



## **OpenEdge Management:** Installation and Configuration Guide

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# Preface

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This Preface contains the following sections:

- [Purpose](#)
- [Audience](#)
- [Organization](#)
- [Using this manual](#)
- [Typographical conventions](#)
- [Examples of syntax descriptions](#)
- [OpenEdge messages](#)

## Purpose

This manual describes how to install and configure OpenEdge® Management in Windows and on UNIX systems. The manual contains installation requirements, CPU and memory requirements, a description of new features, details about using secure communications, and a description of how to begin configuring and working with OpenEdge Management.

For the latest documentation updates see the OpenEdge Product Documentation category on PSDN <http://www.psdn.com/library/kbcategory.jspa?categoryID=129>.

## Audience

This manual is intended for users and administrators of the OpenEdge Management product.

## Organization

### Chapter 1, “Welcome to OpenEdge Management”

Introduces OpenEdge Management and describes where you can find product documentation and details about how to get started using the product. Also includes information about Progress Software Corporation services and support.

### Chapter 2, “Before You Install OpenEdge Management”

Describes planning considerations, system requirements, and license requirements.

### Chapter 3, “Installing OpenEdge Management in Windows”

Provides instructions for installing and uninstalling OpenEdge Management in Windows systems.

### Chapter 4, “Installing OpenEdge Management on UNIX”

Provides instructions for installing and uninstalling OpenEdge Management on UNIX systems.

### Chapter 5, “Introducing OpenEdge Management”

Provides an introduction to the OpenEdge Management configuration.

### Chapter 6, “Setting Up OpenEdge Management for the First Time”

Describes how to select initial configuration options.

### Chapter 7, “Configuring Remote Monitoring for OpenEdge Management”

Provides information about how to set up remote monitoring for OpenEdge Management.

### Chapter 8, “Administering OpenEdge Management”

Provides the following information about administering OpenEdge Management after the initial installation: reviewing product configuration, changing initial OpenEdge configuration options, setting up users as operators or administrators, setting other preferences, and working with OpenEdge Management by using the command-line interface.

### Chapter 9, “Setting up Secure Communications for OpenEdge Management”

Describes how to set up the HTTPS protocol for use with the OpenEdge Management Web server and the OpenEdge Management Trend Database (when trending to a remote database). The chapter explains the process of creating a keystore; requesting, obtaining, and then importing a signed certificate; and then adding the signed certificate to the keystore.

### “Glossary”

## Using this manual

OpenEdge provides a special purpose programming language for building business applications. In the documentation, the formal name for this language is *ABL (Advanced Business Language)*. With few exceptions, all keywords of the language appear in all UPPERCASE, using a font that is appropriate to the context. All other alphabetic language content appears in mixed case.

## References to ABL compiler and run-time features

ABL is both a compiled and interpreted language that executes in a run-time engine that the documentation refers to as the *ABL Virtual Machine (AVM)*. When documentation refers to ABL source code compilation, it specifies *ABL* or *the compiler* as the actor that manages compile-time features of the language. When documentation refers to run-time behavior in an executing ABL program, it specifies *the AVM* as the actor that manages the specified run-time behavior in the program.

For example, these sentences refer to the ABL compiler's allowance for parameter passing and the AVM's possible response to that parameter passing at run time: "ABL allows you to pass a dynamic temp-table handle as a static temp-table parameter of a method. However, if at run time the passed dynamic temp-table schema does not match the schema of the static temp-table parameter, the AVM raises an error." The following sentence refers to run-time actions that the AVM can perform using a particular ABL feature: "The ABL socket object handle allows the AVM to connect with other ABL and non-ABL sessions using TCP/IP sockets."

## References to ABL data types

ABL provides built-in data types, pre-defined class data types, and user-defined class data types. References to built-in data types follow these rules:



- Like most other keywords, references to specific built-in data types appear in all UPPERCASE, using a font that is appropriate to the context. No uppercase reference ever includes or implies any data type other than itself.
- Wherever *integer* appears, this is a reference to the INTEGER or INT64 data type.
- Wherever *decimal* appears, this is a reference to the DECIMAL data type.
- Wherever *numeric* appears, this is a reference to the INTEGER, INT64, or DECIMAL data type.

References to pre-defined class data types appear in mixed case with initial caps, for example, `Progress.Lang.Object`. References to user-defined class data types appear in mixed case, as specified for a given application example.

# Typographical conventions

This manual uses the following typographical conventions:

Convention	Description
<b>Bold</b>	Bold typeface indicates commands or characters the user types, provides emphasis, or the names of user interface elements.
<i>Italic</i>	Italic typeface indicates the title of a document, or signifies new terms.
<b>SMALL, BOLD CAPITAL LETTERS</b>	Small, bold capital letters indicate OpenEdge key functions and generic keyboard keys; for example, <b>GET</b> and <b>CTRL</b> .
<b>KEY1+KEY2</b>	A plus sign between key names indicates a <b>simultaneous</b> key sequence: you press and hold down the first key while pressing the second key. For example, <b>CTRL+X</b> .
<b>KEY1 KEY2</b>	A space between key names indicates a <b>sequential</b> key sequence: you press and release the first key, then press another key. For example, <b>ESCAPE H</b> .
<b>Syntax:</b>	
Fixed width	A fixed-width font is used in syntax statements, code examples, system output, and filenames.
<i>Fixed-width italics</i>	Fixed-width italics indicate variables in syntax statements.
<b><i>Fixed-width bold</i></b>	Fixed-width bold indicates variables with special emphasis.
UPPERCASE fixed width	Uppercase words are ABL keywords. Although these are always shown in uppercase, you can type them in either uppercase or lowercase in a procedure.

Convention	Description
	This icon (three arrows) introduces a multi-step procedure.
	This icon (one arrow) introduces a single-step procedure.
Period (.) or colon (:)	All statements except DO, FOR, FUNCTION, PROCEDURE, and REPEAT end with a period. DO, FOR, FUNCTION, PROCEDURE, and REPEAT statements can end with either a period or a colon.
[ ]	Large brackets indicate the items within them are optional.
[ ]	Small brackets are part of the ABL.
{ }	Large braces indicate the items within them are required. They are used to simplify complex syntax diagrams.
{ }	Small braces are part of the ABL. For example, a called external procedure must use braces when referencing arguments passed by a calling procedure.
	A vertical bar indicates a choice.
...	Ellipses indicate repetition: you can choose one or more of the preceding items.

## Examples of syntax descriptions

In this example, ACCUM is a keyword, and *aggregate* and *expression* are variables:

**Syntax**

```
ACCUM aggregate expression
```

FOR is one of the statements that can end with either a period or a colon, as in this example:

```
FOR EACH Customer:  
    DISPLAY Name.  
END.
```



In this example, STREAM *stream*, UNLESS-HIDDEN, and NO-ERROR are optional:

### Syntax

```
DISPLAY [ STREAM stream ] [ UNLESS-HIDDEN ] [ NO-ERROR ]
```

In this example, the outer (small) brackets are part of the language, and the inner (large) brackets denote an optional item:

### Syntax

```
INITIAL [ constant [ , constant ] ]
```

A called external procedure must use braces when referencing compile-time arguments passed by a calling procedure, as shown in this example:

### Syntax

```
{ &argument-name }
```

In this example, EACH, FIRST, and LAST are optional, but you can choose only one of them:

### Syntax

```
PRESELECT [ EACH | FIRST | LAST ] record-phrase
```

In this example, you must include two expressions, and optionally you can include more. Multiple expressions are separated by commas:

### Syntax

```
MAXIMUM ( expression , expression [ , expression ] ... )
```

In this example, you must specify MESSAGE and at least one *expression* or SKIP [ ( *n* ) ], and any number of additional *expression* or SKIP [ ( *n* ) ] is allowed:

### Syntax

```
MESSAGE { expression | SKIP [ ( n ) ] } ...
```

In this example, you must specify { *include-file*, then optionally any number of *argument* or *&argument-name* = "*argument-value*", and then terminate with }:

### Syntax

```
{ include-file  
  [ argument | &argument-name = "argument-value" ] ... }
```

## Long syntax descriptions split across lines

Some syntax descriptions are too long to fit on one line. When syntax descriptions are split across multiple lines, groups of optional and groups of required items are kept together in the required order.

In this example, WITH is followed by six optional items:

### Syntax

```
WITH [ ACCUM max-length ] [ expression DOWN ]  
    [ CENTERED ] [ n COLUMNS ] [ SIDE-LABELS ]  
    [ STREAM-IO ]
```

## Complex syntax descriptions with both required and optional elements

Some syntax descriptions are too complex to distinguish required and optional elements by bracketing only the optional elements. For such syntax, the descriptions include both braces (for required elements) and brackets (for optional elements).

In this example, ASSIGN requires either one or more *field* entries or one *record*. Options available with *field* or *record* are grouped with braces and brackets:

### Syntax

```
ASSIGN { [ FRAME frame ] { field [ = expression ] }  
        [ WHEN expression ] } ...  
      | { record [ EXCEPT field ... ] }
```

## OpenEdge messages

OpenEdge displays several types of messages to inform you of routine and unusual occurrences:

- **Execution messages** inform you of errors encountered while OpenEdge is running a procedure; for example, if OpenEdge cannot find a record with a specified index field value.
- **Compile messages** inform you of errors found while OpenEdge is reading and analyzing a procedure before running it; for example, if a procedure references a table name that is not defined in the database.
- **Startup messages** inform you of unusual conditions detected while OpenEdge is getting ready to execute; for example, if you entered an invalid startup parameter.

After displaying a message, OpenEdge proceeds in one of several ways:

- Continues execution, subject to the error-processing actions that you specify or that are assumed as part of the procedure. This is the most common action taken after execution messages.
- Returns to the Procedure Editor, so you can correct an error in a procedure. This is the usual action taken after compiler messages.
- Halts processing of a procedure and returns immediately to the Procedure Editor. This does not happen often.
- Terminates the current session.

OpenEdge messages end with a message number in parentheses. In this example, the message number is 200:

```
** Unknown table name table. (200)
```

If you encounter an error that terminates OpenEdge, note the message number before restarting.

## Obtaining more information about OpenEdge messages

In Windows platforms, use OpenEdge online help to obtain more information about OpenEdge messages. Many OpenEdge tools include the following Help menu options to provide information about messages:

- Choose **Help**→**Recent Messages** to display detailed descriptions of the most recent OpenEdge message and all other messages returned in the current session.
- Choose **Help**→**Messages** and then type the message number to display a description of a specific OpenEdge message.
- In the Procedure Editor, press the **HELP** key or **F1**.

On UNIX platforms, use the OpenEdge `pro` command to start a single-user mode character OpenEdge client session and view a brief description of a message by providing its number.



**To use the `pro` command to obtain a message description by message number:**

1. Start the Procedure Editor:

```
OpenEdge-install-dir/bin/pro
```

2. Press **F3** to access the menu bar, then choose **Help**→**Messages**.
3. Type the message number and press **ENTER**. Details about that message number appear.
4. Press **F4** to close the message, press **F3** to access the Procedure Editor menu, and choose **File**→**Exit**.

---

# Welcome to OpenEdge Management

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OpenEdge® Management is a system management center that provides visibility, analysis, and proactive monitoring of critical information assets. OpenEdge Management optimizes the availability and performance of OpenEdge-based applications through system monitoring, alerting, and automatic handling of corrective actions. OpenEdge Management empowers Progress Software customers to become more efficient, decrease the cost of managing the OpenEdge environment, and ensure high availability and performance.

This chapter provides an introduction to OpenEdge Management. The chapter also includes information about service and support, as described in the following sections:

- [Introducing OpenEdge Management](#)
- [What your OpenEdge Management product includes](#)
- [OpenEdge Management product overview](#)
- [Getting started with OpenEdge Management](#)
- [Service and support: a 100% solution](#)
- [Progress Software Developers Network](#)

## Introducing OpenEdge Management

OpenEdge Management provides database administrators and systems operations managers with the performance tools and processes required to configure, monitor, diagnose, and manage the OpenEdge environment. OpenEdge Management not only monitors local and remote OpenEdge databases, system resources (CPU, disk, memory, file system), file resources, and OpenEdge resources (AppServer™, NameServer, and WebSpeed® Transaction Server), it also monitors other components such as TCP-based network services. Deep monitoring provides more information and more detail about your environment, enabling you to proactively manage operations and make your life easier.

Progress Software Corporation believes that you need a product that provides the best business and development solution, plus the highest level of services and support to back it up. This chapter provides the essential information you need to begin using OpenEdge Management. It contains an overview of the OpenEdge Management product, descriptions of the new features in this release, and descriptions of the technical support, education services, and consulting services that are available to you as an OpenEdge Management user.

## What your OpenEdge Management product includes

OpenEdge Management installs only against the current release of OpenEdge®. It can, however, remotely monitor Progress® Version 9.1E resources as well as resources from earlier OpenEdge Releases.

When you purchase OpenEdge Management, you receive the following:

- The OpenEdge Management product CD
- The OpenEdge Management documentation in PDF format, available on the Documentation and Samples CD
- The End-User Product License Agreement
- The following hard-copy product documentation:
  - *OpenEdge Management: Installation and Configuration Guide*
  - *OpenEdge Revealed: Mastering the OpenEdge Database with OpenEdge Management*
  - *OpenEdge Revealed: Achieving Server Control with OpenEdge Management*
  - Release Notes

If you purchased the SNMP Adapter product, it is included on and installed from the OpenEdge Management product CD. You simply enter the appropriate serial number and control numbers for the product during the installation process.

If any of the media or documentation are damaged or missing, call your supplier or Progress Software Corporation at (781) 280-4000. If you are outside of North America, call your regional sales office.

## What is included on the PDF Documentation CD

The PDF Documentation CD contains the following manuals:

- *OpenEdge Management: Installation and Configuration Guide*

Describes planning for a new OpenEdge Management installation and provides installation procedures for both Windows and UNIX platforms. Also provides details about initial configuration, remote monitoring, administration, and setting up secure communications.

- *OpenEdge Management: Resource Monitoring Guide*

Provides detailed information about the management console; the procedures to set up and run resource monitors, jobs, job templates; and the procedures to perform OpenEdge Management-based import and export activities.

- *OpenEdge Management: Database Management Guide*

Describes how to use OpenEdge Management to monitor and manage OpenEdge database resources.

- *OpenEdge Management: Alerts Guide and Reference*

Presents alert concepts and procedures and provides a comprehensive reference section to assist you in understanding and working with the OpenEdge Management alerts feature.

- *OpenEdge Management: Servers Guide*

Describes how OpenEdge Management supports monitoring and managing specific resources associated with the OpenEdge server products: AppServer, WebSpeed Transaction Server, and NameServer.

- *OpenEdge Management: Reporting Guide*

Provides detailed information about creating and working with report instances and templates.

- *OpenEdge Management: Trend Database Guide and Reference*

Describes how to manage your OpenEdge Management Trend Database by compacting and purging data. This book also provides a detailed look at the Trend Database schema.



- *OpenEdge Revealed: Mastering the OpenEdge Database with OpenEdge Management*

Describes best practices for building and maintaining your OpenEdge-based system by exploring the internals of your system, examining the role of the database administrator, and giving examples of the various tools available, including OpenEdge Management.

- *OpenEdge Revealed: Achieving Server Control with OpenEdge Management*

Describes best practices for using OpenEdge Management features to configure, maintain, tune, and debug your WebSpeed- and AppServer-based applications.

For information about using the PDF CD, see the *OpenEdge Management: Installation and Configuration Guide*.

So you can access the PDF documentation while you work, the PDF files are also installed with the OpenEdge Management software. You can access these PDF files from **Start**→**Programs**→**OpenEdge Management**→**Documentation**.

## Accessing OpenEdge product documentation on the Web

For your convenience, you can access the most recent OpenEdge product documentation from the following Web site:

<http://www.psdn.com/library/kbcategory.jspa?categoryID=129>

## OpenEdge Management product overview

OpenEdge Management includes the following key features and benefits:

- Provides centralized monitoring of the OpenEdge environment to present a comprehensive picture of the health and performance of your OpenEdge application with error reports, performance analysis, and trend analysis to support resource planning.
- Can be used immediately to monitor local log files and the following local and remote resources: OpenEdge databases, system resources (such as CPU, memory, disk, or file system), OpenEdge server resources (AppServer, NameServer, WebSpeed Transaction Server), disks, and file systems. OpenEdge Management also monitors network resources such as TCP- and UDP-based services.
- Allows you to create collections and custom views from the **My Dashboard** page. You can create and use a collection to better organize and operate on resources. You can also optionally create one or more custom views in OpenEdge Management and specify exactly what types of information you want to see. The information provides, sometimes in a graphical format, a customized view of your various resources' status.
- Offers a graphical display of database views, which allows you to see at a glance what is happening in the database. The graphics appear in several different, easy-to-understand charts whose display you can open as a separate window and customize in style and size.

A graphical representation of data also appears in the summary information for other resources—such as OpenEdge server resources, memory, CPU, disk, file, or file system resource—and for several AppServer- and WebSpeed-related performance views.

- Enables you to configure alerts to notify appropriate IT personnel of problems with your OpenEdge applications. For example, you can configure alerts to send e-mail notifications to IT personnel and execute scripts.
- Allows you to view, print, and save reports showing historical and trend data related to all of the monitored resources. Each report instance that you create and run is based on a report template, either one of the over 20 provided by OpenEdge Management, or one of your own creation. You can also write custom reports with ABL or use other reporting tools, such as Crystal Reports. Use this feature to help with capacity planning and forecasting.

OpenEdge-related reports include a graphical and an HTML display of information.

- Is easy to deploy, configure, and use. A multi-platform Web user interface allows you to configure and use OpenEdge Management through any compatible Web browser.

- Allows you to define batch-style application programs using your existing scripts as OpenEdge Management jobs. You can schedule the jobs for execution at regular intervals. OpenEdge Management also provides historical reports of the jobs.
- Is non-intrusive. You are not required to make any changes to the network applications you choose to monitor.
- Allows you to use Secure Sockets Layer (SSL) when you are setting up:
  - Remote trending of data to the OpenEdge Management Trend Database
  - The OpenEdge Management Web server

## OpenEdge Management and the Progress OpenEdge platform

OpenEdge Management is a key component of the Progress® OpenEdge® platform. This platform provides you with all of the tools to build complete, mission-critical applications. OpenEdge then gives you the ability to deploy and manage those applications across a wide range of platforms and configurations—host-based, client/server, n-tier, and Web-based environments, open and proprietary systems, and character and graphical interfaces—without changing the application’s business logic. This allows developers to focus on solving business problems, not on reacting to changes in the organization’s computing configuration.

The OpenEdge platform is a comprehensive platform for developing, deploying, integrating, and managing business applications:

- **Development Tools** — OpenEdge® Studio, WebSpeed® Workshop, 4GL Development System, Translation Manager and Roundtable® TSMS (total software management system)
- **Application Framework** — Progress Dynamics®
- **Client Processing** — GUI client, character client, WebSpeed Agents, WebClient™, Open Clients (Java™, .NET, and Web services)
- **Business Processing** — The availability of ABL, a powerful, unified language built into OpenEdge for rapidly building business applications that express the service processing and information management needs of the enterprise
- **Analytical Processing** — Business Intelligence (CorVu®) and reporting (Crystal Decisions™, Progress RESULTS®, and Progress Report Engine)

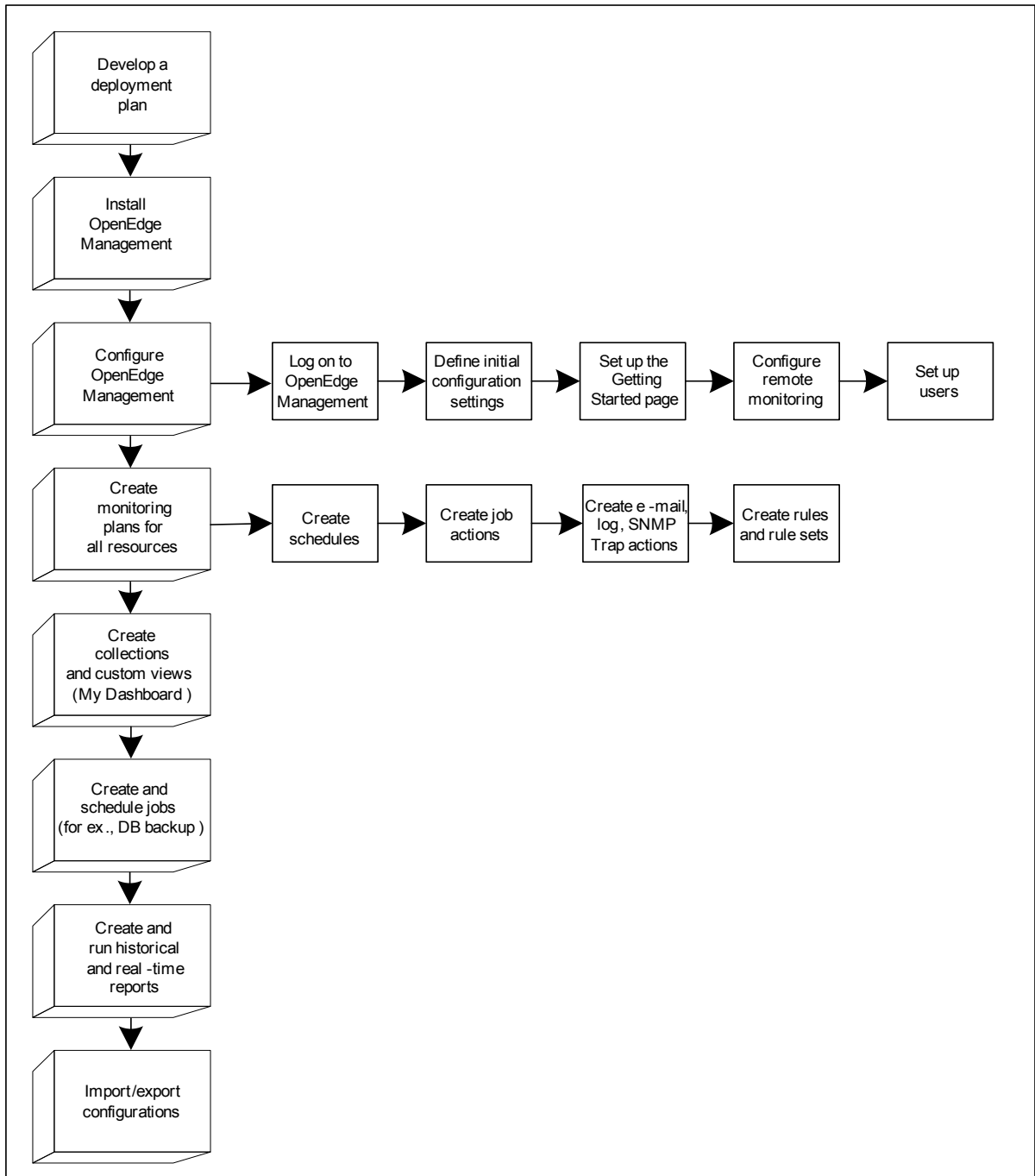
- **Integration** — OpenEdge Adapters for SonicMQ® and Sonic ESB®
- **Application Server** — OpenEdge Application Server, including the AppServer and the WebSpeed Transaction Server
- **Data Management** — OpenEdge RDBMS and DataServer technology
- **Application Management** — OpenEdge Management, OpenEdge Replication

For more information about OpenEdge, see the Progress Software Web site at <http://www.progress.com/products/index.htm> and see *OpenEdge Getting Started: New and Revised Features*, provided with your software.

