before it runs Script 1 Value. This entry is usually the OS's command line prompt. Example: \$

Field Name	Setting
Script 1 Value	<p>The command line value to enter once EAM sees the DB server write Script 1 Pattern. Use this value to run mpro and pass it the .pf file that the EAM appserver uses.</p> <p>Note: Place a period followed by a space (.) at the beginning of this line so that the Progress Editor window closes after the Progress session ends. Without this, users are left at the server's command prompt.</p> <p>Example: . mpro -pf /qadapps/eam/pf/eamtest.pf</p>
Script 2 Pattern	(Optional) This entry is the next pattern EAM is looking for. It runs Script Value 2 when it sees it. You can use this entry to skip through Progress messages related to codepage, if they occur. Example: Press space bar to continue.
Script 2 Value	The keyboard strokes / text that EAM automatically writes to the telnet session when Script 2 Pattern is detected. An Example would be a space (" " without the double quotes).
Script 3 Pattern	(Optional) If more keyboard automation is required, EAM looks for this pattern.
Script 3 Value	(Optional) If more keyboard automation is required, EAM automatically enters these keystrokes when Script 3 Pattern is detected.
Script 4 Pattern	(Optional) If more keyboard automation is required, EAM looks for this pattern.
Script 4 Value	(Optional) If more keyboard automation is required, EAM automatically enters these keystrokes when Script 4 Pattern is detected.
Min Connections	Reserved for future use
Max Connections	Reserved for future use

Product Information Resources

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[QAD Knowledgebase \(knowledgebase.qad.com\)*](https://knowledgebase.qad.com)

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[QAD Document Library \(documentlibrary.qad.com\)](https://documentlibrary.qad.com)

Get browser-based access to user guides, release notes, training guides, and so on; use powerful search features to find the document you want, then read online, or download and print PDF.

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