# Getting started with OpenEdge Management

This guide provides step-by-step installation instructions. The guide also describes how to find information that is specific to your environment. Additional documentation, provided on the PDF CD, provides detailed instructions on configuring and using OpenEdge Management to monitor your resources.

To help you get started with OpenEdge Management, [Figure 1–1](#) illustrates the major OpenEdge Management tasks in the order they are typically performed. This diagram is not intended to depict all of the features or functionality in OpenEdge Management, but rather to provide a high-level view. Use the information in [Table 1–1](#) to locate information on performing each task.



**Figure 1–1: OpenEdge Management workflow overview**

**Table 1–1: Documentation for major OpenEdge Management tasks***(1 of 2)*

<b>For information on this task . . .</b>	<b>See this manual . . .</b>
Developing a deployment plan before you install OpenEdge Management	This guide
Installing OpenEdge Management in each Windows or on each UNIX system that you plan to monitor	This guide
Configuring OpenEdge Management, which includes logging on, defining initial configuration settings, setting up the Getting Started page, configuring OpenEdge Management for remote monitoring (optional), and setting up users	This guide
Updating initial settings related to authorized users, user preferences, the SNMP Adapter, and other configuration settings in the following categories: general, OpenEdge Management Trend Database, Web server, e-mail alerts, and resource monitoring	This guide
Using the HTTPS (SSL) protocol for trending to a remote database or for communication between an OpenEdge Management Web server and client	This guide
Creating monitoring plans for and managing system, network, file, and OpenEdge resources	<i>OpenEdge Management: Resource Monitoring Guide</i>
Creating collections and custom views ( <b>My Dashboard</b> )	<i>OpenEdge Management: Resource Monitoring Guide</i>
Creating and scheduling jobs	<i>OpenEdge Management: Resource Monitoring Guide</i>
Importing and exporting configurations	<i>OpenEdge Management: Resource Monitoring Guide</i>
Creating and running reports	<i>OpenEdge Management: Reporting Guide</i>
Creating monitoring plans for and managing database resources	<i>OpenEdge Management: Database Management Guide</i>

**Table 1–1:      Documentation for major OpenEdge Management tasks** (2 of 2)

For information on this task . . .	See this manual . . .
Creating monitoring plans for and managing OpenEdge server resources	<i>OpenEdge Management: Servers Guide</i>
Understanding and working with OpenEdge Management alerts	<i>OpenEdge Management: Alerts Guide and Reference</i>
Managing your OpenEdge Management Trend Database by compacting and purging data, and understanding the trend database schema	<i>OpenEdge Management: Trend Database Guide and Reference</i>



## Service and support: a 100% solution

Progress Software Corporation maintains a long-term commitment to superior product performance and productivity. Ultimately, product quality is a direct result of the judgment and experience of the people who work to produce it. The quality of an application development environment is only as good as the products and services that back it up. It is the people behind the product—in Development, Documentation, Technical Services, Education Services, and Consulting Services—who make the difference.

### The Technical Support organization

The Technical Support organization is structured according to geographic regions, each with its own center. The regions are:

- Americas
- Europe, Middle East, and Africa
- Asia Pacific

#### Americas

The Americas Support Center is located in Bedford, Massachusetts. It provides telephone support in English, Spanish, and Portuguese for North American and Latin American customers. Hours of operation provide coverage that takes into account the business hours of local sales offices as well as the time zone differences between the countries in this region.

Customers can access the Americas Support Center by telephone, by e-mail, or by using the PSC Support Web site (<http://www.progress.com/support>).

#### Europe, Middle East, and Africa (EMEA)

The EMEA Technical Service Centre is located in Rotterdam, Netherlands, and supports our distributors, application partners (APs), and direct end users in the EMEA region. Support is offered in ten different languages, to supply telephone coverage in your native language. All the Technical Support Engineers (TSEs) belong to a language team to ensure telephone coverage. They also belong to one or more skill groups, which are defined around different areas of the Progress Software Corporation product set.

Customers can access the EMEA Support Centre by telephone, by e-mail, or by using the Progress Software Corporation Support Web site (<http://www.progress.com/support>).

## Asia Pacific

The Asia Pacific Support Centre is located in Melbourne, Australia, and supports our subsidiaries, distributors, APs, and direct end users in the Asia Pacific region. Support is provided only in English.

Customers can access the Asia Pacific Support Centre by telephone, by e-mail, or by using the Progress Software Corporation Support Web site (<http://www.progress.com/support>).

## Coverage offerings

Technical support is committed to providing the best possible customer support. For more detailed information and a complete reference to important names, phone numbers, and e-mail addresses, visit the Progress Software Corporation support Web site at <http://www.progress.com/support>.

Technical Support is available to you when the commercial products fail to work as documented. If it is determined during the course of a call that you would be better served by making use of training and consulting services, Technical Support might refer you to your local office.

Technical Support provides assistance with products according to our Product Life Cycle document. The following levels of customer support are available:

- **Mission Critical Support** — Focuses on your company needs and provides a designated Technical Account Manager (TAM), proactive personalized support, and direct access to senior level Technical Support Engineers
- **Extended 24x7 Support** — Provides 24x7 support 365 days a year including holidays, one-hour guaranteed call back, and continuous effort for business-critical issues
- **Basic Support** — Provides technical support during Progress standard business hours. For assistance outside of business hours, our online Knowledge Center is available 24x7 to provide you with solutions
- **Partner After-Hours Support** — Provides Application Partners the ability to offer their end users direct access to Progress Technical Support for after-hours support on Progress products

**When you place your call**

Some information is required when you log a support issue with Progress Software Corporation Technical Support. Here is a list of the primary information you need to provide when you place your support call:

- Your name
- Your company name and/or customer number
- The product's serial number
- The telephone number or e-mail address where you can be reached

In addition, be prepared to answer the following questions to help us assist you more quickly:

- In which environment is the product running? Include:
  - Memory
  - Swap space
  - Number of users
  - Disk space
  - Machine and model
  - Operating system and version
  - Progress Software Corporation product and version
  - HLC or ESQL/C (Large or Small Client?)
  - Multi-operating system environment (Yes or No?)
  - Third-party products installed on the machine, and versions
- Which error messages did you receive and where or when did you see them? Include:
  - Messages appearing on screen from client or server or in log file (in the order they appeared).
  - Previous messages in the log file (going back several days before onset of problem).
  - Message in hardware log or event viewer, if appropriate.

- What was happening when the problem occurred?
- Is the problem new, has it occurred before, or was it always there?
- How often does the problem occur? For instance, how many times has it occurred in the last twenty sessions?
- Can you recreate the problem at will or upon demand?
- Can you duplicate the problem against the Sports database?
- If you have more than one database, does the problem occur on all the databases?
- Does it happen with multi-user Progress, single-user Progress, or both?
- Was there anything unusual about the environment when the problem occurred?
- Do you have any idea what the problem might be? For example, are you aware of any recent changes in the system environment or in the application?
- Was a core file or Dr. Watson log file produced? If so, save this file in case the stack trace information is needed.
- What have you done so far to debug or isolate the problem?

### Placing your call to Technical Support

Before placing your call, please ensure you have all the relevant information available. You can contact your regional support center by telephone, fax, e-mail, or via the Web. See [http://www.progress.com/support/tech\\_support/contact\\_support](http://www.progress.com/support/tech_support/contact_support) for more information.

### Logging your calls on the Web

TechSupport Direct is available from the Support Web page at <http://www.progress.com/support>. Click the **TechSupport Direct** link. This is the direct Web interface into your regional Technical Support call logging and tracking system. Through this service, you can log, monitor, update, report on, and close your issues over the Web. A login ID and password are required.

Quick Log is a tool specifically designed for users to quickly log an issue without requiring a login ID or password. If you would like to update your existing call or check the status of a call, you must use TechSupport Direct.

## **From your customer site**

If you are calling from a customer site, please make this known to the engineer. Ask the engineer to set the priority of your call to HIGH to ensure you get a prompt call back if your issue cannot be resolved during the first call.

## **Supporting Progress customers**

We support our customers. A customer is any organization that has a valid maintenance contract with Progress Software Corporation. Our goal is to provide the best support possible. To this end, it is important that we service and support those customers who have contracts with Progress Software Corporation.

In situations involving APs, the first call on any issue related to an end-user customer should come from the AP. It is important that the AP initiate all support calls to Progress Software Corporation. It is in the AP's best interest to know what problems their customers are encountering and to isolate any problem. Furthermore, the customer of the AP is not the best resource in problem isolation between the AP's application or software from Progress Software Corporation. The AP must stay involved with any problem that its customers might encounter with Progress software. This involvement will increase their knowledge and maintain the appropriate relationship with the customer. The AP also will be in a position to determine if this is a problem affecting a single site or the AP's entire customer base.

If the customer of the AP contacts Progress Software Corporation directly, they will be asked to discuss their issue with their AP. Obviously, this does not replace the application support provided by the AP. Failure to renew your maintenance agreements for the licenses in question is likely to result in denial of support for any further calls.

If you have questions about evaluation licenses, future products or any sales-related questions, please contact your local presales support team at your local Progress Software Corporation office.

## **Service packs**

Service Packs are a collection of bug fixes to Progress products; they go through a high level of testing, including running a complete suite of regression tests. Service Packs are released for all supported platforms simultaneously, have the same version number, and contain the same fixes. Service Packs for Core Products are released every three months, as needed, from the product's release delivery date. They are available online through the **Product Updates and Documentation** link on <http://www.progress.com/esd>. Service Packs include an installation procedure to take you through the steps to apply the service pack.

## Registering your product

To be eligible for user support services, you must register your Progress product.

### **Benefits of the Annual Maintenance Plan**

There are three important reasons for you to cover your Progress products under the Annual Maintenance Plan: access to new product versions, investment protection on product trade-ins, and access to Progress Software Corporation Technical Services.

Keeping up with software enhancements always is important, and often it is critical to the success of your application. Progress Software Corporation regularly introduces new features and capabilities. If you cover your products under the Annual Maintenance Plan, you can receive new versions for only a processing fee plus the cost of the documentation, where applicable. Also, if your product is covered under maintenance, there is no fee in most cases when you change an operating system, machine, or site (within the operations of a currently licensed customer).

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**Note:** This does not apply to machine-based or unlimited user count licenses.

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Finally, we think you will find access to our Technical Services staff invaluable.

### **How do I enroll?**

The Annual Maintenance Plan should be purchased when you purchase your Progress Software Corporation product and can be renewed at the end of that year. For the specific costs of your maintenance plan, please contact your Progress product supplier.

The sooner you enroll in the Annual Maintenance Plan, the more economical it is. If you enroll in the plan more than 90 days after purchasing your product, you are subject to substantially higher prices. Please contact your Progress product supplier if you have any questions about the Annual Maintenance Plan.

### **So don't delay. Enroll in the Annual Maintenance Plan today!**

If you purchased your product through a Progress Software Corporation Application Partner, contact them first to purchase maintenance.

## Education Services

Progress Education Services offers a complete, task-based, hands-on curriculum for core Progress products. Both classroom training and non classroom alternatives are available.

Our classroom courses are taught by expert instructors in state-of-the-art facilities located around the globe. On-site training also is available, for the convenience of our customers who wish to take our courses directly at their workplace. For those who prefer learning at their own pace, we offer a full range of computer-based training, Web-based training, and text-based instruction courses.

By taking one of our courses, you receive Progress education from professionals who have made software training a career focus. Our instructors are specialists who receive complete technical training in all aspects of Progress products. Our highly skilled course developers work together with top Progress software engineers to create the best possible training.

All our courses, whether classroom or self-paced, are task-based. That is, they emphasize what you need to know to do your job and how you can leverage the capabilities of Progress products to maximize your investment.

All our courses provide ample opportunity for practice through hands-on, real-world labs. In each course, you build an application that simulates a real-world environment. When you complete your training, you can take your newly built application with you for future development at your own site.

A Progress education provides you with:

- The highest quality course materials for classroom and non classroom study, developed by expert course developers working closely with Progress software engineers
- Experienced instructors with access to Progress Software Corporation benchmarking and source materials
- Web-based and other computer-based training options that enable students to learn what they need, when they need it, without leaving the office

### **How to remain current with Progress Software Corporation Education Services offerings**

Progress Software Corporation offers you a wide and ever-increasing choice of educational options. We are continually offering new courses to address the pressing needs of our user community. For up-to-date information, visit us on the Web at

<http://www.progress.com/education/index.htm>.

## Progress Software Professional Services

Progress Software Professional Services (PSPS) offers strategic solutions to help you make the most of your technology investment and prepare you for the future. Whether you are looking to take your business to the Web, gain operational efficiencies through better reporting and decision support, or enhance your technology environment to make it run faster and smoother, Progress Software Professional Services can help you get there.

It is easier than ever to tap into the power of this expert knowledge and advanced insight with a collection of consulting, mentoring, and training programs. These programs are tailored to address the issues you are facing right now:

- **Business enhancement** — Take your business to a new level by enhancing your existing Progress-based applications with valuable business solutions.
- **Business migration and optimization** — Master advanced strategies and tactics for moving your applications to the Web.
- **System enhancement** — Examine, tune, supplement, and manage your systems for maximum performance.
- **Globalization empowerment** — Open your doors and start doing business with anyone in the world with speed and confidence.
- **User training and education** — Improve productivity by ensuring that everyone on your team is up-to-date on the latest Progress Software Corporation technology.

### The inside advantage for consulting and education

Progress Software Professional Services is the only resource where you will find the kind of in-depth product knowledge and envelope-pushing attitude that lets you take your business to the next level of performance. We offer:

- More than 300 consultants worldwide
- More than 60 product training experts
- Expert project management teams and a dedicated Office of Project Management



## For more information

To find out how Progress Software Professional Services can help you with your most pressing objectives or to learn more about any of our programs, log on to

<http://www.progress.com/consulting/index.htm>.

Services might vary from region to region. For information regarding Progress Software Professional Services in your area, contact the appropriate address listed below. For current information, visit our Web site at <http://www.progress.com/worldwide/index.htm>.

<b>North America – Corporate Offices</b> 14 Oak Park Bedford, Massachusetts 01730 Tel: 781-280-4000 Fax: 781-280-4095	<b>Latin America</b> Progress Software Corporation 2255 Glades Road One Boca Place – Suite 300 E Boca Raton, Florida 33431 USA Tel: 561-998-2244 Fax: 561-998-1573
<b>Europe/Middle East/Africa</b> Progress Software Europe BV Schorpioenstraat 67 3067 GG Rotterdam The Netherlands Tel: 31 10 286 5700 Fax: 31 10 286 5225	<b>Asia/Pacific</b> Progress Software Pty. Level 2, 25 Ryde Road Pymble NSW 2073, Australia Tel: 61-2-9496-8439

## Worldwide sales offices and subsidiaries

Progress Software Corporation sells products and services worldwide to organizations that develop and use mission-critical business applications. With our partners, we deliver solutions, consulting, technical support, and training to customers in over 100 countries. Our Web sites around the world are updated to continually provide the most current localized content and area-specific information.

For a complete list of Worldwide Sales Offices and Subsidiaries, consult the Progress Software Corporation Web site at <http://www.progress.com/worldwide/offices.htm>.

## **Progress Software Corporation user groups**

Progress Software Corporation user groups provide the ideal networking environment for you and other users. Worldwide user groups provide a way to meet others in an informal setting to exchange ideas and discuss the applications that are impacting today's fast-paced technology model. User groups feature Progress Software Corporation experts and other guest speakers, so you can keep up with the latest product advancements and trends. Progress Software Corporation actively supports its user groups with formal communication forums and discounts on training and other corporate events.

Whether you participate in person or via the Internet, a Progress Software user group is your best way to stay informed and stay connected.

For a complete list of Progress Users Groups, visit the Progress Software Corporation Web site at [http://www.progress.com/support/user\\_groups](http://www.progress.com/support/user_groups).

## Progress Software Developers Network

Visit <http://www.psdn.com>. The Progress Software Developer's Network (PSDN) is a service designed to deliver to developers the information and resources for creating best-of-breed business systems with Progress technology. At <http://www.psdn.com>, you will find technical reports, up-to-date product information, and a gateway for participating more actively in the Progress Software Corporation developer community. You also can subscribe to receive information on the topics and products most relevant to you.

If you have purchased maintenance on a development product directly from Progress Software Corporation, you are entitled to become a member of PSDN. Members receive two computer-based training courses prepared by Progress Education. In addition, members have deeper access to PSDN dynamic content that provides insight from product specialists into technological future directions and the opportunity to pose your technical questions directly to Progress experts during Web seminars and chats.

Premier PSDN membership is another level of service that includes subscriptions to the PSDN Software Developer's Kit (SDK). The PSDN SDK is a comprehensive package of Progress Software Corporation products designed to support developing the full range of Progress applications: Web services-oriented, WebSpeed, distributed, client/server, and DataServer.

For more information about PSDN membership, please see <http://www.psdn.com>.



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# Before You Install OpenEdge Management

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This chapter describes the system requirements you must consider and the tasks you must perform before you install OpenEdge® Management. The chapter also provides important details about OpenEdge Management CPU, memory, and licensing requirements, as described in the following sections:

- [OpenEdge Management with OpenEdge](#)
- [Planning your installation](#)
- [System requirements](#)
- [CPU and memory requirements](#)

## OpenEdge Management with OpenEdge

This manual provides details about installing and configuring OpenEdge Management. You can install this release of OpenEdge Management only against the current release of OpenEdge®. (You can, however, remotely monitor Progress® Version 9.1E resources as well as resources from earlier OpenEdge releases.)

# Planning your installation

OpenEdge Management is a browser-based management tool that you can use to monitor databases, files, networks, OpenEdge components, and system resources in an OpenEdge environment. OpenEdge Management consists of agents that collect monitoring data and a database that stores this monitoring data.

## Installing OpenEdge Management for the first time

There are several factors to consider before you install OpenEdge Management for the first time. For example, you should analyze what you need to monitor before you begin the installation. You also need to decide where to install OpenEdge Management components.



### To prepare to install OpenEdge Management:

1. Determine the names and locations of the resources you need to monitor.

The resources can include local network-based services and the following local and remote resources: database, CPU, memory, file system, disk, AppServer™, NameServer, and WebSpeed® Transaction server.

2. Determine whether to save monitoring information to the OpenEdge Management Trend Database and, if saving the monitoring information, where to locate the database.

The OpenEdge Management Trend Database stores the monitoring information that OpenEdge Management collects. During configuration, you can choose whether to save monitoring information locally, remotely, or not at all. Before installation, you should decide if you want to save this data and where you want to save it.

OpenEdge Management automatically creates the OpenEdge Management Trend Database if you have an OpenEdge® Enterprise RDBMS, an OpenEdge® Workgroup RDBMS, or an OpenEdge® Personal database installed on the same machine where you are installing OpenEdge Management.

If you decide to save monitoring information remotely, the remote machine must have both a database (Enterprise, Workgroup, or Personal) and OpenEdge Management installed. In other words, you cannot just copy a trending database to a remote machine.

The local instance of OpenEdge Management needs to communicate with a remote instance of OpenEdge Management to use the remote trending database.

3. Determine how monitoring might affect system performance.

The more resources you monitor, the more system resources OpenEdge Management uses. If you plan to monitor a large number of database servers and network services in your configuration, you might want to consider configuring additional OpenEdge Management instances, both locally and remotely.

See the [“CPU and memory requirements”](#) section on page 2–8 for more information.

4. Determine where to install OpenEdge Management.

Based on the decisions you made in Steps 1 through 4, you can install OpenEdge Management locally on the machine with the monitored resources or on a separate or standalone machine.

See the [“Product support”](#) section on page 2–5 for more information.



# System requirements

Most of the system requirements for OpenEdge Management are the same as those for OpenEdge.

## Product support

To use all of OpenEdge Management's features, you must install products that support the following functionality:

- The AdminServer
- A database, to allow trending of OpenEdge Management data
- A client networking license, to allow OpenEdge Management to run standard jobs and reports

See [Table 2-1](#) to determine the OpenEdge Management functionality that is available with an installation of specific OpenEdge products and also see where there might be limitations on OpenEdge Management functionality based on licensing.

**Table 2-1: OpenEdge products that support OpenEdge Management**

(1 of 2)

OpenEdge product	Admin Server	OpenEdge database	Client networking	OpenEdge Mgmt runs	OpenEdge Mgmt trends	OpenEdge reports and jobs
Client Networking	No	No	Yes	No	No	No
NameServer	Yes	No	No	Yes	No	No
Personal Database	Yes	Yes	No	No	No	No
Workgroup Database	Yes	Yes	Yes	Yes	Yes	Yes
Enterprise Database	Yes	Yes	No	Yes	Yes	No
OpenEdge Studio	Yes	Yes	Yes	Yes	Yes	Yes

**Table 2–1: OpenEdge products that support OpenEdge Management***(2 of 2)*

<b>OpenEdge product</b>	<b>Admin Server</b>	<b>OpenEdge database</b>	<b>Client networking</b>	<b>OpenEdge Mmgt runs</b>	<b>OpenEdge Mgmt trends</b>	<b>OpenEdge reports and jobs</b>
OpenEdge Development Server	Yes	Yes	Yes	Yes	Yes	Yes
OpenEdge Application Server Basic	Yes	No	Yes	Yes	No	Yes
OpenEdge Application Server Enterprise	Yes	No	Yes	Yes	No	Yes
4GL Development	No	Yes	Yes	No	No	No
Query/Results	No	No	Yes	No	No	No

## Platform support

OpenEdge Management is designed to run on OpenEdge. For a list of the supported platforms and minimum Java level requirements, go to:

<http://www.psdn.com/library/entry.jspa?externalID=3233>

## Browser support

A Web browser is required to run the OpenEdge Management console. Although you might find other browsers that you can use with OpenEdge Management, the following browsers are supported in Windows platforms:

- Netscape Communicator, 7.x
- Internet Explorer, 6.x

On UNIX platforms, the following browsers are supported:

- Mozilla, 1.4 and higher, for Linux
- Firefox, 1.5 and higher
- Netscape Communicator, 7.x

## CPU and memory requirements

OpenEdge Management consumes both CPU and memory on the system where it is running. The amount consumed varies based on the number and types of resources being monitored, the frequency with which they are polled, and the processing power of the host system.

### CPU use

OpenEdge Management CPU utilization should typically be in the range of 1-5% (with possible spikes as noted below). Factors that might result in greater levels of CPU utilization include:

- **A very high number of monitored resources relative to the processing power of the host system** — The number of resources you can monitor with OpenEdge Management before it introduces an unacceptable CPU load is very dependent upon the processing power of the host system.

On most systems monitoring a moderate number of resources such as 10 databases, 20 system resource monitors, and 20 network resource monitors, the CPU load of OpenEdge Management should be minimal. Host systems with greater processing power will be able to support greater resource counts.

- **A very short polling interval on monitored resources** — Each poll of a resource requires a small measure of CPU utilization. Polling a lot of resources with very short polling intervals will increase OpenEdge Management load on the CPU. Using the default OpenEdge Management polling interval should minimize this problem.

If OpenEdge Management CPU utilization becomes a problem, you can reduce it by increasing the polling interval of monitored resources. For example, rather than polling databases every 5 minutes, you can set them to poll every 15 minutes.

- **A very high level of user interaction with OpenEdge Management through the management console** — Each page displayed in the console needs to be produced by OpenEdge Management, and, therefore, requires a small measure of CPU utilization. A very high level of user interaction with the console will increase OpenEdge Management load on the CPU. This is especially true of any page that displays graphical data.

One feature to be particularly conscious of is the OpenEdge Management Auto Refresh capability. This feature allows you to configure the OpenEdge Management console such that the displayed pages are automatically refreshed at a specified rate. Automatically refreshing pages with lots of graphical data at a high frequency will increase OpenEdge Management load on the CPU.

- **Very high levels of report execution** — OpenEdge Management uses an OpenEdge database for storing trend information and ABL for running reports. This combination makes OpenEdge Management historical reports very efficient; however, running reports very frequently or against a large volume of historical data will increase OpenEdge Management load on the CPU.

You should use the OpenEdge Management scheduling facility to schedule reports to run at off-peak hours. You can also install a copy of OpenEdge Management on a nonproduction host and use it as the trend database for the OpenEdge Management installs on your production hosts. Doing this will allow you to offload the management of trend data and run historical reports from your production host.

- **A large number of jobs** — Like reports, jobs can put a heavy load on the CPU. The scheduling algorithm of your operating system might give all available CPU time to execute jobs or reports, which can cause a spike in CPU utilization while the job or report is running. You should schedule CPU-intensive jobs, such as database backups, to run at off-peak hours to minimize the chances of introducing too much overhead during peak system times. Offloading jobs to nonproduction systems is another option.

## Memory use

OpenEdge Management memory utilization is directly related to the number and types of resources being monitored. The AdminServer with OpenEdge Management loaded but no resources defined requires 25MB to 35MB of memory. This requirement can vary based upon the platform and the number of other OpenEdge products installed.

As you add resources to OpenEdge Management, the memory requirements increase. Each database requires about 2MB of memory. Other monitored resource types require much less, typically in the range of 10KB to 100KB per resource.

OpenEdge Management allows you to store the data being used for graphs. This increased storage can cause a significant increase in memory usage.

Factors you can control to manage OpenEdge Management memory utilization include:

- **The number of monitored resources** — If OpenEdge Management is consuming an unacceptable amount of memory, you can reduce the number of monitored resources. You can also choose to install an instance of OpenEdge Management on a nonproduction host and use that host to monitor network and log file resources. This would remove the load from your production hosts, leaving on them only the monitoring of local system resources and databases.

- **Use of the OpenEdge Management remote database monitoring agent** — Using an instance of OpenEdge Management on a nonproduction host in conjunction with the remote database monitoring agent will allow you to greatly minimize overhead on your production systems. In this configuration, the majority of OpenEdge Management activity is off-loaded to a nonproduction host. Only the overhead of the remote database agent will be incurred on your production systems. This overhead is very minimal.
- **Adding remote monitoring on the OpenEdge Management machine** — The addition of remote monitoring will substantially increase memory use.

---

# Installing OpenEdge Management in Windows

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This chapter provides information related to installing OpenEdge Management in Windows systems, as outlined in the following sections:

- [Preinstallation tasks in Windows systems](#)
- [Installing OpenEdge Management in Windows](#)
- [Optionally configuring the OpenEdge Management Trend Database](#)
- [Using OpenEdge Management for the first time](#)
- [Installing additional related products](#)
- [Accessing documentation](#)
- [Using the InstallShield silent \(batch mode\) utility](#)
- [Uninstalling OpenEdge Management in Windows](#)

## Preinstallation tasks in Windows systems

You can install OpenEdge Management provided you have the current release of OpenEdge installed.

### Reading OpenEdge Management documentation before installing

It is very important that you read the following two OpenEdge Management documentation before you begin to install OpenEdge Management:

- [Chapter 2, “Before You Install OpenEdge Management,”](#) for information on installation planning details and system requirements
- *OpenEdge Management Release Notes*, which might contain supplemental or corrected installation information

The information provided in this guide is current as of its publication date; however, requirements can change. To make sure that you have the most up-to-date information, please be sure to refer to the release notes.

### Other preliminary tasks

There are several other tasks you must perform before you install OpenEdge Management.



#### To prepare to install OpenEdge Management:

1. Make sure that you have the current release of OpenEdge installed.

If you intend to use OpenEdge Management’s remote monitoring feature, you cannot include spaces in either the OpenEdge Management or OpenEdge install directory name (on either the OpenEdge Management machine or the remote machine). If there are spaces in any of the names, the AdminServer will not start and you will not be able to perform remote monitoring.

If you have already installed OpenEdge in a directory whose name has spaces and you do want to use OpenEdge Management’s remote monitoring feature, you must uninstall and reinstall it in a directory whose name does not contain spaces.



2. Obtain the serial number and control numbers for your installation of OpenEdge Management and the SNMP Adapter (if you have purchased the SNMP Adapter license). This information is shipped with the OpenEdge Management installation media.
3. Obtain administrative privileges on the machine on which you are installing OpenEdge Management. You cannot install unless you are logged in as administrator or have administrative privileges associated with your account. For more information, see your Windows documentation or consult with your system administrator.

## Installing OpenEdge Management in Windows

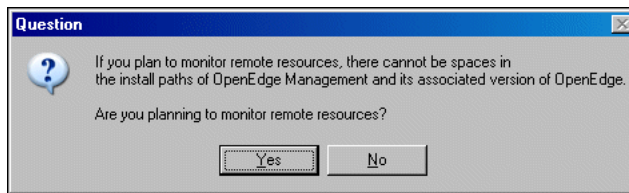
Be sure to have the serial and control numbers for OpenEdge Management and the SNMP Adapter (if applicable) handy before you begin the installation. These numbers are included in your OpenEdge Management media kit.



### To install OpenEdge Management:

1. Stop the AdminServer. If you do not stop the AdminServer, the install will detect that the AdminServer is running and will discontinue the installation process.
2. Insert the installation CD into your CD-ROM drive. If the CD does not run automatically, double-click `setup.exe` in the root directory of the CD.

The following message appears:



3. Do either of the following:

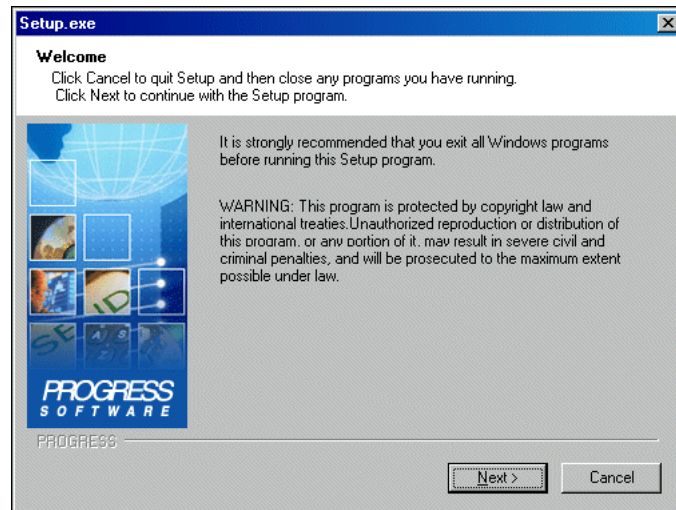
- Click **Yes** if you intend to monitor remote resources.

If you are installing OpenEdge Management against an OpenEdge installation and that installation is in a directory whose name has spaces, an error message appears.

Click **OK** to end the installation. Then uninstall OpenEdge, reinstall it in a directory name without spaces, and begin the OpenEdge Management installation.

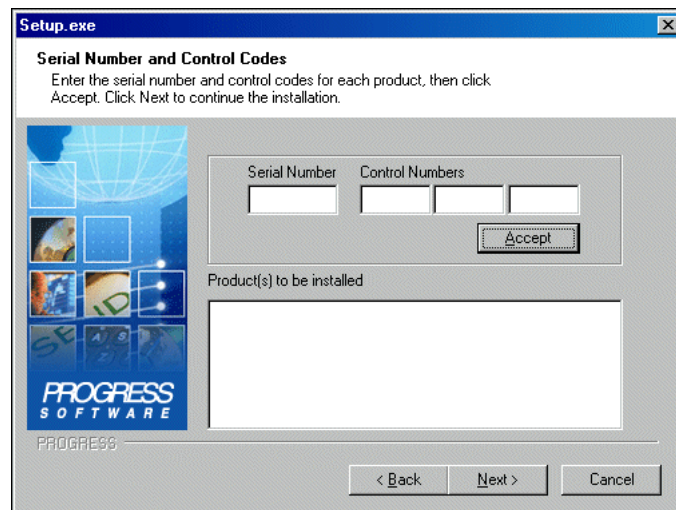
- Click **No** if you do not intend to monitor remote resources.

The **Welcome** dialog box appears:



The dialog box reminds you to close other Windows programs that are currently running.

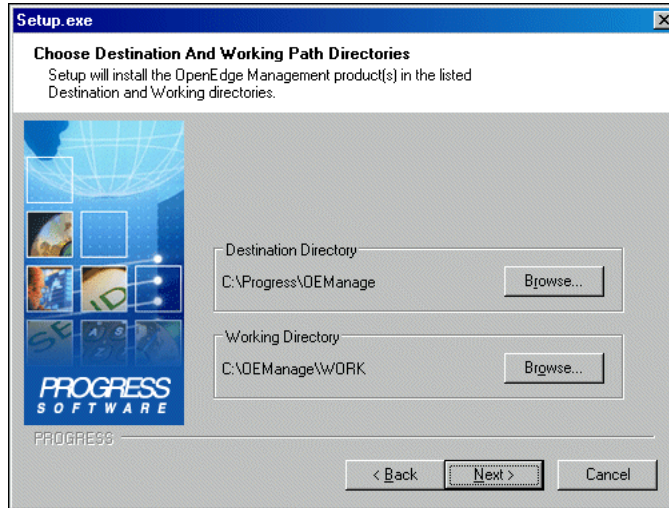
4. Click **Next**. The **Serial Number and Control Codes** dialog box appears:



5. Enter the serial number and control numbers for OpenEdge Management in the **Serial Number** and **Control Numbers** fields. Click **Accept**. The **Product(s) to be installed** list updates to include OpenEdge Management.

6. If applicable, enter the serial number and control numbers for the SNMP Adapter in the **Serial Number** and **Control Numbers** fields. Click **Accept**. The **Product(s) to be installed** list updates to include the SNMP Adapter.

Click **Next**. The **Choose Destination And Working Path Directories** dialog box appears and identifies where the OpenEdge Management installation will create these directories:



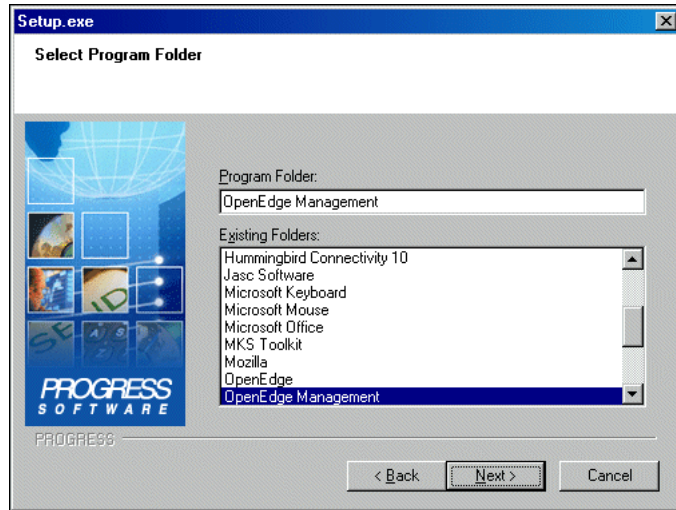
7. Specify the destination and working directories. Do not include spaces in either directory name. You can change the defaults by choosing the **Browse** buttons.

---

**Note:** If you are installing multiple instances of OpenEdge Management on a system that has multiple versions of OpenEdge installed, make sure that each instance of OpenEdge Management has a unique **Destination Directory** and a unique **Working Directory**.

---

8. Click **Next**. The **Select Program Folder** dialog box appears:



The **Select Program Folder** dialog box allows you to accept the default folder OpenEdge Management, specify another folder, or select an existing folder.

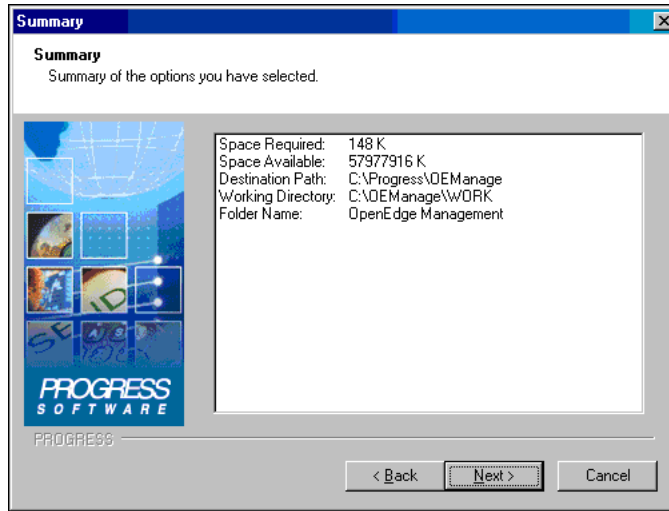
9. Specify the Program Folder for OpenEdge Management in the **Program Folder** field, and click **Next**.

---

**Note:** If you are installing multiple instances of OpenEdge Management on a system that has multiple versions of OpenEdge installed, make sure that each instance of OpenEdge Management has a unique Program Folder name.

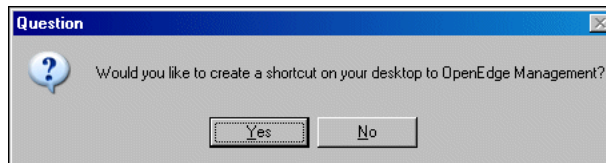
---

The **Summary** dialog box lists the choices you made in the previous dialog boxes, as shown:



10. Review the summary information for this installation.
11. Click **Back** if you need to make any changes, or click **Next** to continue if the options are correct. The installation proceeds and displays messages that indicate the status of the install.

The following question appears:



12. Click **Yes** to add the **Management Console** shortcut; otherwise, click **No**. The **Complete Setup Done** dialog box appears.

13. Click **Finish**. A subsequent dialog box appears and allows you to decide whether you want to reboot now or later. (Note that you must reboot your machine before starting OpenEdge Management.)
14. Restart the AdminServer.

## Change to the OpenEdge install directory

When you install OpenEdge Management, the file addons is added to the OpenEdge install directory in Windows platforms.

## Optionally configuring the OpenEdge Management Trend Database

After you install OpenEdge Management and before you begin the configuration in the OpenEdge Management console (as described in [Chapter 6, “Setting Up OpenEdge Management for the First Time”](#)), you can preallocate file system space in the OpenEdge Management Trend Database. This preallocation step is optional; however, it will make the database run more efficiently if you create fixed length extents before the database is created.



### To preallocate file system space:

1. Copy the OpenEdge Management Trend Database structure file (`fathom.st`) that exists in the `<OpenEdgeManagement-install-dir>\db` to the directory where the database will reside. The default directory is `Progress\OEManage\db`.
2. Edit the file, and add fixed length data extents to area 7.
3. Continue with the configuration as described in [Chapter 6, “Setting Up OpenEdge Management for the First Time.”](#) When the OpenEdge Management Trend Database is created, the database will pick up and use the structure file that exists in the directory where the database is being created.

For more information about editing `.st` files, see *OpenEdge Data Management: Database Administration*.



## Using OpenEdge Management for the first time

When you first start the OpenEdge Management console, you must enter the default user name and password (**admin** for both) in order to begin the configuration process. During the configuration, you will be required to change the default password.

See the [“Logging on to OpenEdge Management”](#) section on page 6–5 for details.

## Installing additional related products

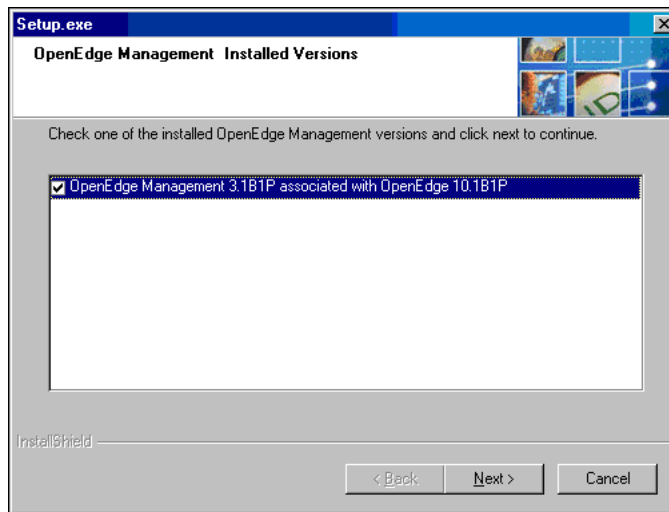
You can add another OpenEdge Management-related product, such as the SNMP Adapter, to an existing OpenEdge Management installation.



**To add an OpenEdge Management-related product to an existing OpenEdge Management installation:**

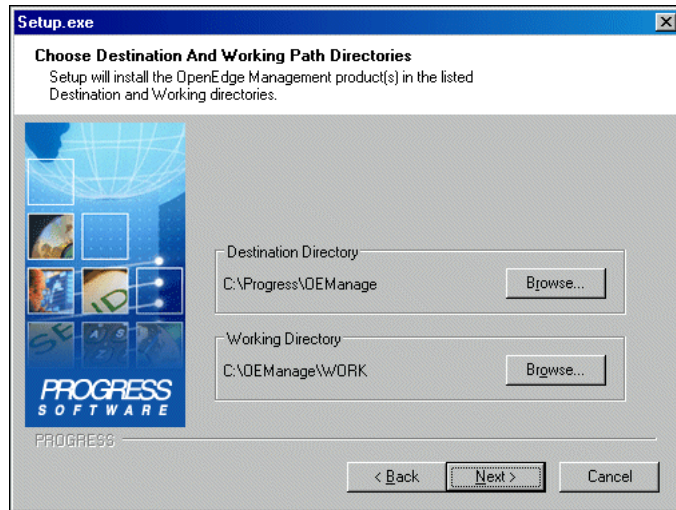
1. Stop the AdminServer. If you do not stop the AdminServer, the install will detect that the AdminServer is running and will discontinue the installation process.
2. Insert the installation CD into your CD-ROM drive.

If the CD does not run automatically, double-click `setup.exe` in the root directory of the CD. The **OpenEdge Management Installed Versions** dialog box appears:



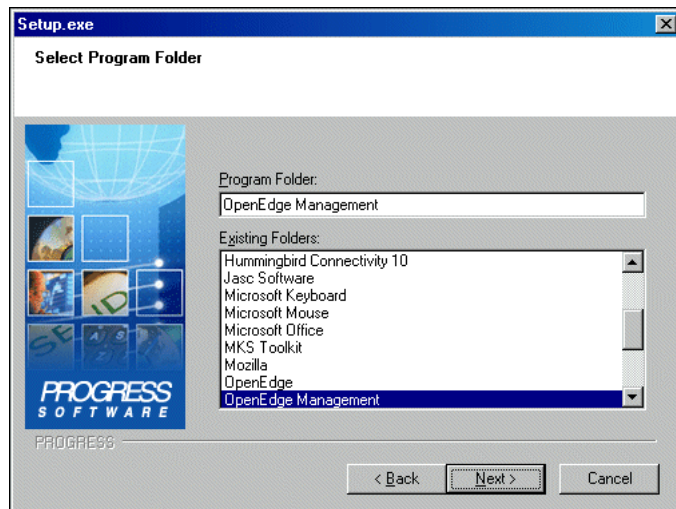
3. Click **Next**. The **Welcome to OpenEdge Management Installation Utility** dialog box appears.
4. Click **Next**. The **Serial Number and Control Codes** dialog box appears.
5. Enter the serial number and control numbers for the additional product in the **Serial Number** and **Control Numbers** fields; then click **Accept**. The **Product(s) to be installed** list updates to include the additional product.

6. Click **Next**. The **Choose Destination And Working Path Directories** dialog box appears and identifies where the OpenEdge Management installation will install the additional product:



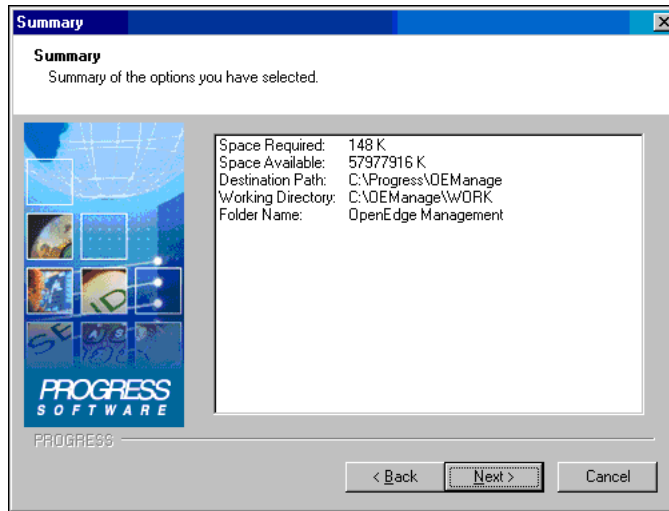
The additional product is automatically installed in the existing OpenEdge Management install directory. You do have the option to specify a different Working Directory.

7. Click **Next**. The **Select Program Folder** dialog box appears and allows you to accept the default folder OpenEdge Management, specify another folder, or select an existing folder:



8. Specify the Program Folder for OpenEdge Management in the **Program Folders** field, and click **Next**.

The **Summary** dialog box lists the choices you made in the previous dialog boxes, as shown:



9. Review the summary information for this installation.
10. Click **Back** if you need to make any changes, or click **Next** to continue if the options are correct. The installation proceeds and displays messages that indicate the status of the install. The **Complete Setup Done** dialog box appears.
11. Click **Finish**. A subsequent dialog box appears and allows you to decide whether you want to reboot now or later. (Note that you do not need to reboot your machine before restarting OpenEdge Management.)
12. Restart the AdminServer.

## Accessing documentation

The OpenEdge Management manuals are available in PDF format from the OpenEdge Management menu or the Documentation and Samples CD. The CD is readable on both Windows and UNIX systems. You can also access the documentation in PDF and HTML format from the Progress Software Developers Network (psdn) Web site in the following location:

<http://www.psdn.com/library/kbcategory.jspa?categoryID=129>

For best results when using the PDF files, install the Acrobat Reader. You can download the Reader from the following location on the Adobe Web site:

<http://www.adobe.com/products/acrobat/readstep2.html>

Begin by reading `start.pdf`, which should open automatically (if you have autorun enabled) when you insert the Documentation and Samples CD into the CD-ROM drive. If you do not have autorun enabled, find the file on the CD and double-click it.

The `start.pdf` file describes how to do the following:

- View the PDF files from the CD
- Copy the PDF files from the CD to your machine
- Search across the PDF files
- Print the PDF contents

The names of the OpenEdge Management manuals and their corresponding PDF versions appear in [Table 3–1](#).

**Table 3–1: OpenEdge Management manuals and corresponding PDF files**

<b>OpenEdge Management manual</b>	<b>Directory name</b>	<b>PDF filename</b>
<i>OpenEdge Management: Installation and Configuration Guide</i>	\fin	fin.pdf
<i>OpenEdge Management: Resource Monitoring Guide</i>	\rmg	rmg.pdf
<i>OpenEdge Management: Trend Database Guide and Reference</i>	\ftd	ftd.pdf
<i>OpenEdge Management: Alerts Guide and Reference</i>	\far	far.pdf
<i>OpenEdge Management: Database Management Guide</i>	\fdg	fdg.pdf
<i>OpenEdge Management: Servers Guide</i>	\foe	foe.pdf
<i>OpenEdge Management: Reporting Guide</i>	\frg	frg.pdf
<i>OpenEdge Revealed: Achieving Server Control with OpenEdge Management</i>	\asc	asc.pdf
<i>OpenEdge Revealed: Mastering the OpenEdge Database with OpenEdge Management</i>	\mpf	mpf.pdf

## Using the InstallShield silent (batch mode) utility

The standard, interactive installation receives necessary information by prompting you and recording your input from dialog boxes. By contrast, a silent or batch mode installation does not prompt you for input. Instead, InstallShield Silent (ISS) reads input information from a file called a *response file*. You must create the response file before running a silent or batch installation.

### Creating a response file automatically

The preferred method for creating a response file is to create it automatically.

To create a response file automatically, run OpenEdge Management's `setup.exe` with the options indicated in the following syntax:

```
setup.exe -psc_r [-psc_f1=C:\pathname\ResponseFilename]
```

By default, the response file is created in your Windows directory. You can use the `-f1` option to specify an alternate directory and filename for the response file.

---

**Note:** Be sure that there is no space between `-f1` and the equal sign or between the equal sign and `C:\pathname\ResponseFile`.

---

When you run `setup.exe` with the option as shown, InstallShield runs the installation interactively and creates the response file, which contains all of your installation choices.

### Creating the response file manually

You can create and edit a response file in any text editor by adding necessary sections in a predefined order.



### To create a response file manually:

1. Create a new text file using any text editor.
2. Enter the response file's required sections in the following order, noting that section names are contained in brackets:
  - a. Silent Header Section [InstallShield Silent].
  - b. Application Header Section [Application].
  - c. Dialog Data Sections, for example [SerialControlNumber Dialog].
3. Edit the necessary data within each section name. Data entries consist of name=value pairs, such as szDirWrk=C:\OEManage\WORK.
4. Save and close the response file.

The following sample shows what a response file looks like:

```
[InstallShield Silent]
Version=7.1.100.1242
File=Response File
[File Transfer]
OverwrittenReadOnly=NoToAll
[Application]
Name=OpenEdge Management
Version=10.1x
Company=Progress Software
Lang=9

(continued)
```



```
[SdWelcome]
Result=1
[SerialControlNumber Dialog]
nvCount=1
svSerialNumber-0=XXXXXXXXX
svControlNumber_1-0=xxxxx
svControlNumber_2-0=xxxxx
svControlNumber_3-0=xxxxx
_bInstallingDB=0
_bMessengerInstalled=0
_bProgressExplorerLocalOption=1
_nDbProdnumBitmask=0
_bInstallingColorEditor=0
_bInstallingFathom=1
_szUseSourceEditor=NULL
_nWebServicesProducts=0
_bInstallingOpenEdgeStudio=0
_bInstallingWSA=0
_bInstallingSonicEsbAdapter=0
_bInstallingSonicMqAdapter=0
_bInstallingWebspeed=0
_bSonicEsbProductNumberEntered=0
Result=1
[TargetDirectory Dialog]
szDirDest=C:\Progress\OEManage
szDirWrk=C:\OEManage\WORK
Result=1
[UserInstallationType Dialog]
_bQuickInstallRadioButton=1
_bCustomInstallRadioButton=0
_bTypicalInstallRadioButton=0
Result=1
[SdSelectFolder]
szFolder=OpenEdge Management
Result=1
[SdShowInfoList]
Result=1
```

(continued)

```
[Installed Products]
ProductCount=1
Product 8=OpenEdge Mgt. SE

[Product 8]
__Component_Common Files (m)=1
__SubComponent_Common Files (m)=1
__SubComponent_WebSpeed Common (m)=1
__Component_Fathom (m)=1
__SubComponent_Administration Server (m)=1
__SubComponent_Fathom common (m)=1
__SubComponent_fathom tailor (m)=1
__SubComponent_Fathom Doc (m)=1
__SubComponent_Client-Side Security (r)=1
__SubComponent_Java Class Tailoring (m)=1
__SubComponent_Perl (m)=1
__Component_Progress Messages (Add-on) (m)=1
__SubComponent_German=1
__SubComponent_Spanish=1
__SubComponent_French=1
__SubComponent_Dutch=1
__SubComponent_Portuguese=1
__SubComponent_Swedish=1
__SubComponent_Czech=1
__SubComponent_Polish=1
__SubComponent_Italian=1
__SubComponent_Portuguese - Brazilian=1
__SubComponent_Spanish - Latin=1
__SubComponent_English - International=1
__SubComponent_English - American=1
```

## Running the InstallShield Silent Utility

As an alternative to the standard interactive installation, you can install OpenEdge Management without being prompted for input.



### To run the InstallShield Silent utility:

1. Create a response file.

See either the [“Creating a response file automatically”](#) section on page 3–17 or the [“Creating the response file manually”](#) section on page 3–17 for information about creating a response file.

2. Run OpenEdge Management’s setup.exe using the -psc\_-s option.

Note the following syntax:

```
setup.exe -psc_s -psc_f1=<path>\<response-file-name>  
[-psc_f2=<path>\<logfile-name>]
```

By default, InstallShield looks for a response file named `fathomsetup.ini` in your Windows directory. During the installation, a log file named `fathomsetup.log` is created in your Windows directory. Use the `-f1` option to specify an alternate directory and filename for the response file. Use the `-f2` option to specify an alternate directory and filename for the log file.

---

**Note:** Be sure that there is no space between `-f1` and the equal sign, `-f2` and the equal sign, or the equal sign and the pathnames that follow.

---

For more information about creating a response file or running a silent install, see *OpenEdge Getting Started: Installation and Configuration*.

## Uninstalling OpenEdge Management in Windows

Always uninstall OpenEdge Management before you uninstall the OpenEdge product that it is associated with.

---

**Caution:** If you want to save trending data, be sure to back up the  
`<OpenEdgeManagement-install-dir>\db` before removing the OpenEdge  
Management installation.

---

Note that reports and logs are stored in the OpenEdge Management Work directory and will not be removed when you uninstall OpenEdge Management.



### To uninstall OpenEdge Management:

1. Stop the OpenEdge Management Trend Database.

You can use either Progress Explorer or the following command:

```
dbman -stop FathomTrendDatabase
```

The AdminServer must be running in order to stop the OpenEdge Management Trend Database.

If you receive a warning during the uninstall that the `fathom.db` is in use, the OpenEdge Management Trend Database has not been stopped.

2. Stop the AdminServer.

If you receive a warning during the uninstall that either `pphelper.dll` or `osmetrics.dll` is in use, the AdminServer has not been stopped.

3. If you have WebSpeed installed, stop the Web servers.

If you receive a warning during the uninstall that `wsmgsp.dll` is in use, the Web servers have not been stopped.

4. Choose **OpenEdge Management→ Uninstall**.

---

# Installing OpenEdge Management on UNIX

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This chapter provides information related to installing OpenEdge Management on UNIX systems, as described in the following sections:

- [Preinstallation tasks on UNIX systems](#)
- [Installing OpenEdge Management on UNIX](#)
- [Optionally configuring the OpenEdge Management Trend Database](#)
- [Using OpenEdge Management for the first time](#)
- [Installing additional products after installing OpenEdge Management](#)
- [Accessing documentation](#)
- [Running the installation utility in batch mode](#)
- [Uninstalling OpenEdge Management on UNIX](#)

## Preinstallation tasks on UNIX systems

You can install OpenEdge Management provided you have installed the current release of OpenEdge. See the “[System requirements](#)” section on page 2–5 for details.

### Reading OpenEdge Management documentation before installing

It is very important that you read the following two OpenEdge Management documentation sources before you begin to install OpenEdge Management:

- [Chapter 2, “Before You Install OpenEdge Management,”](#) for information on installation planning details and system requirements.
- *OpenEdge Management Release Notes*, which might contain supplemental or corrected installation information.

The information provided in this chapter is current as of the publication date of this manual; however, requirements can change. To make sure that you have the most up-to-date information, please be sure to refer to the release notes.

### Other preliminary tasks

There are several other tasks you must perform before you install OpenEdge Management.



#### To prepare to install OpenEdge Management:

1. Make sure that you have a valid OpenEdge product installed.
2. Obtain the serial number and control numbers for your installation of OpenEdge Management and the SNMP Adapter (if you have purchased the SNMP Adapter license). This information is shipped with the OpenEdge Management installation media.
3. Obtain the root password for the machine on which you are installing OpenEdge Management. You must be logged in as root in order to perform an install (or an uninstall). For more information, see your system administrator.

# Installing OpenEdge Management on UNIX

Be sure to have the serial and control numbers for OpenEdge Management and the SNMP Adapter (if applicable) handy before you begin the installation. These numbers are included in your OpenEdge Management media kit.



## To install OpenEdge Management on a UNIX system:

1. Stop the AdminServer.
2. Log in as root in a terminal window. If you do not know the root password for your system, consult with your system administrator.
3. Insert the OpenEdge Management installation CD into the CD-ROM drive.
4. Enter your platform-specific mount command.

[Table 4–1](#) lists the mount commands for each supported platform (where *device-name* is the device you are using for the installation and *mount-point* is the mount-point directory).

---

**Note:** On several platforms, there is an automount daemon that mounts the CD within approximately five seconds. If, however, the automount does not occur on your machine, use the mount command provided in [Table 4–1](#).

---

**Table 4–1: Mount commands**

(1 of 2)

Operating system	Mount command
HP Tru64 UNIX	mount -t cdfs -o noversion <i>device-name</i> <i>mount-point</i> For example: mount -t cdfs -o noversion /dev/rz3c /cdrom
HP-UX 11, 11i	mount -F cdfs -r -o cdcase <i>device-name</i> <i>mount-point</i> For example: mount -F cdfs -r -o cdcase /dev/dsk/c0t2d0 /cdrom
IBM AIX 5L	mount -v cdrfs -r <i>device-name</i> <i>mount-point</i> For example: mount -v cdrfs -r /dev/cd0 /cdrom

(2 of 2)

**5.** Enter the following install command:

**Note:** You cannot run `proinst` if you are in the `mount-point` directory.

```

Welcome

WELCOME TO THE OPENEDGE MANAGEMENT
INSTALLATION UTILITY

Copyright (c) 1984-2006
Progress Software Corp.
All Rights Reserved.

[Enter=OK]

```



6. Press **ENTER**. The OpenEdge Path screen appears:

```
+-----+
| Please enter the full path to the supported OpenEdge installation. |
+-----+
| Enter Path: _____ |
|                               |
| [Enter=OK]  [CTRL-N=Cancel] |
+-----+
```

7. Enter the full path to a supported OpenEdge product, and press **ENTER**. The **Product Configuration Data** screen appears:

```
+-----+
| Product Configuration Data |
+-----+
| Company Name: █          | [Enter=Additional]
| Serial Number: _____ | [Ctrl-E=Done]
| Control Number: _____ | [CTRL-T=Quit]
|                               | [CTRL-N=Release Notes]
|                               | [CTRL-V=View]
|                               | [TAB=Next Field]
+-----+
```

---

**Note:** Remember that each instance of OpenEdge Management is associated with one particular OpenEdge product upon installation. If you later install a different instance of OpenEdge, you can use the `reglue` command to change the OpenEdge Management-to-OpenEdge product association. See the [“Uninstalling OpenEdge Management on UNIX”](#) section on page 4–20 for more information.

---

8. Enter a company name (which can be any character string), the serial number, and the control numbers for OpenEdge Management. Then press **ENTER**.
9. If applicable, enter the serial number and the control numbers for the SNMP Adapter. Then press **ENTER**.

10. When you are done with this screen, press **CTRL+E**. The **Done Configuration Data Confirmation** screen appears:

```

-----
|               Done Configuration Data Confirmation               |
|-----|
| Are you sure that you are done entering all the control numbers for the |
| OpenEdge products that will be installed?                             |
|                                                                           |
|                               [Y=YES] [N=NO]                             |
|-----|

```

- 11.** Type **Y** to continue. The **Install Type and Destination** screen appears:

```

+-----+
| Install Type and Destination |
+-----+
| Select Destination Pathname |
| Continue with Installation |
| View Release Notes         |
| Cancel                     |
| Quit Installation          |
+-----+

```

```

+-----+
| Type: Complete Install     |
| Destination pathname: /usr/oemange |
| Working Dir pathname: /usr/wrk  |
+-----+

```

The defaults for the **Type** of install, the **Destination pathname** for the OpenEdge Management install, and the **Working Dir pathname** for OpenEdge Management are listed at the bottom of the screen.

12. Type **D** if you want to change either the destination or work directory paths. The **Select Destination Pathname** screen appears:

```

+-----+
+               Select Destination Pathname               +
+-----+
+ Enter Destination Path: /usr/oemanage                     +
+ Enter Work Directory Path: /usr/wrk                      +
+ [Enter=OK]  [Ctrl-E=Default Dest]  [Ctrl-G=Default Work]  [CTRL-N=Cancel]  +
+-----+

```

- Note:** If you are installing multiple instances of OpenEdge Management (to monitor separate OpenEdge products, for example), make sure that each instance of OpenEdge Management has a unique **Destination Path** and **Work Directory Path**.

- On the bottom of the screen you can review the type of installation, the destination pathname, and the working directory.

- ```

Complete Installation
-----
The following products will be installed:
'OpenEdge Mgt. SE'

Disk Space Required for Products: 165,456,384 bytes
Disk Space Required for Installation: 166,360,576 bytes
Disk Space Remaining After Installation: 260,436,480 bytes

Selected Destination Path: /users/doc/aspauldi/OEMgmtinstall

Do you want to install the above listed product(s)?

[Y=YES] [N=NO]

```

- After you have completed this step, the actual installation begins. An indicator showing the progress of the installation appears. Then a message appears to inform you that the installation program is tailoring the installed files.

```

+-----+
|               To Configure OpenEdge Management               |
+-----+
|
| Once the Admin Server has been restarted, you can configure OpenEdge
| Management by starting a web browser and entering http://localhost:9090.
| When prompted for a user name and password, enter "admin" for both.
| Refer to the OpenEdge Management Standard Edition Installation and
| Configuration Guide for assistance.
|
|               [Enter=OK]
|
+-----+

```

- ```
+-----+
|Installation of selected OpenEdge Management products is complete.|
|Refer to the installation notes for more information.|
+-----+
|End the OpenEdge Management Installation|
|View Release Notes|
+-----+
```

- ```
proadsv -start
```

**Note:** Be sure that you are not root when you restart the AdminServer. If you start the AdminServer as root, root has exclusive ownership and access to the files that you create when running OpenEdge Management. You will be unable to access those files when logged in as a user without root permissions.

## Changes to the OpenEdge install directory

When you install OpenEdge Management against OpenEdge, the following changes occur in the OpenEdge install directory:

- `.fathom` is created in `$DLC`
- `$DLC/addons` is updated
- `$DLC/properties/AdminServerPlugins.properties` is updated
- `$DLC/properties/JavaTools.properties` is updated

## Optionally configuring the OpenEdge Management Trend Database

After you install OpenEdge Management and before you begin the configuration in the OpenEdge Management console (as described in [Chapter 6, “Setting Up OpenEdge Management for the First Time”](#)), you can preallocate file system space in the OpenEdge Management Trend Database. This preallocation step is optional; however, it will make the OpenEdge Management Trend Database run more efficiently if you create fixed length extents before the OpenEdge Management Trend Database is created.



### To preallocate file system space:

1. Copy the OpenEdge Management Trend Database structure file (`fathom.st`) that exists in the `<OpenEdgeManagement-install-dir>/db` to the directory where the database will reside. The default directory is `Progress/OEManage/db`.
2. Edit the file, and add fixed length data extents to area 7.
3. Continue with the configuration as described in [Chapter 6, “Setting Up OpenEdge Management for the First Time.”](#) When the OpenEdge Management Trend Database is created, the database will pick up and use the structure file that exists in the directory where the database is being created.

For more information about editing `.st` files, see *OpenEdge Data Management: Database Administration*.

## Using OpenEdge Management for the first time

When you first start using OpenEdge Management, you must type the default user name and password (**admin** for both) in order to begin the configuration process. During the configuration, you will be required to change the default password.

See the [“Logging on to OpenEdge Management”](#) section on page 6–5 for details.

## Installing additional products after installing OpenEdge Management

You can add another OpenEdge Management-related product, such as the SNMP Adapter, to an existing OpenEdge Management installation.



**To add another OpenEdge Management-related product to an existing OpenEdge Management installation:**

1. Log in as root in a terminal window. If you do not know the root password for your system, consult with your system administrator.
2. Insert the OpenEdge Management installation CD into the CD-ROM drive.
3. Enter your platform-specific mount command.

[Table 4–1](#) lists the mount commands for each supported platform (where *device-name* is the device you are using for the installation and *mount-point* is the mount-point directory).

---

**Note:** On several platforms, there is an automount daemon that mounts the CD within approximately five seconds. If, however, the automount does not occur on your machine, use the mount command provided in [Table 4–1](#).

---

4. Enter the following install command:

```
mount-point/proinst
```

---

**Note:** You cannot run *proinst* if you are in the *mount-point* directory.

---



After you enter the install command, the **Welcome** screen appears:

```

+-----+
+       Welcome       +
+-----+
+
+  WELCOME TO THE OPENEDGE MANAGEMENT
+  INSTALLATION UTILITY
+
+  Copyright (c) 1984-2006
+  Progress Software Corp.
+  All Rights Reserved.
+
+
+  [Enter=OK]
+-----+

```

5. Press **ENTER**. The OpenEdge Path screen appears:

```
+-----+  
| Please enter the full path to the supported OpenEdge installation. |  
+-----+  
  
Enter Path: _____  
  
[Enter=OK] [CTRL-N=Cancel]  
+-----+
```

6. Enter the full path to a supported OpenEdge product. The following **Question** appears:

```

+-----+
+               QUESTION               +
+-----+
|The same version of OpenEdge Management has been detected.
|Would you like to add products to this OpenEdge Management installation?|
+-----+
|               [Y=YES] [N=NO]        |
+-----+

```

If you have multiple instances of OpenEdge and/or OpenEdge Management installed, you might be offered the option of doing a new installation of OpenEdge Management. If this is the case, see the “[Installing OpenEdge Management on UNIX](#)” section on page 4–3 for details. To install an additional product only, continue with [Step 7](#).

7. Press **Y** to continue to install the additional product. The following reminder appears:

```
+-----+  
|              INFORMATION              |  
+-----+  
| Please ensure that the OpenEdge Admin Server is shut down before continuing |  
| this upgrade. █                      |  
+-----+  
|                                [Enter=OK]                                |  
+-----+
```

8. Press **ENTER**. The **Product Configuration Data** screen appears:

```

+-----+
|               Product Configuration Data               |
+-----+
Company Name:	_____ [Enter=Additional]
Serial Number:	_____ [Ctrl-E=Done]
Control Number:	_____ [Ctrl-T=Quit]
	_____ [Ctrl-N=Release Notes]
	_____ [Ctrl-V=View]
	_____ [TAB=Next Field]
+-----+
  
```

9. Enter a company name (which can be any character string), the serial number, and the control numbers for the additional product, and then press **ENTER**.
10. Press **CTRL+E** when you finish adding the additional products. The **Done Configuration Data Confirmation** screen appears, asking if you are sure you are done.
11. Press **Y**. The **Install Type and Destination** screen appears.
12. Select **Continue with Installation**. The **Complete Installation** screen appears, as shown in the following example for the SNMP Adapter:

```

+-----+
|               Complete Installation                   |
+-----+
| The following products will be installed:              |
| 'SNMP Adapter'   |
|   |
| Disk Space Required for Products: 1,536 bytes         |
| Disk Space Required for Installation: 905,728 bytes   |
| Disk Space Remaining After Installation: 257,822,208 bytes |
|   |
| Selected Destination Path: /users/doc/aspauldi/OEMgmtinstall |
|   |
| Do you want to install the above listed product(s)?  |
|   |
|               [Y=YES] [N=NO]                          |
+-----+
  
```

13. Press **Y** to complete the installation. (Press **N** to terminate the installation and return to the command line of the terminal window.)

After you have completed this step, the installation of the new product begins. An indicator showing the progress of the installation appears. Then a message appears to inform you that the installation program is tailoring the installed files.

When tailoring is complete, the following message appears:

```
+-----+
|                                     |
|      To Configure OpenEdge Management      |
|                                     |
|Once the Admin Server has been restarted, you can configure OpenEdge |
|Management by starting a web browser and entering http://localhost:9090. |
|When prompted for a user name and password, enter "admin" for both. |
|Refer to the OpenEdge Management Standard Edition Installation and |
|Configuration Guide for assistance. |
|                                     |
|                                     | [Enter=OK] |
|                                     |
+-----+
```

14. Press **ENTER**. The following screen appears:

```
+-----+
|Installation of selected OpenEdge Management products is complete. |
|Refer to the installation notes for more information. |
+-----+
| End the OpenEdge Management Installation |
| View Release Notes |
+-----+
```

15. Choose **End the OpenEdge Management Installation** or **View Release Notes**, and press **ENTER**.
16. Restart the AdminServer, using the proadsv utility with the following syntax:

```
proadsv -start
```

For more information on proadsv, see *OpenEdge Database Management: Database Administration*.

---

**Note:** Be sure that you are not root when you restart the AdminServer. If you start the AdminServer as root, root has exclusive ownership and access to the files that you create when running OpenEdge Management. You will be unable to access those files when logged in as a user without root permissions.

---

## Accessing documentation

The OpenEdge Management documentation manuals are available in PDF format from the OpenEdge Management menu or the OpenEdge Management documentation CD. The CD is readable on both Windows and UNIX systems.

You can also access the documentation in PDF and HTML format from the Progress Software Developers Network (PSDN) Web site in the following location:

<http://www.psdn.com/library/kbcategory.jspa?categoryID=129>

For best results when using the PDF files, install the Acrobat Reader. You can download the Reader from the following location on the Adobe Web site:

<http://www.adobe.com/products/acrobat/readstep2.html>

Begin by reading `start.pdf`, which should open automatically if you have autorun enabled, when you insert the OpenEdge Management documentation CD into the CD-ROM drive. If you do not have autorun enabled, find the file on the CD and double-click it.

The `start.pdf` file describes how to do the following:

- View the PDF files from the CD
- Copy the PDF files from the CD to your machine
- Search across the PDF files
- Print the PDF contents

The names of the OpenEdge Management manuals and their corresponding PDF versions appear in [Table 4–2](#).

**Table 4–2: OpenEdge Management manuals and corresponding PDF files**

| <b>OpenEdge Management manual</b>                                                  | <b>Directory name</b> | <b>PDF filename</b> |
|------------------------------------------------------------------------------------|-----------------------|---------------------|
| <i>OpenEdge Management: Installation and Configuration Guide</i>                   | \fin                  | fin.pdf             |
| <i>OpenEdge Management: Resource Monitoring Guide</i>                              | \rmg                  | rmg.pdf             |
| <i>OpenEdge Management: Trend Database Guide and Reference</i>                     | \ftd                  | ftd.pdf             |
| <i>OpenEdge Management: Alerts Guide and Reference</i>                             | \far                  | far.pdf             |
| <i>OpenEdge Management: Database Management Guide</i>                              | \fdg                  | fdg.pdf             |
| <i>OpenEdge Management: Servers Guide</i>                                          | \foe                  | foe.pdf             |
| <i>OpenEdge Management: Reporting Guide</i>                                        | \frg                  | frg.pdf             |
| <i>OpenEdge Revealed: Achieving Server Control with OpenEdge Management</i>        | \asc                  | asc.pdf             |
| <i>OpenEdge Revealed: Mastering the OpenEdge Database with OpenEdge Management</i> | \mpf                  | mpf.pdf             |

## Running the installation utility in batch mode

This section describes running the OpenEdge Management installation utility in batch mode.

### Creating the installation initialization file

Running the OpenEdge Management installation utility in batch mode requires an initialization file in addition to the other OpenEdge Management installation support files. You can create an installation initialization file by using any text editor. Typically, you would save the initialization file with a `.ini` extension.

The following sample shows the format of an installation initialization file:

#### Sample installation initialization file

```
[Configuration Count]
NumberOfConfigurations=1

[OpenEdge Core Install Data]
installDir=/users/doc/aspauldi/OE101C

[Product Configuration 1]
name=your_company_name
serial=NNNNNNNNN
version=3.1B1P
control=NNNNN NNNNN NNNNN
prodname=Fathom Mgt. SE

[Install Destination]
type=Complete
path=/users/doc/aspauldi/OEinstall1
workpath=/users/doc/aspauldi/wrk
```

### Running a batch installation

The syntax for running the OpenEdge Management installation utility in batch mode follows:

#### Syntax

```
<OpenEdgeManagement-mount-point>/proinst -b pathname/filename.ini
-l pathname/filename.log
```

In the previous syntax, *OpenEdgeManagement-mount-point* refers to the directory where the OpenEdge Management installation utility, the installation support files, and the archive files can be found. For example, a typical batch installation command might be:

```
proinst -b /test/install.ini -l /log/test.log
```

If no `install.ini` file is specified as the argument to the `-b` option, the OpenEdge Management installation utility searches the current directory for the default file, `install.ini`. If no `install.ini` file is found, the batch installation fails.

All error messages are redirected to a log file. You can specify a log filename as an argument to the `-l` option. If no filename is specified for the log file, errors are redirected to the default log filename `install.log`. If no directory is specified for the log file, the installation utility checks the `TMP`, `TEMP`, and `TMPDIR` environment variables. The installation utility writes the log file to the first valid directory that it finds defined in those variables.

## Uninstalling OpenEdge Management on UNIX

Because OpenEdge Management is associated with (or “glued to”) an installed OpenEdge product, uninstalling OpenEdge Management is a two-step process. First, you disassociate (“unglue”) OpenEdge Management from OpenEdge, then you remove the OpenEdge Management files.

If you want only to change the association between OpenEdge Management and a particular OpenEdge product, it is not necessary for you to uninstall OpenEdge Management. Instead, you can unglue OpenEdge Management from one OpenEdge installation and reglue it to another installation of the same product. See the [“Using the Reglue command to change the OpenEdge Management association”](#) section on page 4–23 for details.

When you run `unglue`, the OpenEdge Management Trend Database entry is removed from the `conmgr.properties` file.

---

**Caution:** If you want to save trending data, be sure to back up the `<OpenEdgeManagement-install-dir>/db` before removing the OpenEdge Management installation.

---

Note that reports and logs are stored in the OpenEdge Management Work directory and will not be removed when you uninstall OpenEdge Management.



**To uninstall OpenEdge Management (unglue and remove the OpenEdge Management files):**

1. Stop any databases associated with OpenEdge Management.
2. Log in as root in a terminal window. If you do not know the root password for your system, consult with your system administrator.
3. Run the OpenEdge Management `unglue` command in a terminal window. The syntax for the command is:

```
/<OpenEdgeManagement-install-dir>/bin/unglue
```

Where `OpenEdgeManagement-install-dir` is the complete pathname of the directory where you installed OpenEdge Management.



The following prompt appears:

```
WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING
The unglue script will dis-associate Fathom from the Progress product.
Removes Fathom settings from the property files:
  $DLC/properties/AdminServerPlugins.properties
  $DLC/properties/JavaTools.properties
Removes the files fathom_env and .fathom from $DLC/bin,
Removes the fathom_v3.1B entry from $DLC/addons and removes the
FathomTrendDatabase definition from $DLC/properties/conmgr.properties.
Where $DLC = /users/doc/aspauldi/OE101B.

WARNING, the Progress AdminServer must be shutdown before continuing.
Choosing to do so will result in Fathom not being able to run on this
machine, do you wish to continue? [y | n]
```

4. Press **Y** and then press **ENTER** to complete the unglue.
5. Remove the directory where you installed OpenEdge Management. For example:

```
rm -r OEMgmtinstall
```

6. If you have configured remote monitoring, remove the `vpd.properties` file. For example:

```
rm $HOME/vpd.properties
```

---

**Caution:** If you want to uninstall OpenEdge Management and not associate it with a different OpenEdge installation, be sure to uninstall OpenEdge Management before you uninstall the OpenEdge product that it is associated with.

---

## If you remove the install directory before running unglue

Always run `unglue` before removing the OpenEdge Management directory. If you remove the OpenEdge Management directory before running `unglue`, the associated OpenEdge product will be partially disabled. You will not be able to run it correctly.



### To recover from a failure to run unglue:

1. Delete the following files:

```
OpenEdge-install-dir/.fathom
OpenEdge-install-dir/bin/fathom_env
```

2. If you configured remote monitoring, delete the following file:

```
OpenEdge-install-dir/properties/management.properties
```

3. Open the *OpenEdge-install-dir/addons* file, and remove the **fathom\_v3.1B** line. Then save the addons file.
4. Open the following file:

```
OpenEdge-install-dir/properties/AdminServerPlugins.properties
```

- a. Remove the `PluginsPolicy.Fathom` entry.
  - b. Remove the `Plugin.Fathom` entry.
  - c. To undo the changes that were made when OpenEdge Management was installed, modify the `jvmargs` line under the `[PluginPolicy.Progress.AdminServer]` section as follows: remove the `-Djava.awt.headless=true` entry; remove the `-Xbootclasspath/a:/OpenEdgeManagment-install-dir/jars/pja.jar` entry; and review the `-Xmx` setting.
5. Open the following file:

```
OpenEdge-install-dir/properties/JavaTools.properties
```

Remove the entries for `FATHOMCLI` and `FMBOUND`.

## Using the Reglue command to change the OpenEdge Management association

Each OpenEdge Management installation is associated with one particular OpenEdge product. If you have multiple versions of OpenEdge, you must have an individual OpenEdge Management installation for each version.

The OpenEdge Management `reglue` command, available only on the UNIX platform, allows you to change the association between a OpenEdge Management installation and an OpenEdge installation without necessarily having to uninstall and then reinstall OpenEdge Management.

When you run `reglue`, the OpenEdge Management Trend Database entry is removed from the `conmgr.properties` file. The next time you open OpenEdge Management in a browser, you see the **OpenEdge Management Configuration** page. Choose initial configuration options.

---

**Note:** You can also run the `reglue` command without having run `unglue`; in this case, the command performs both the `unglue` and the `reglue`.

---

### Ungluing and then regluing OpenEdge Management to a different OpenEdge installation

You can change the association between OpenEdge Management and a particular OpenEdge installation.



**To unglue OpenEdge Management from one OpenEdge installation and reglue to another installation:**

1. Log in as root.
2. Run the OpenEdge Management `unglue` command in a terminal window.

The syntax for the command is:

```
/<OpenEdgeManagement-install-dir>/bin/unglue
```

Where *OpenEdgeManagement-install-dir* is the complete pathname of the directory where you installed OpenEdge Management.

The following prompt appears:

```
WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING
The unglue script will dis-associate Fathom from the Progress product.
Removes Fathom settings from the property files:
  $DLC/properties/AdminServerPlugins.properties
  $DLC/properties/JavaTools.properties
Removes the files fathom_env and .fathom from $DLC/bin,
Removes the fathom_v3.1B entry from $DLC/addons and removes the
FathomTrendDatabase definition from $DLC/properties/conmgr.properties.
Where $DLC = /users/doc/aspauldi/OE101B.

WARNING, the Progress AdminServer must be shutdown before continuing.
Choosing to do so will result in Fathom not being able to run on this
machine, do you wish to continue? [y | n]
```

3. Press **Y** to complete the unglue.
4. Run the OpenEdge Management `reglue` command in a terminal window. The syntax for the command is:

```
/<OpenEdgeManagement-install-dir>/bin/reglue
```

Where *OpenEdgeManagement-install-dir* is the complete pathname of the directory where you installed OpenEdge Management. The following warning appears:

```
The Progress AdminServer and the Fathom trend database must
both be shutdown before continuing.
Do you wish to continue? [y | n]
```

5. Press **Y** to continue with the `reglue`. The following message appears:

```
Please enter the new directory path for the Progress installation
```

6. Type the path to the OpenEdge installation you want to glue OpenEdge Management to.
7. Press **ENTER**. The following message appears:

```
The reglue script adds Fathom settings to:
  $DLC/properties/AdminServerPlugins.properties
  $DLC/properties/JavaTools.properties
The reglue script will copy the files
fathom_env and .fathom into $DLC/bin,
and add a "fathom_v3.1B" entry to $DLC/addons and update
fathom.init.params to point to the new installation of Progress.
Where $DLC = /users/doc/aspauldi/OE101B.

WARNING
Beyond this point, changes will be made to the Fathom files.
Do you want to continue? [y | n]
```

8. Press **Y** and then press **ENTER**. A reglue confirmation appears:

```
Regluing Fathom in /users/doc/aspauldi/OEMgmtinstall to /users/doc/aspauldi/OE10
1B
OpenEdge Release 10.1B1P as of Wed Sep 20 22:20:06 EDT 2006
OpenEdge Release 10.1B1P as of Wed Sep 20 22:20:06 EDT 2006

Examine /users/doc/aspauldi/OEMgmtinstall/fathom.init.params to see if you are
still satisfied with the working directory settings.
Done.
```

9. Close the terminal window.



---

## Introducing OpenEdge Management

---

OpenEdge Management helps you to monitor the availability and performance of databases; system, network, and file resources; and OpenEdge server components. The following sections provide information about OpenEdge Management:

- [Understanding the system architecture](#)
- [Deploying OpenEdge Management](#)
- [Monitoring remote OpenEdge Management resources](#)
- [Choosing a deployment strategy](#)

## Understanding the system architecture

OpenEdge Management consists of the following parts:

- A Web-based management console, which provides a central location for viewing and configuring resources that are monitored by OpenEdge Management.
- Components to monitor database, system, network, file, and OpenEdge server resources.
- A database called the OpenEdge Management Trend Database that stores all data collected by agents for use in reporting.
- The OpenEdge Management process running as a thread in the AdminServer.



# Deploying OpenEdge Management

You can deploy OpenEdge Management by installing it on:

- A single host
- Multiple hosts

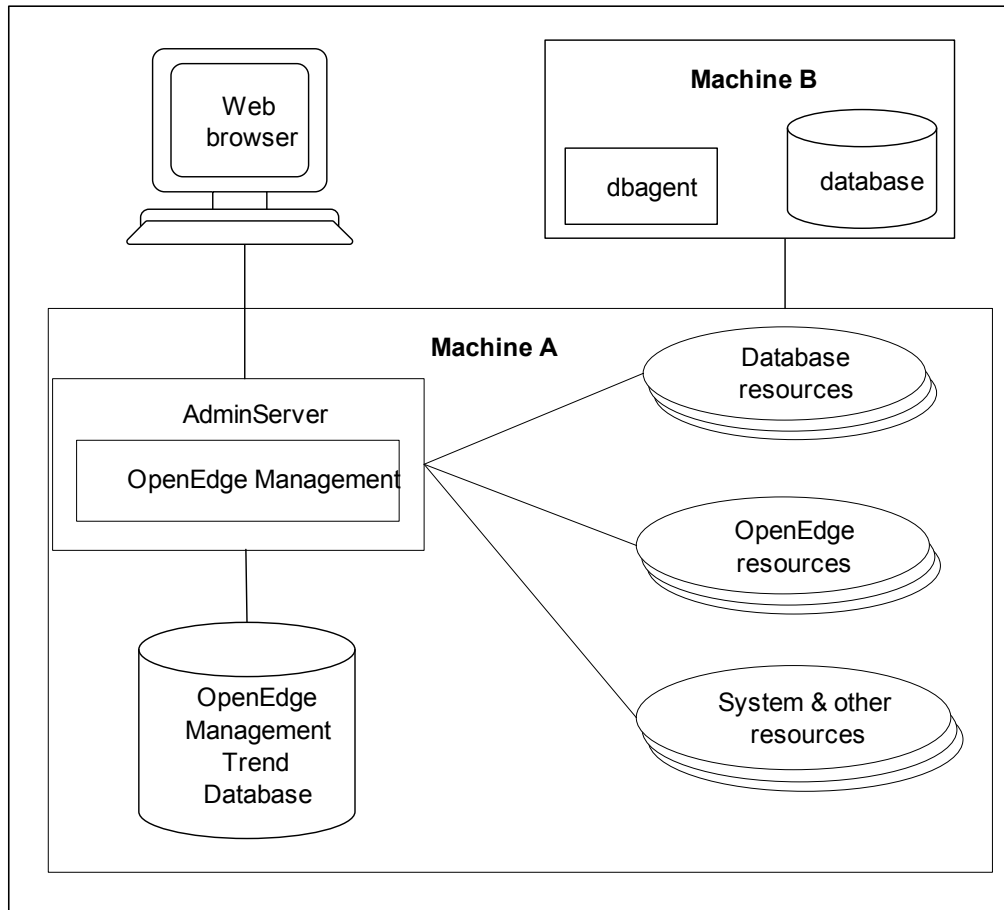
## Deploying OpenEdge Management on a single host

The simplest way to deploy OpenEdge Management is to install it on a single host where only local resources are to be monitored. A local resource is a system, network, file, or OpenEdge server resource that exists on the same host as OpenEdge Management.

A database resource that exists on the same host as OpenEdge Management is not considered local. Instead, a database on the same host as OpenEdge Management is a managed database, provided that the database is recognized by the AdminServer also running OpenEdge Management.

OpenEdge Management can also monitor scripted databases, which are not under AdminServer control, on the same host as OpenEdge Management or on other machines.

In the scenario shown in [Figure 5–1](#), all components of OpenEdge Management exist on the same host, Machine A.



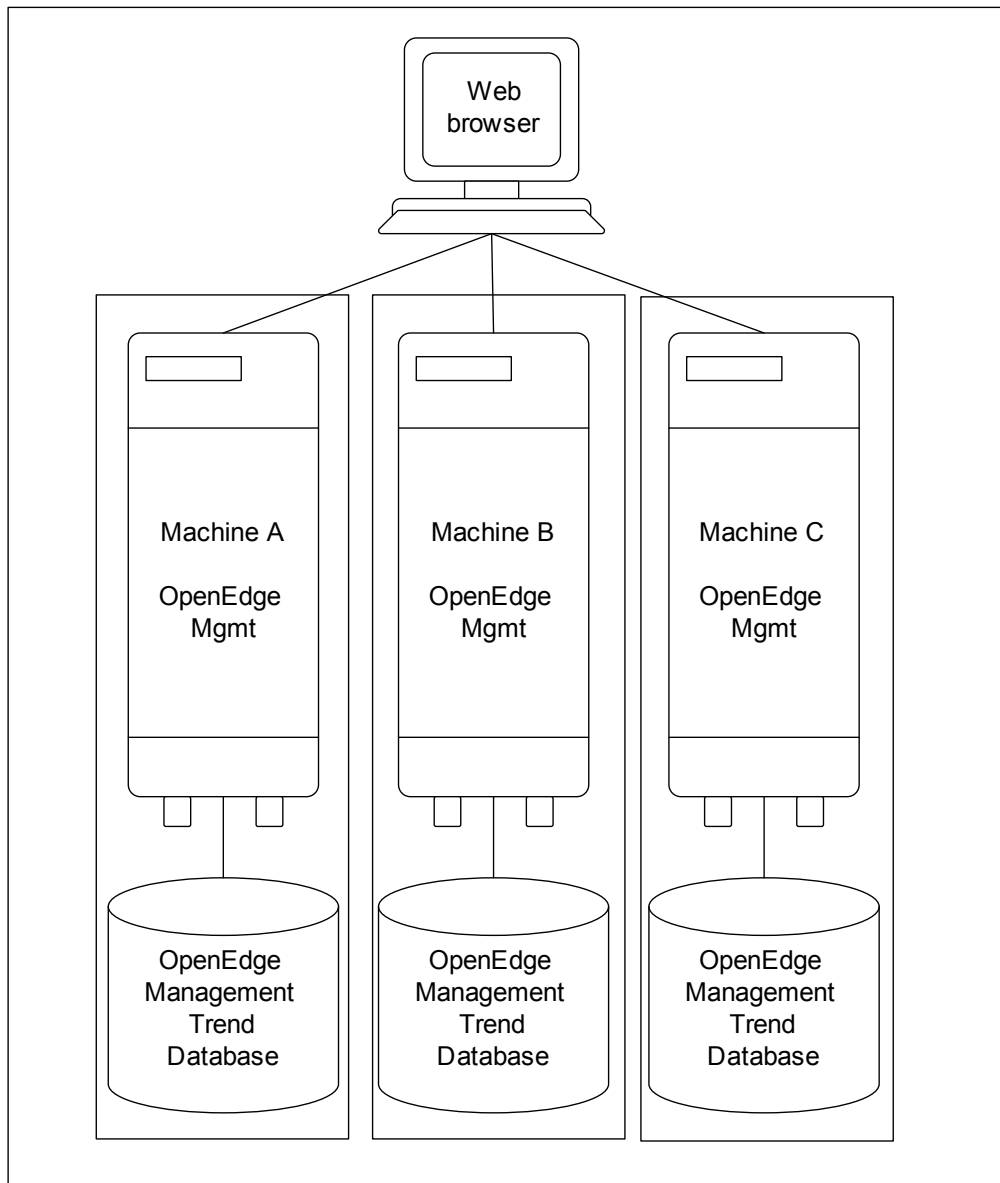
**Figure 5–1: Single-host OpenEdge Management installation**

OpenEdge Management is running inside the AdminServer on Machine A. The OpenEdge Management Trend Database and all monitored resources are also on Machine A.

On Machine B are a dbagent and a scripted database, which is running outside of the AdminServer on Machine A.

## Deploying OpenEdge Management on multiple hosts

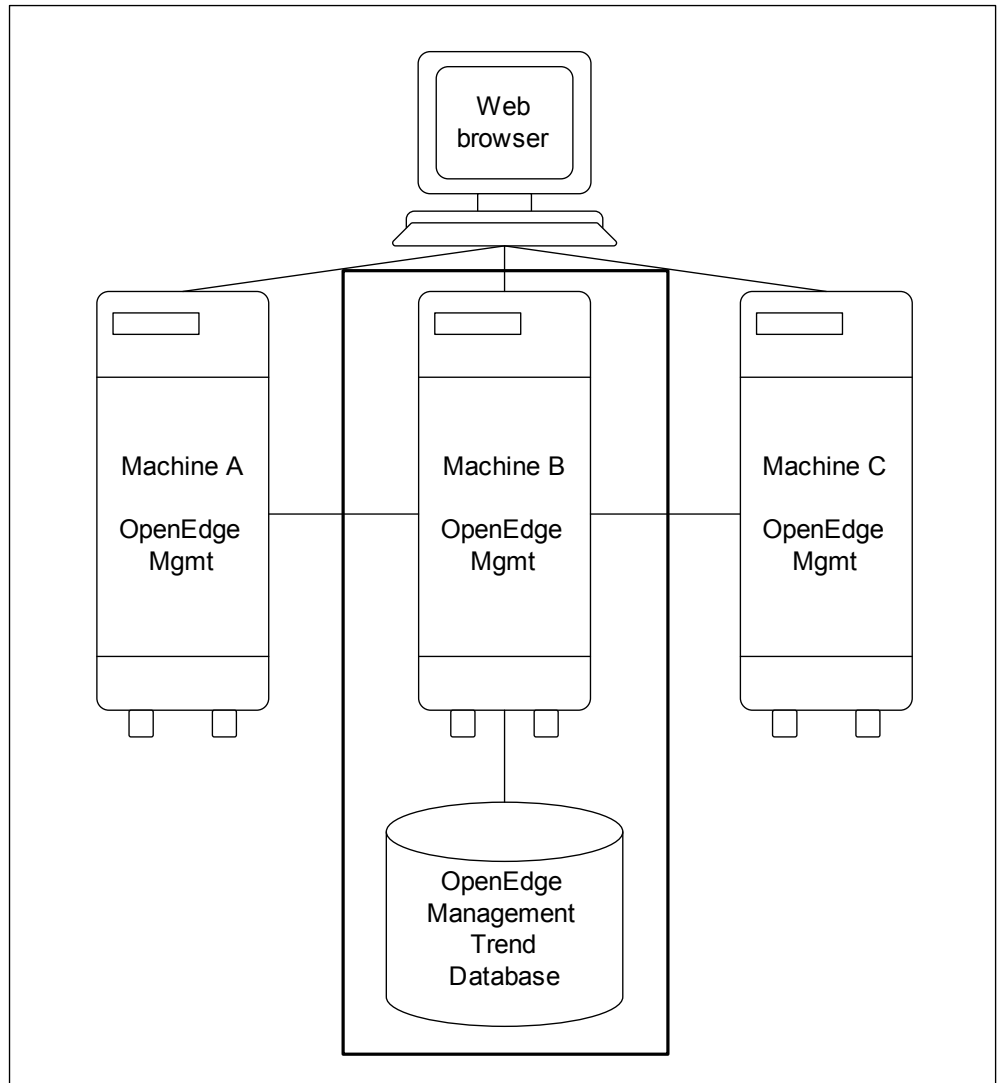
A slightly more complex way to deploy OpenEdge Management is to install it on each host where resources are to be monitored. In this scenario, each install of OpenEdge Management will monitor only those resources local to the host on which it is installed. Each install of OpenEdge Management uses its own OpenEdge Management Trend Database, as illustrated in [Figure 5-2](#).



**Figure 5–2: Multiple-host OpenEdge Management installation**

Figure 5–2 illustrates three separate installs of OpenEdge Management, one each on Machine A, B, and C. Each install uses its own OpenEdge Management Trend Database, and each install is monitoring only local resources. A possible negative aspect of the deployment shown in Figure 5–2 is that you have multiple OpenEdge Management Trend Databases.

As an alternative, you could configure each install of OpenEdge Management to use a shared OpenEdge Management Trend Database, as shown in [Figure 5-3](#).



**Figure 5-3: Multiple-host installation with shared OpenEdge Management Trend Database**

[Figure 5–3](#) illustrates three separate installs of OpenEdge Management, one each on Machine A, B, and C. Each install is sharing a single OpenEdge Management Trend Database on Machine B, and each install is monitoring only local resources.

In the deployments shown in [Figure 5–2](#) and [Figure 5–3](#), there is a separate install of OpenEdge Management on each host where resources are to be monitored. Neither takes advantage of OpenEdge Management's remote resource monitoring.

## Monitoring remote OpenEdge Management resources

OpenEdge Management allows you to monitor resources on a remote machine where OpenEdge Management is not installed. This provides numerous benefits, the greatest of which is the ability to view the status of all your resources and alerts through a single OpenEdge Management console. Remote resource monitoring also simplifies deployment because OpenEdge Management need not be installed on each host where resources are to be monitored.

For monitoring resources remotely, OpenEdge Management uses the SonicMQ, which is a very fast and reliable messaging system.

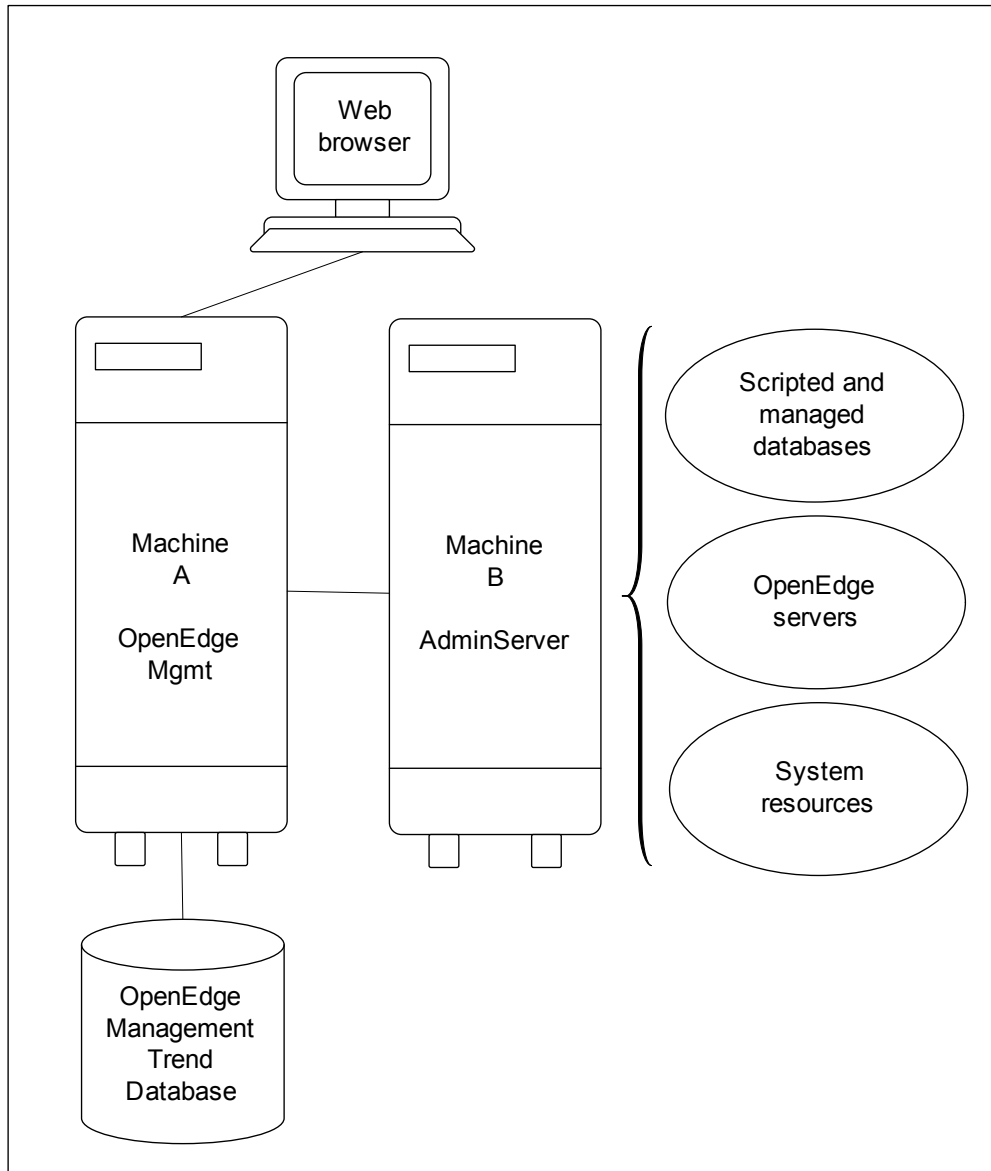
OpenEdge Management requires that you have an AdminServer running on the remote host where resources are to be monitored. Additionally, both OpenEdge Management on the local host and the AdminServer on the remote host must be configured using the OpenEdge Management Remote Configuration Utility (fmconfig), as described in [Chapter 7, “Configuring Remote Monitoring for OpenEdge Management.”](#)

## Monitoring database, OpenEdge, and system resources on a remote machine

You can deploy OpenEdge Management to monitor the following remote resources:

- **Databases** — Progress Version 9.1E, OpenEdge Releases 10.0B, 10.1x. OpenEdge Management uses the dbagent to monitor all database resources
- **OpenEdge servers** — AppServer, WebSpeed, and NameServer
- **System resources** — CPU, memory, disk, and file system

A deployment in which OpenEdge Management is monitoring database, OpenEdge server, and system resources on a remote machine is shown in [Figure 5-4](#).



**Figure 5-4: Remote monitoring of resources on one machine**



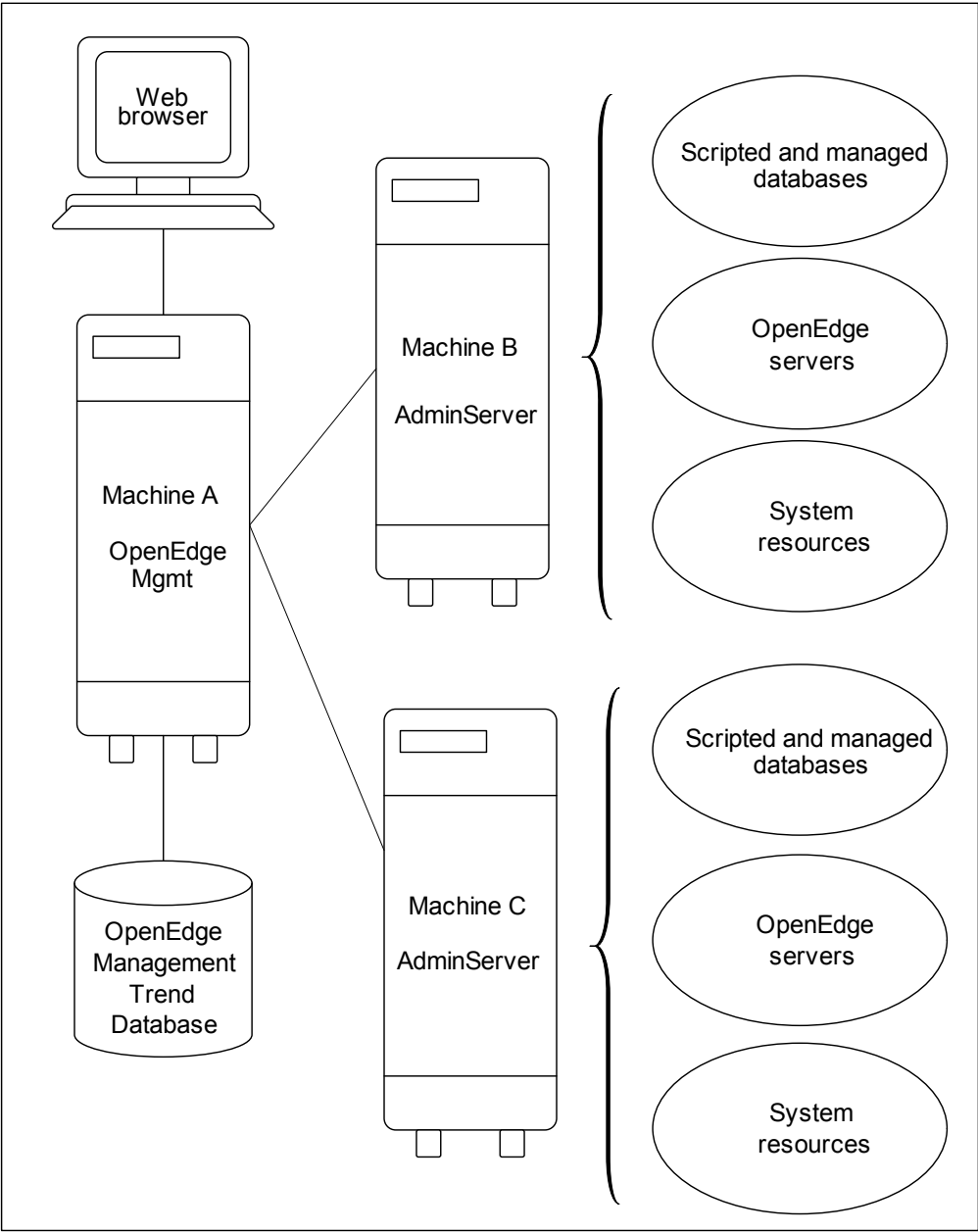
The illustration shown in [Figure 5–4](#) presents a single installation of OpenEdge Management on Machine A, which is monitoring the following resources on Machine B:

- **Scripted and managed databases** — A *scripted database* is a database that is not currently listed among the database resources that the AdminServer manages. A *managed database* is a database that the Progress Explorer and the AdminServer recognize and manage.

You cannot set up a resource for a scripted database, or its associated file systems and disks, until the database is recognized as a managed database. For details, see the [“Understanding managed and scripted databases”](#) section on page 6–16.

- **OpenEdge servers** — An OpenEdge server can be an AppServer, a NameServer, or a WebSpeed Transaction Server.
- **System resources** — System resources are CPU, disk, memory, and file system.

You can extend this deployment model to multiple hosts, as shown in [Figure 5–5](#).



**Figure 5–5: Remote monitoring of resources on two machines**

The illustration shown in [Figure 5–5](#) presents a single install of OpenEdge Management on Machine A, which is monitoring databases (scripted and managed), OpenEdge servers, and system resources on Machine B and Machine C.

The number of remote hosts you monitor from the OpenEdge Management install on Machine A is limited only by the power of Machine A, the number of remote resources monitored, and the frequency with which they are polled.

This deployment model is very effective in that it allows you to install OpenEdge Management on a non-production machine—that is, a machine other than one where your OpenEdge or other critical application resources run. The benefit of this deployment model is that it minimizes the impact of using OpenEdge Management to monitor your production machines.

## More about monitoring scripted and managed databases

You can configure OpenEdge Management to monitor both scripted and managed databases. Using the dbagent, OpenEdge Management can monitor a database that is running on the same host as OpenEdge Management or on a different host, regardless of whether the database is managed (recognized by the AdminServer and Progress Explorer) or scripted (not under AdminServer control).

Currently OpenEdge Management can monitor:

- A scripted database that is running through a remote-enabled AdminServer.
- A managed database (that OpenEdge Management has autodiscovered) running under a remote-enabled AdminServer.
- A scripted database that is running outside of the AdminServer in which OpenEdge Management is running. In this case, the AdminServer is not remote-enabled.

### **Monitoring a scripted database through a remote-enabled AdminServer**

When OpenEdge Management monitors a scripted database that is running through a remote-enabled AdminServer, the scripted database communicates directly with that AdminServer, which then uses the Sonic infrastructure to communicate with OpenEdge Management. The advantage to setting up monitoring in this way is that the scripted database can connect right into an AdminServer that is remote-enabled for all resources; it is not necessary for the dbagent to open a separate port into OpenEdge Management.

You configure OpenEdge Management and the remote-enabled AdminServer by using the OpenEdge Management Remote Monitoring Configuration Utility. For details, see [Chapter 7, “Configuring Remote Monitoring for OpenEdge Management.”](#)

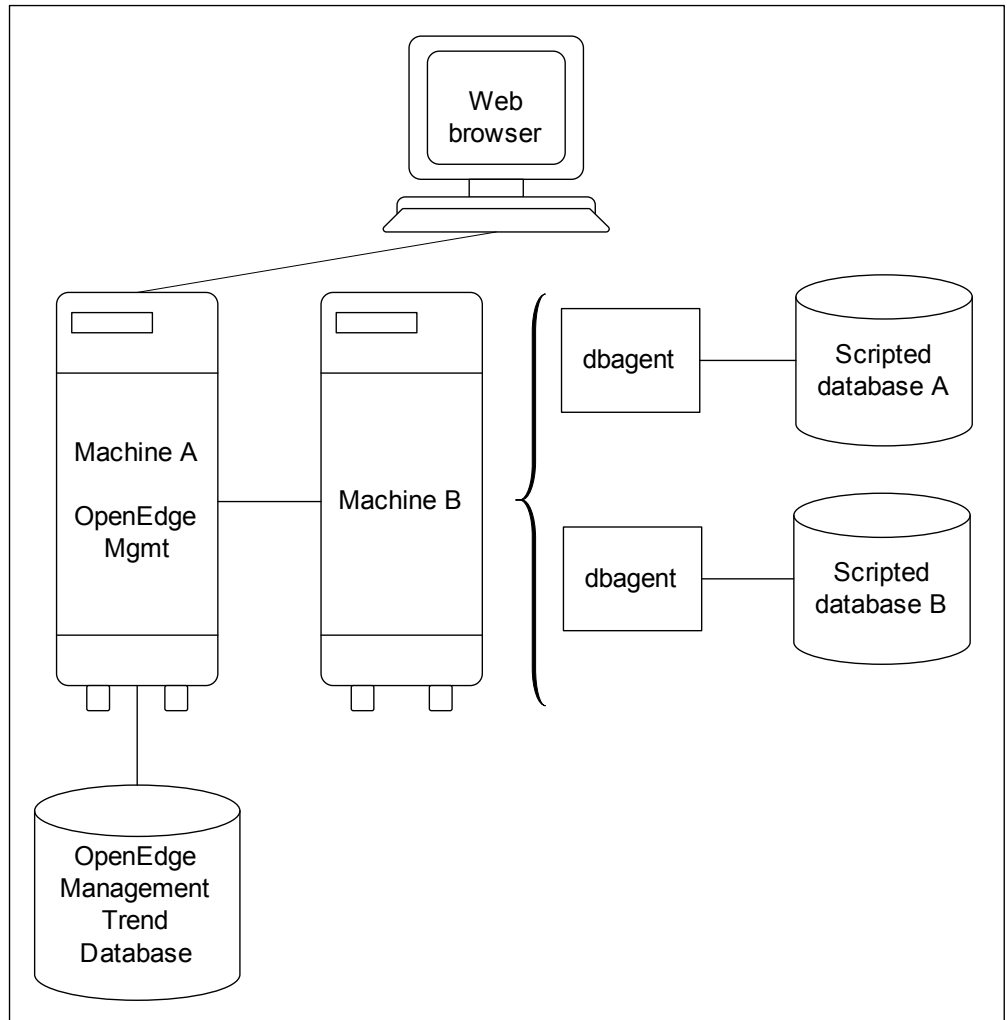
### **Monitoring a managed database through a remote-enabled AdminServer**

OpenEdge Management can monitor a managed database that has been autodiscovered running under a remote-enabled AdminServer.

### **Monitoring scripted databases outside the AdminServer running OpenEdge Management**

OpenEdge Management can monitor scripted databases that are running outside of the AdminServer in which OpenEdge Management is running. In order to monitor a database that is scripted, you must create a remote database resource.

To monitor a scripted database once you migrate it, OpenEdge Management uses the dbagent installed with your OpenEdge database. This deployment is shown in [Figure 5–6](#).



**Figure 5–6: Monitoring scripted databases on another machine**

If you are using the AdminServer on Machine B to manage your databases, you can use Progress Explorer to configure those databases for monitoring by OpenEdge Management. If you are not using the AdminServer on Machine B, you will need to modify the startup parameters of each database to start the dbagent when the database is started. See the *OpenEdge Management: Database Management Guide* for more information.

## Choosing a deployment strategy

The best strategy for deploying OpenEdge Management depends on your requirements. There is no one strategy that works best for all environments. You may find that a combination of approaches works best for your needs. Some factors to consider when deciding on a deployment strategy include:

- Do you want to minimize the impact of OpenEdge Management on your production machines? If so, you should consider installing OpenEdge Management on a machine dedicated to running OpenEdge Management and use OpenEdge Management remote monitoring capabilities.
- Do you want to view the status of all your resources from a single OpenEdge Management console? If so, you should consider using OpenEdge Management's remote resource monitoring capabilities.
- Do you need to monitor file or log file resources on multiple machines? If so, you'll need to install OpenEdge Management on each machine. OpenEdge Management currently does not provide the ability to monitor file or log file resources remotely.

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**Note:** If you have NFS-mounted disks, you may be able to monitor these resources locally, even if the disks are on a remote machine.

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- Do you need to monitor network (TCP, UDP, HTTP, or ICMP) resources on multiple machines? If so, you'll need to install OpenEdge Management on each machine. OpenEdge Management currently does not provide the ability to monitor these resources on a remote machine. Note that, under most circumstances, it is sufficient to have OpenEdge Management monitor these resources from the local machine, as that will test the availability of the resources.
- Do you need to run jobs on remote machines? If so, you'll need to install OpenEdge Management on each machine where jobs are to be run. OpenEdge Management currently does not provide the ability to start a job on a remote machine.
- Will you be monitoring resources outside of your network firewall? If so, you'll need to perform the appropriate tunneling to allow OpenEdge Management through the firewall.

The default port for monitoring remote OpenEdge and system resources is 6835, and the default port for monitoring remote databases is 7835.

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## Setting Up OpenEdge Management for the First Time

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This chapter introduces the components of OpenEdge Management and describes how to set up OpenEdge Management, as outlined in the following sections:

- [Using the OpenEdge Management console](#)
- [Preparing to configure OpenEdge Management](#)
- [Completing the initial configuration process](#)
- [Logging on to OpenEdge Management](#)
- [Choosing initial configuration options](#)
- [Setting up the Getting Started page](#)

## Using the OpenEdge Management console

The information presented in this chapter describes how to establish initial configuration settings for OpenEdge Management. As you make decisions about how you would like to set up OpenEdge Management initially, keep in mind that you can change the configuration options as you become more familiar with all that OpenEdge Management has to offer. For details about changing options, see [Chapter 8, “Administering OpenEdge Management.”](#)

For a complete description of the OpenEdge Management console, see the *OpenEdge Management: Resource Monitoring Guide*, which covers the console’s features and functionality in detail.



## Preparing to configure OpenEdge Management

To ensure that you have the necessary information to perform your configuration, consider the following information before you proceed:

- Review the installation and deployment decisions made when OpenEdge Management was installed at your site. See [Chapter 2, “Before You Install OpenEdge Management,”](#) for installation considerations.
- Note that OpenEdge Management runs as a managed service in the AdminServer; your databases can be administered by the AdminServer and the Progress Explorer. Therefore, you should be familiar with the AdminServer and Progress Explorer functionality.
- If you intend to monitor remote resources, be sure that you have installed OpenEdge Management and OpenEdge in directories whose names do not contain spaces.
- Note that familiarity with the OpenEdge Management command-line options (which can be launched from **Start**→**Programs**→**OpenEdge Management**→**Set OpenEdge Management Environment**) is also useful when you are upgrading and you have preconfigured OpenEdge Management not to autostart. You can stop and start OpenEdge Management manually, as follows:

```
fathom -start  
fathom -stop
```

You can also:

- Start or stop OpenEdge Management from the **OpenEdge Management** menu.
- Open OpenEdge Management in a browser from the **Management Console** shortcut on your desktop (if you chose to install the shortcut during OpenEdge Management installation).

For details about using command-line options with OpenEdge Management, see the [“Using the command-line interface”](#) section on page 8–28.

## Completing the initial configuration process

The OpenEdge Management configuration process involves making choices on these OpenEdge Management console pages:

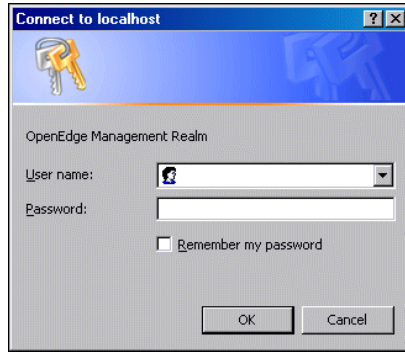
- **OpenEdge Management Configuration**
- **Getting Started**

You are prompted to make initial configuration choices the first time you start OpenEdge Management after installing it, when the **OpenEdge Management Configuration** page automatically appears. Once you fill in all the fields and click **Submit**, OpenEdge Management is partially initialized and the **Getting Started** page appears. The **Getting Started** page allows you to define monitors for files, disks, and scripted databases.

After you make your initial configuration choices, you can access and change certain configuration options at any time.

## Logging on to OpenEdge Management

Each time you open OpenEdge Management in a browser, the logon window shown in [Figure 6–1](#) appears. This window requires you to enter your user name and password.



**Figure 6–1: Logon window**



To display the user name and password logon window shown in [Figure 6–1](#), do one of the following:

- From a Web browser, enter the URL `http://host:port` in the address or location field. The *host* is the name of a machine where OpenEdge Management is installed, and *port* is the OpenEdge Management Web server port (by default, this port is 9090). The logon window appears.
- From the Windows Desktop on your local host, select **Start→Programs→OpenEdge Management→Management Console**. Your default browser appears, displaying the logon window.
- Click the **Management Console** shortcut in your Windows Desktop (if you chose to add the shortcut during OpenEdge Management installation in a Windows platform). Your default browser appears, displaying the logon window. Note that the specific appearance of this window depends on the browser you are using.

## Entering the default User Name and Password

The first time you log on to OpenEdge Management, you must use the default user name, which is **admin**, and the default password, which is **admin**.



### To enter the default user name and password:

1. Type **admin** in both the **User Name** and the **Password** fields.
2. Click **OK**. The **OpenEdge Management Configuration** page opens in the OpenEdge Management console, allowing you to set up your initial configuration options.

Note the following details related to the default password **admin**:

- You use the default password **admin** only once—the first time you log on to OpenEdge Management. The **OpenEdge Management Configuration** page that opens at the initial login requires you to change the default password before you can submit your initial configuration selections or use OpenEdge Management.
- The new password you provide on the **OpenEdge Management Configuration** page does not take effect until you stop and restart OpenEdge Management, by either shutting down and restarting the host machine or using the appropriate command-line interface (CLI) commands. See the [“Using the command-line interface”](#) section on page 8–28 for more information.

## Choosing initial configuration options

Use the **OpenEdge Management Configuration** page that appears when you log on to OpenEdge Management for the first time to make initial choices about the following:

- The Administrator password.
- Whether you want OpenEdge Management to start automatically when the AdminServer starts.
- The location of the OpenEdge Management Trend Database.
- The port number for the OpenEdge Management Web server.
- The e-mail server host and port, and the default e-mail recipient for OpenEdge Management alerts. *Alerts* are messages from OpenEdge Management regarding potential irregularities in the resources you are monitoring.
- SNMP Adapter settings (if you have installed the SNMP Adapter).

Remember that you can subsequently change these initial configuration decisions.

## HTTPS Secure Sockets Layer support

OpenEdge Management supports the implementation of the Secure Sockets Layer (SSL) protocol for HTTP.

Once you complete the initial configuration of OpenEdge Management, you can further modify your settings by choosing SSL support in either or both of the following two areas:

- When trending to a remote OpenEdge Management Trend Database.
- When setting up the OpenEdge Management Web server. You have the option of setting up either the HTTP or the HTTPS protocol; you also have the option of setting up both protocols.

See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for more information.

## Required and optional fields

As you use the OpenEdge Management console to establish your configuration, notice that required fields appear in red. Configuration does not proceed if you leave a required field blank.

## Specifying the Admin Password

OpenEdge Management initializes with a default user name and password for the administrator. The default value for both the user name and the password is **admin**.

You must change the password on the **OpenEdge Management Configuration** page after you log in for the first time, and you should change it at frequent intervals thereafter. To change the password at any time other than during initial configuration, do so from the **Authorized Users** page. See the [“Adding OpenEdge Management users as administrators or operators”](#) section on page 8–7 for more information.

The new password you provide on the **OpenEdge Management Configuration** page does not take effect until you stop and restart OpenEdge Management, by either shutting down and restarting the host machine or using the appropriate command-line interface (CLI) commands. See the [“Using the command-line interface”](#) section on page 8–28 for more information.



### To change the administrator password:

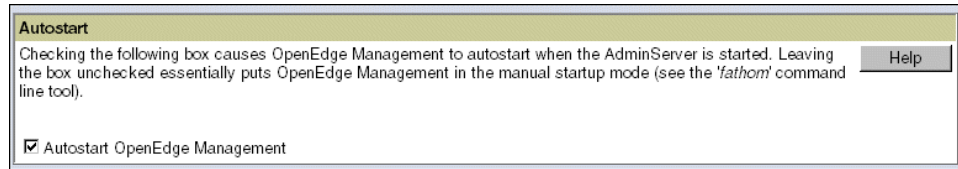
1. Enter your new administrator password in the **Password** field of the **Admin Password** section:

The screenshot shows a web form titled "Admin password" with a light green header. Below the title is a paragraph: "Change the administrator account password by entering a new password in both fields below. The new password will take effect the next time OpenEdge Management is started." To the right of this paragraph is a "Help" button. Below the paragraph are two input fields. The first field is preceded by the label "Password:" in red text. The second field is preceded by the label "Confirm password:" in red text. Both labels and their corresponding input fields are aligned to the left.

2. Confirm the new password by typing it in the **Confirm password** field. When you stop and restart OpenEdge Management, remember to use the new password. Note that the default user name of **admin** remains valid.
3. Continue to the next section on the **OpenEdge Management Configuration** page to determine if you want to start OpenEdge Management automatically when the AdminServer starts. (You should delay clicking **Submit** until after reviewing and/or selecting all options on the **OpenEdge Management Configuration** page.)

## Specifying the AutoStart OpenEdge Management option

If you select the **Autostart OpenEdge Management** option, OpenEdge Management will start automatically when the AdminServer starts. The **Autostart OpenEdge Management** check box is selected by default, as shown in [Figure 6–2](#).

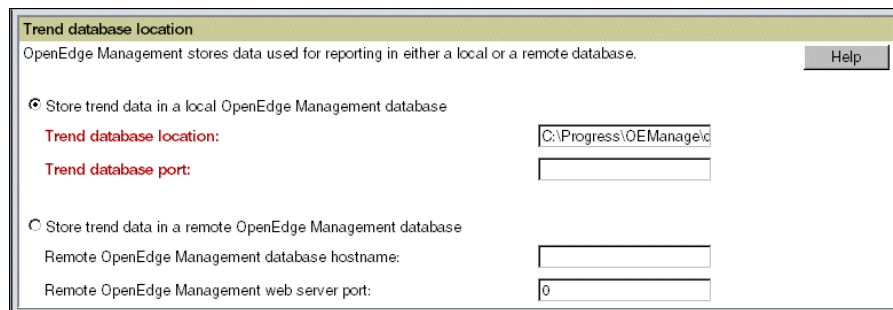


**Figure 6–2: Autostart OpenEdge Management option**

If you clear this box, you must use the OpenEdge Management command-line interface to start OpenEdge Management. See the [“Using the command-line interface”](#) section on page 8–28 for details.

## Specifying the location of the OpenEdge Management Trend Database

OpenEdge Management allows you to store trend data, which is the monitoring information OpenEdge Management maintains, in either a local or remote OpenEdge Management Trend Database. These options appear in the **Trend database location** section, shown in [Figure 6–3](#).



**Figure 6–3: Trend database location**

If you choose to send trend data to a local database (which is the default), you must specify the trend database location and the port used to connect to that database. If you choose to use a remote database, you must specify the host name and Web server port of the remote OpenEdge Management Web server. The trend database must be locally configured at the remote location. All values you enter for either option are validated.

If you are trending to a remote database and want to establish secure transmission of data, you can choose to use the HTTPS protocol. See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for more information.

---

**Note:** The configuration option you select for this step must match the installation decisions you implemented during the OpenEdge Management installation process. For example, you can elect to store trend data in a remote OpenEdge Management Trend Database only if you installed OpenEdge Management on both the local machine and the remote machine. For more information, see [Chapter 3, “Installing OpenEdge Management in Windows,”](#) or [Chapter 4, “Installing OpenEdge Management on UNIX.”](#)

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### To specify the location of your OpenEdge Management Trend Database:

1. Scroll to the **OpenEdge Management Configuration** page's **Trend database location** section, as shown in [Figure 6–3](#).
2. To store trend data locally, follow these steps:
  - a. Select the **Store trend data in a local OpenEdge Management database** option.
  - b. Specify the **Trend database location**. You can either confirm the explicit path that matches the database location specified during the OpenEdge Management installation process, or you can provide a different path to the OpenEdge Management Trend Database.

If you enter a path location for the OpenEdge Management Trend Database that is different from the one you specified during installation, you must also copy the OpenEdge Management Trend Database from its previously installed location to its new location. You must use either the `procopy` or `prodb` command to preserve the schema integrity.

For more information about either command, see *OpenEdge Data Management: Database Administration*.

The configuration name of the trending database is OpenEdge Management Trend Database. The name of the physical database must be **fathom**.

- c. Enter the port number in the **Trend database port** field.



3. To store trend data remotely, follow these steps:
  - a. Select the **Store trend data in a remote OpenEdge Management database** option.
  - b. Enter the host name of the machine in the **Remote OpenEdge Management database hostname** field. This is the host name where the remote database is installed. The name can be either a valid IP address or a name; it does not have to be fully qualified.
  - c. Enter the HTTP port number in the **Remote OpenEdge Management web server port** field. This is the port number that the OpenEdge Management Web server uses to connect to the remote OpenEdge Management system.

When you choose to store trend data on a remote OpenEdge Management database, the assumption is that you have already configured the OpenEdge Management Trend Database on the remote system. OpenEdge Management displays a warning message if it cannot verify that the remote database is properly configured.

## Specifying the OpenEdge Management Web server port

OpenEdge Management contains a Web server that allows you to connect to OpenEdge Management through the Web-based management console. By default, OpenEdge Management uses port 9090 for this Web server. If port 9090 is already in use on your system, or if you prefer to use another port, you can change the port used by OpenEdge Management.

---

**Note:** If you change the port number, the Web server immediately stops and restarts on the new port. You must reconnect the console to OpenEdge Management on the new port.

---

Once you set up the Web server port during the initial configuration, you can further modify its settings by choosing to use either the HTTP or the HTTPS protocol; you also have the option of setting up both protocols. See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for more information.



### To change the port used by the OpenEdge Management Web server:

1. Scroll to the **Web server port** section of the **OpenEdge Management Configuration** page:

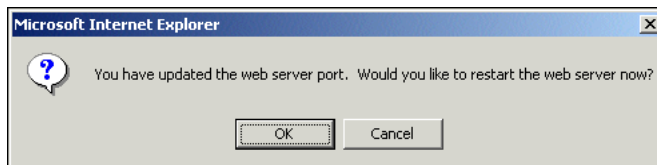
Web server port

By default the OpenEdge Management web server starts on port 9090. If you are going to run multiple versions of OpenEdge Management on one system you will need to redefine this port. *Note, if you change the port, you will need to reconnect to OpenEdge Management using the new port.*

OpenEdge Management web server port:

2. Accept the default port number 9090, or enter a different port number. Once you finish making configuration choices on this page and click **Submit**, the port number is referenced.

If you change the Web server port, you will see the following message once you submit both the **OpenEdge Management Configuration** and the **Getting Started** pages:



3. Click **OK** to restart the Web server. You must then reconnect to OpenEdge Management, using the new port number in the browser's URL, and refresh the page.

## Specifying the e-mail server and default operator

OpenEdge Management uses e-mail to send alerts to appropriate personnel. Alerts are messages from OpenEdge Management regarding potential irregularities in the resources you are monitoring.

If your organization has access to a paging service that reports on text-based messages that are sent by e-mail, your organization can use the e-mail action feature to initiate this message. You can determine whether the e-mail alert message is to be sent to an e-mail address or to a pager as a text message. To use alerts, you must specify the Simple Mail Transfer Protocol (SMTP) host and port that OpenEdge Management will use to send e-mail messages.

You should also identify a default user to receive alerts. This user's name will appear as the default recipient of each new alert that you define. You should choose a user who is most likely to receive most, if not all, generated alerts. However, remember that when you set up your monitors with OpenEdge Management, you can choose to override the default user.



**To specify the e-mail server and the default operator you want to receive these alerts:**

1. Scroll to the **Default alert recipient** section of the **OpenEdge Management Configuration** page:

2. Enter the SMTP host name in the **Mail server (SMTP) host** field. Check with your e-mail administrator if you do not know the e-mail host name.
3. Enter the port used by the SMTP host in the **Mail server (SMTP) port** field. On most systems, this is port 25.
4. Enter the e-mail address of the user you want to be listed as the default recipient of alerts in the **Default e-mail recipient** field.
5. If you want to require the default e-mail recipient to enter a user name and password, select the **Require SMTP user name and password** option. Then provide the user name and the password and confirm the password in the fields provided.

When the default alert recipient information is submitted, OpenEdge Management automatically sets up a Transmission Control Protocol (TCP) network resource monitor, SMTP\_MAIL, for the host and port specified using default monitoring values. The SMTP protocol is used for sending e-mail messages between servers.

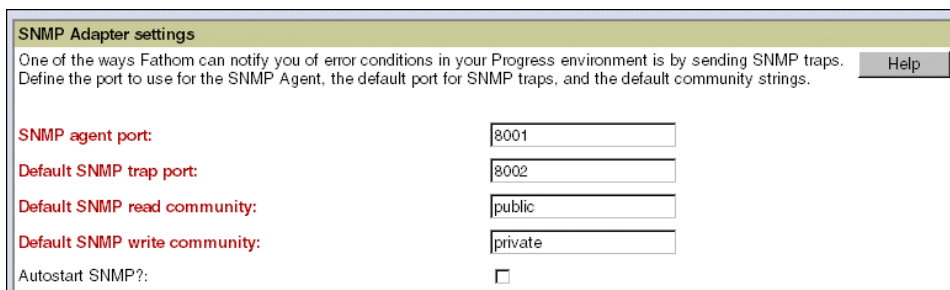
Alerts generated for this resource monitor are based on host and port performance only. For more information about network resource monitors, see the [OpenEdge Management: Resource Monitoring Guide](#).

## Choosing SNMP Adapter settings

The Simple Network Management Protocol (SNMP) Adapter allows you to run the OpenEdge Management SNMP agent and configure it to throw traps to an SNMP management console. *Traps* are OpenEdge Management-resource-related event notifications sent to your SNMP management console. (For more information about the SNMP Trap Action, see the [OpenEdge Management: Resource Monitoring Guide](#).)

The SNMP agent is responsible for handling SNMP requests. All OpenEdge Management-specific SNMP variables are contained in the Management Information Base (MIB); the MIB is named `PSC-FM-MIB.txt` and is located in the `<OpenEdgeManagement-install-dir>\config` directory.

If you installed the SNMP Adapter, you see default adapter settings, as shown in [Figure 6-4](#), as you perform your initial OpenEdge Management configuration.

A screenshot of the 'SNMP Adapter settings' dialog box. The title bar is green and says 'SNMP Adapter settings'. Below the title bar, there is a text area with the following text: 'One of the ways Fathom can notify you of error conditions in your Progress environment is by sending SNMP traps. Define the port to use for the SNMP Agent, the default port for SNMP traps, and the default community strings.' To the right of this text is a 'Help' button. Below the text area, there are four rows of settings, each with a label on the left and a text input field on the right. The labels are in red: 'SNMP agent port:', 'Default SNMP trap port:', 'Default SNMP read community:', and 'Default SNMP write community:'. The input fields contain the values '8001', '8002', 'public', and 'private' respectively. At the bottom left, there is a label 'Autostart SNMP?:' followed by an unchecked checkbox.

**Figure 6-4: SNMP Adapter settings**

You can change these SNMP Adapter settings, which are defined as follows:

- **SNMP agent port** — The port number of the host machine on which the SNMP management agent resides. The SNMP agent translates the requests from the SNMP management console and interprets MIB variables. The default port number is 8001.
- **Default SNMP trap port** — The port number to which traps are sent. The default number is 8002.
- **Default SNMP read community** — The community that specifies who has permissions to read which variables.

- **Default write community** — The community that specifies who has permissions to write which variables. (In the case of the OpenEdge Management MIB, the values are read-only.)
- **Autostart SNMP** — The option to autostart the SNMP agent.

## Submitting the OpenEdge Management Configuration page

Once you make your initial configuration choices, you must save them.



**To save your initial configuration options:**

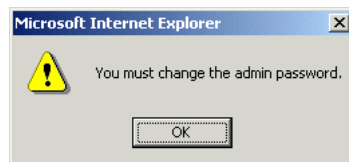
1. Click **Submit** at the bottom of the **OpenEdge Management Configuration** page.

If you have entered all required values and the values are validated, then:

- OpenEdge Management is initialized.
- The creation of SMTP\_MAIL is acknowledged.
- A reminder appears about using the new password when restarting OpenEdge Management.

2. Click **OK**, and the **Getting Started** page automatically appears.

If all the initial configuration values cannot be validated, warning messages appear. For example, if you have not updated the default password, you receive the following message:



- a. Click **OK** to erase the message, and, in this instance, change the admin password.
- b. Click **Submit**. The **Getting Started** page, which you will complete to finish the initial configuration, appears.

## Setting up the Getting Started page

The choices you make on the **Getting Started** page allow you to migrate scripted databases to managed databases recognized by the AdminServer and OpenEdge Management, and define monitoring and trending options for file systems and disks.

Once you establish these initial resource-monitoring options, you can set more specific monitoring criteria for individual resources. Similarly, you can also manually initiate resource discovery of TCP- and UDP-based applications. See the [OpenEdge Management: Resource Monitoring Guide](#) for more details.

## Understanding managed and scripted databases

You can set up a database resource monitor in OpenEdge Management for a database that the Progress Explorer, the AdminServer, and OpenEdge Management commonly recognize, as follows:

- A *managed database* is a database that the Progress Explorer and the AdminServer recognize and manage. You can set up resources for file systems and disks associated with managed databases.

At OpenEdge Management startup, all databases currently managed by Progress Explorer and the AdminServer are automatically *discovered* (recognized) by OpenEdge Management.

If you add a database to Progress Explorer *after* you have initially configured OpenEdge Management, you must add that database to OpenEdge Management as well. See the [“Adding a managed database”](#) section on page 6–18 for more information.

- A *scripted database* is a database that is not currently listed among the database resources that the AdminServer manages. You cannot set up a resource for a scripted database, or its associated file systems and disks, until the database is recognized as a managed database.

To change a scripted database to a managed database, use OpenEdge Management’s Database Migration Utility and migrate the database’s configuration, or define a remote database monitor for each scripted database. See the [“Defining monitors for previously scripted databases”](#) section on page 6–17 for more information.

## Defining monitors for previously scripted databases

By using the OpenEdge Management Database Migration Utility, you can add a previously scripted OpenEdge database as a resource to OpenEdge Management. These databases are typically managed outside the AdminServer using parameter files (.pf) and operating system-dependent scripts.

With the Database Migration Utility, you can identify the database as manageable through the Progress Explorer and the AdminServer. After the configuration migration occurs:

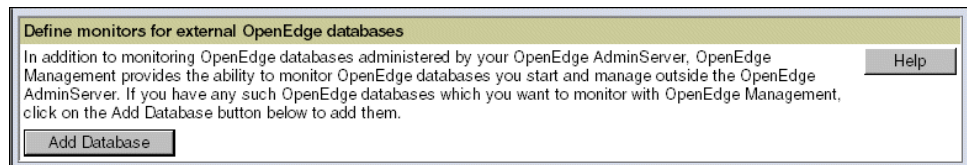
- OpenEdge Management creates a resource if one does not already exist.
- You can define trend and monitoring options.

---

**Note:** Before you perform the database migration process, you should shut down the database you intend to migrate. This shutdown activity enables the AdminServer to recognize the database as managed when the database is restarted through OpenEdge Management, and to create and enable the database monitor.

---

Figure 6–5 shows the **Define monitors for external OpenEdge databases** section.



**Figure 6–5: Defining monitors for external OpenEdge databases**

---

**Note:** When you add a managed database using the values you enter on the **Database Migration Utility** page and then submit the **Getting Started** page, a database configuration is created in the `conmgr.properties` file, and a database resource is created in the OpenEdge Management configuration data store.

---

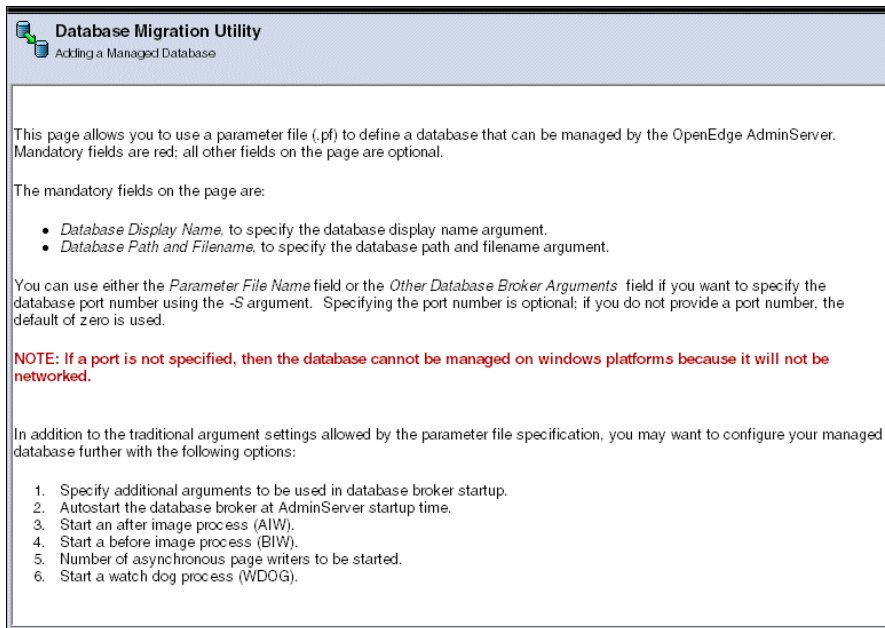
### Adding a managed database

For OpenEdge Management to monitor a database fully, the database must be managed.

Click **Add Database**. The **Database Migration Utility** page appears. The page comprises two areas:

- An **Instructions** area at the top of the page, describing how to add a managed database.
- A **Database information** area at the bottom of the page, where you enter the database values. Note that any field name in red requires a value; all other fields are optional.

Figure 6–6 shows the **Instructions** area.



**Figure 6–6: Adding a managed database—instructions**



Figure 6–7 shows the **Database information** area.

**Figure 6–7: Adding a managed database—information**



**To add the managed database:**

1. Choose the database container in the **Container** field.
2. Enter the database display name in the **Database Display Name** field.
3. Enter the database path and filename associated with the physical database in the **Database Path and Filename** field.
4. Optionally provide values to add database arguments, using either or both of these methods:
  - In the **Parameter File Name** field, enter the name of the parameter file (.pf) that contains database argument values if you have overriding arguments defined for database brokers.
  - Enter the database argument values explicitly in the **Other Database Broker Arguments** field. If you want to specify a port for the database, type -S and then the port number.

If the port specified for the database is **0**, the database is considered non-networked and will not be monitored by OpenEdge Management.

Note that you can enter any miscellaneous, non-AdminServer-recognized arguments using either of the previous methods.

Values set using the parameter file method can be overridden by the values specified in the **Other Database Broker Arguments** field. Processing difficulties related to these values are handled as follows:

- If an argument defined in the .pf file is not recognized, it is ignored. Any ignored arguments will be displayed in an alert box when you submit the **Getting Started** page.
  - If an error occurs either when the database configuration is created or when the database resource is created, the configuration is not added to the `conmgr.properties` file, and the resource is not created.
5. Select one of the **Database Broker Type** options to indicate the type of client that is allowed to connect to the broker: **4GL** brokers allow only ABL client connections and **SQL** brokers allow SQLEditor or other SQL client connections. The default option, **Both**, allows ABL and SQL clients.

Remember that the client type choice you make here is honored only when you have installed the proper licenses for that client.

6. Select **AutoStart Database Broker** to start the database broker automatically when the AdminServer is started.
7. Select **Watch Dog Process (WDOG)** to start a watchdog process for the database.

The following are Enterprise-only options that are automatically started only if the database broker is also automatically started:

- Select **After Image Process (AIW)** to start an after-image writer for the database.
- Select **Before Image Process (BIW)** to start a before-image writer for the database.
- Enter a numeric value in the **Asynchronous Page Writers (APW)** field to define the number of asynchronous page writers to start. The default value is 1. You can change this default value by specifying a port in either a named .pf file or the **Other Database Broker Arguments** field.

---

**Note:** If you are running the Workgroup database, the default value for each of the writers is zero, and you cannot change it.

---

## Making changes to a managed database configuration

You can view, modify, or delete a managed database configuration by using the Progress Explorer. If the Progress Explorer is connected to the AdminServer, the new database node is automatically added to the Progress Explorer database tree node, and the new node displays once you refresh the database tree.

---

**Note:** From within the OpenEdge Management product, you can use the **Control** page to start and stop a database configuration. For more information about starting and stopping the database in OpenEdge Management, see the [OpenEdge Management: Database Management Guide](#).

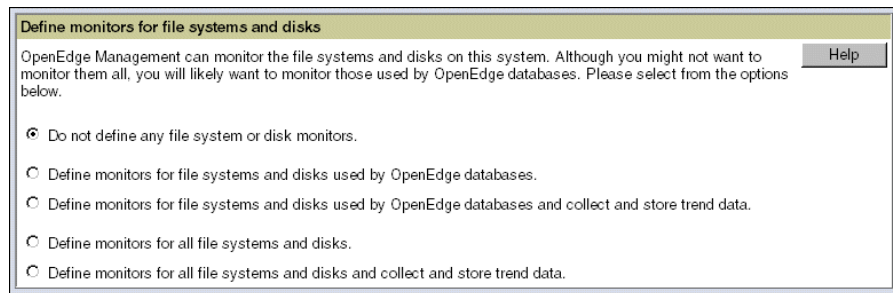
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If you use the Progress Explorer to delete a database that OpenEdge Management also recognizes, OpenEdge Management asks if you want to delete the resource. It is possible to enable this database again at a later time if you choose to add the database again by using the Progress Explorer or the Database Migration Utility. You can optionally choose to delete the database from OpenEdge Management using the **Database Resource** page.

## Defining monitoring and trending options for file systems and disks

OpenEdge Management can create resource monitor and trending options for all file systems and disks on a system where OpenEdge Management is installed.

As shown in [Figure 6–8](#), you can specify whether you want OpenEdge Management to monitor only those file systems and disks used by OpenEdge databases, or all file systems and disks.



**Figure 6–8:** Defining monitors for file systems and disks

You can also choose whether or not OpenEdge Management should collect and store trend data on the file systems and disks. If you prefer, you can opt not to set up monitors for file systems and disks at all. These file system and disk resource monitors are created with default settings, helping you to expedite the resource monitoring setup activities.

### Monitoring and trending considerations

Consider the following before you add monitors for file systems and disks for your OpenEdge databases:

- If a file system monitor or resource does not already exist, a new file system resource or monitor is configured. The monitor or trend process is enabled for each file system that is accessed by a managed database or any of its extents.
- If a disk monitor or resource does not exist, a new disk resource or monitor is added. The monitor or trend process is enabled for each disk on the system that is accessed by a managed database or any of its extents.

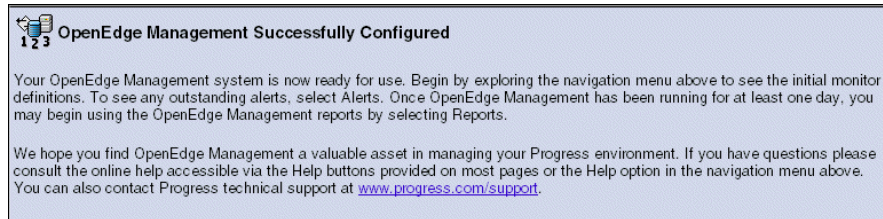
Choose one of the following options to define monitors for file systems and disks:

- Select **Do not define any file system or disk monitors** to bypass any monitoring and trending options.
- Select **Define monitors for file systems and disks used by OpenEdge databases** to add only monitors for file systems and disks.
- Select **Define monitors for file systems and disks used by OpenEdge databases and collect and store trend data** to add monitoring and trending activities for file systems and disks used by your OpenEdge databases.
- Select **Define monitors for all file systems and disks** to define monitors for all file systems and disks, not just those used by OpenEdge databases.
- Select **Define monitors for all file systems and disks and collect and store trend data** to add monitoring and trending activities for all file systems and disks, not just those used by your OpenEdge databases.

## Submitting the Getting Started page

When you finish making your selections on the **Getting Started** page, click **Submit**. OpenEdge Management starts the monitoring database agent for each managed database for which you selected the monitoring option. CPU and memory resources are created as well.

The OpenEdge Management console appears with a confirmation that OpenEdge Management is ready to use, as shown in [Figure 6–9](#).



**Figure 6–9: OpenEdge Management Configuration success**



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# Configuring Remote Monitoring for OpenEdge Management

---

In addition to monitoring local databases, disks, file systems, network components, and file resources, you can also monitor certain remote resources. These remote resources include databases, disks, CPU, memory, file systems, and OpenEdge server components, such as WebSpeed, AppServer, and NameServer resources.

This chapter describes how to set up OpenEdge Management to use the remote monitoring functionality, as outlined in the following sections:

- [Remote monitoring requirements](#)
- [Setting up remote monitoring](#)
- [Additional remote monitoring configuration utility command-line options](#)
- [Disabling remote monitoring](#)
- [Uninstalling OpenEdge Management if remote monitoring is configured](#)

## Remote monitoring requirements

Remote monitoring requires that you have, at a minimum, two different machines:

- One with OpenEdge and OpenEdge Management.
- One with a supported installation of Progress (Release 9.1E) or OpenEdge (Release 10.0B, 10.1x). You are not limited to monitoring only one remote machine at a time; you can monitor from one to ten machines, provided you have set up each machine properly. (OpenEdge Management should **not** be installed on any of these machines.)

You must also have root permissions on each machine.

Neither the OpenEdge Management installation nor the OpenEdge installation (on either machine) can be located in a directory whose name has spaces. If you install in a directory with spaces in the name, the AdminServer will not start once remote monitoring has been enabled.

When OpenEdge Management is configured for remote monitoring, messages are exchanged between the OpenEdge Management machine and the remote machines. These messages are time stamped, and the time information is used in the communication protocol used between the machines. It is, therefore, important that the machines involved have their universal time setting coordinated. This can be accomplished by ensuring that the machines subscribe to an NTP time service.



# Setting up remote monitoring

The order in which you set up the machines is important: You must have the machine with the OpenEdge Management installation up and running with remote monitoring in place **before** you set up the required configuration on any other machine to be monitored remotely.

## Setting up the first machine

You must first set up resource monitoring on the machine that has both OpenEdge Management and OpenEdge installed before setting up a second machine.

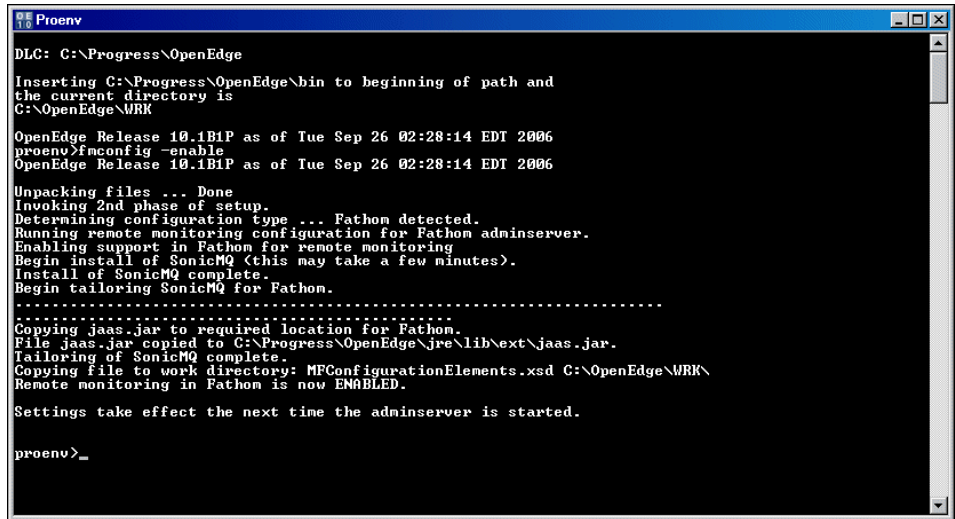


### To set up the first machine:

1. Install OpenEdge.
2. Install OpenEdge Management.
3. When the installation completes, start OpenEdge Management. The **OpenEdge Management Configuration** page opens.
4. Fill in the configuration settings, and then click **Submit**. The **Getting Started** page appears.
5. Fill in the **Getting Started** page settings, and then click **Submit**. The OpenEdge Management console opens and displays the **My Dashboard** page.
6. From the Windows **Start** menu, choose **Programs** → **OpenEdge** → **Proenv**. The **Proenv** window opens.
7. Run the following command in the **Proenv** window:

```
fmconfig -enable
```

- Steps in the setup process are listed (as they occur) in the **Proenv** window, until the setup is complete, as shown:



```
Proenv
DLC: C:\Progress\OpenEdge

Inserting C:\Progress\OpenEdge\bin to beginning of path and
the current directory is
C:\OpenEdge\WRK

OpenEdge Release 10.1B1P as of Tue Sep 26 02:28:14 EDT 2006
proenv>fmconfig -enable
OpenEdge Release 10.1B1P as of Tue Sep 26 02:28:14 EDT 2006

Unpacking files ... Done
Invoking 2nd phase of setup.
Determining configuration type ... Fathom detected.
Running remote monitoring configuration for Fathom adminserver.
Enabling support in Fathom for remote monitoring
Begin install of SonicMQ (this may take a few minutes).
Install of SonicMQ complete.
Begin tailoring SonicMQ for Fathom.
.....
Copying jaas.jar to required location for Fathom.
File jaas.jar copied to C:\Progress\OpenEdge\jre\lib\ext\jaas.jar.
Tailoring of SonicMQ complete.
Copying file to work directory: MFConfigurationElements.xsd C:\OpenEdge\WRK\
Remote monitoring in Fathom is now ENABLED.

Settings take effect the next time the adminserver is started.

proenv>_
```

As noted in the **Proenv** window, the `jaas.jar` file is copied to the `<OpenEdge-install-dir>\<JRE-home-dir>\lib\ext` directory.

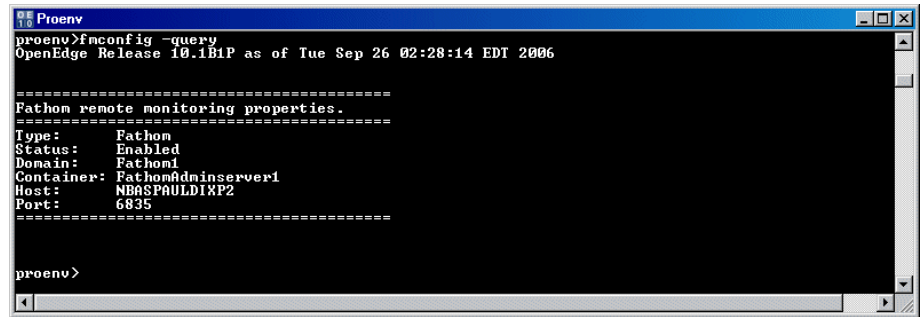
Additionally, the following new directory is installed:

`<OpenEdgeManagement-install-dir>\SonicMQ`.

- To verify that remote monitoring has been set up properly, run the following command in the **Proenv** window:

```
fmconfig -query
```

The OpenEdge Management remote monitoring properties appear:



```

Proenv
proenv>fmconfig -query
OpenEdge Release 10.1B1P as of Tue Sep 26 02:28:14 EDT 2006

=====
Fathom remote monitoring properties.
=====
Type:      Fathom
Status:    Enabled
Domain:    Fathom1
Container: FathomAdminServer1
Host:      NBASP4ULDXP2
Port:      6835
=====

proenv>

```

10. Restart the AdminServer. The following actions occur:

- The Fathom1.FathomAdminServer1.log file is created in the same directory as the AdminServer log file (admserv.log).
- The last line of the Fathom1.FathomAdminServer1.log file includes the following text:

[04/05/04 11:25:02] (info) ...reconciling complete

- The admserv.log completes as usual, with the starting of the OpenEdge Management probe.

OpenEdge Management is now ready to monitor remote systems.

## Setting up the second machine

Once you set up the machine that has both OpenEdge and OpenEdge Management installed, you can set up the machine you want to monitor remotely. This second machine must have a supported version of Progress or OpenEdge installed.



### To set up the second machine:

1. Start the AdminServer.
2. Run the following command in the **Proenv** window:

```
fmconfig -host <OpenEdgeManagement-machine-hostname> -enable
```

Where *<OpenEdgeManagement-machine-hostname>* is the name of the host where OpenEdge Management is running.

3. Press **ENTER**. Steps in the setup process are listed (as they occur) in the **Proenv** window, until the setup is complete. For example:

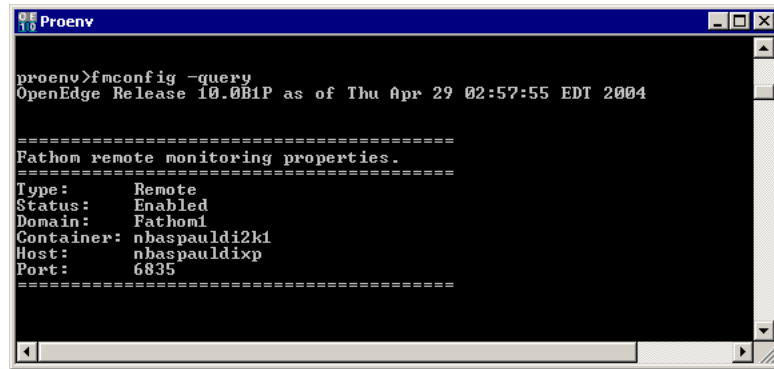
```
Proenv
DLC: C:\Progress\OpenEdge
Inserting C:\Progress\OpenEdge\bin to beginning of path and
the current directory is
C:\OpenEdge\WRK
OpenEdge Release 10.0B1P as of Thu Apr 29 02:57:55 EDT 2004
proenv>fmconfig -host nbaspauldixp -enable
OpenEdge Release 10.0B1P as of Thu Apr 29 02:57:55 EDT 2004
Unpacking files ... Done
Invoking 2nd phase of setup.
Determining configuration type ... Fathom NOT detected.
Configuring for remote monitoring by Fathom.
Enabling support for remote monitoring.
Connecting to Fathom JMS broker: nbaspauldixp:6835
Connecting to Fathom directory services ... Done
Creating new container for host: nbaspauldi2k ... Done
New container created: nbaspauldi2k1
Adding components to container: nbaspauldi2k1
Importing components from file: nbaspauldi2k1.import
- nbaspauldi2k1.import ...
Importing components complete.
Creating boot file: container.xml ... Done
Copying file to work directory: MFConfigurationElements.xsd C:\OpenEdge\WRK\
Remote monitoring of the adminserver is now ENABLED.
Settings take effect the next time the adminserver is started.
proenv>
```

Additionally, required files are created in the \$DLC/java/ext directory.

4. To verify that remote monitoring has been set up properly, run the following command in the **Proenv** window:

```
fmconfig -query
```

The OpenEdge Management remote monitoring properties appear:



```

Proenv
proenv>fmconfig -query
OpenEdge Release 10.0B1P as of Thu Apr 29 02:57:55 EDT 2004

=====
Fathom remote monitoring properties.
=====
Type:      Remote
Status:    Enabled
Domain:    Fathom1
Container: nbaspauldi2k1
Host:      nbaspauldixp
Port:      6835
=====

```

5. Restart the AdminServer. The following events occur:
  - The Fathom1.<container-name>.log file is created. The container name is generated by the Remote Monitoring Configuration Utility; the format of the name is *hostname+number*—for example, PCTEST1.
  - The last line of the log file confirms that startup is complete. For example:

```
[04/05/04 16:33:51] (info) Startup complete
```

- The admserv.log completes as usual.

## Verifying that OpenEdge Management sees the remote container

After you run the Remote Monitoring Configuration Utility on the OpenEdge Management machine and the remote machine, you see the remote container in the OpenEdge Management machine's console list frame.



### To verify that OpenEdge Management can see the remote container:

1. From the OpenEdge Management console, select **Resources**.
2. In the list frame, sort the resources by **Container**. The newly added remote container is listed in the tree view in the list frame.

Note that the container on which OpenEdge Management is installed is identified by the OpenEdge Management icon.

## Additional remote monitoring configuration utility command-line options

The command-line options described in [Table 7-1](#) are available for use with the Remote Monitoring Configuration Utility. You run each command-line option in the **Proenv** window.

**Table 7-1: Remote Monitoring Configuration Utility options**

| Command-line option | Description                                                                                                                           |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| -enable             | Runs the configuration process and updates the following line in the \$DLC/properties/management.properties file:<br>isMonitored=true |
| -disable            | Updates the following line in the \$DLC/properties/management.properties file:<br>isMonitored=false                                   |
| -query              | Reports the current settings for OpenEdge Management remote monitoring                                                                |
| -update             | Reruns the configuration process and allows you to change the host your client connects to                                            |
| -debug              | Provides detailed information                                                                                                         |

The command-line options listed in [Table 7-2](#) are also available for use. Use caution, however, when running either option to ensure that remote monitoring continues to operate properly.

**Table 7-2: Additional Remote Monitoring Configuration Utility options**

| Command-line option | Description                                                                           |
|---------------------|---------------------------------------------------------------------------------------|
| -port               | Allows you to change the default listening port, which is 6835.                       |
| -name               | Allows you to specify the container name. The default container name is <hostname>+1. |

## Disabling remote monitoring

If you want to stop remote monitoring, you can disable it by entering the following command from the **Proenv** window:

```
fmconfig -disable
```



## Uninstalling OpenEdge Management if remote monitoring is configured

If you want to uninstall OpenEdge Management from a UNIX platform and you have configured remote monitoring, see the [“Uninstalling OpenEdge Management on UNIX”](#) section on page 4–20 for details about how to complete the uninstall correctly.

If you are uninstalling OpenEdge Management from a Windows platform and you have configured remote monitoring, you need not take any extra steps other than those described in the [“Uninstalling OpenEdge Management in Windows”](#) section on page 3–22. The uninstall process removes the remote monitoring settings along with the OpenEdge Management installation.



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# Administering OpenEdge Management

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You can fine-tune the initial OpenEdge Management configuration and licensing decisions you made, as described in the following sections:

- [Reviewing the OpenEdge configuration](#)
- [Updating OpenEdge Management licensing information](#)
- [Updating configuration options](#)
- [Adding OpenEdge Management users as administrators or operators](#)
- [Changing configuration settings](#)
- [Setting user preferences](#)
- [Changing the SNMP Adapter settings](#)
- [Using the command-line interface](#)
- [Using the OpenEdge Management environment window](#)
- [Setting the log level for the AdminServer log file](#)

## Reviewing the OpenEdge configuration

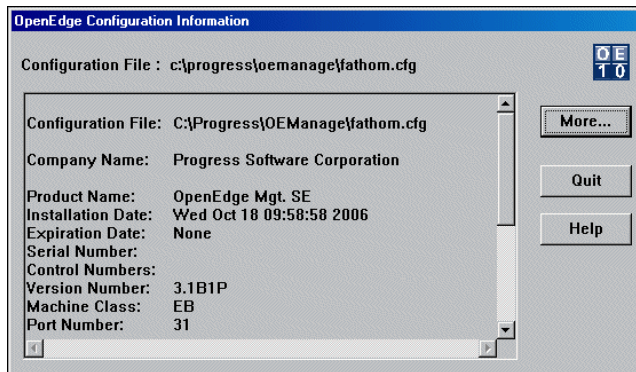
As you install OpenEdge Management, the installation program prompts you to enter product information contained in the License Addendum, which is included in your software package. The installation program records the license information in the OpenEdge Management configuration file, `fathom.cfg`.

You can later review the product installation and configuration information for each OpenEdge Management product installed on your system. This is helpful when you are considering whether to add other licensed products to your OpenEdge Management installation.



**To review the current OpenEdge Management product configuration:**

1. Choose **Start→ Programs→ OpenEdge Management→ Config**. The **OpenEdge Configuration Information** dialog box appears and identifies the OpenEdge Management product configuration information stored in `fathom.cfg`, as shown:



2. Review the configuration details provided, and scroll down to see configuration details for additional products that are installed (if applicable).

The display contains the following OpenEdge Management configuration details:

- **Configuration File** — The location of the `fathom.cfg` file
- **Company Name** — The name you entered during the installation

The display also provides the following information for each OpenEdge Management product installed on the system:

- **Product Name** — Name of the installed product
  - **Installation Date** — Date the product was installed
  - **Expiration Date** — Date the license expires
  - **Serial Number** — Number associated with the license agreement
  - **Control Numbers** — Numbers used by the OpenEdge Management installation software
  - **Version Number** — Software product version
  - **Machine Class** — Tier code associated with the license agreement
  - **Port Number** — Platform on which the software product is installed
3. To view and load another .cfg file, click **More**. Locate the file, and then click **Save**.
  4. Click **Quit** to close the dialog box.

## Updating OpenEdge Management licensing information

You can update the OpenEdge Management licensing information that you provided during the initial installation.



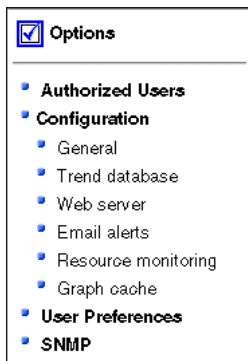
**To update the OpenEdge Management licensing information:**

1. Choose **Start** → **Programs** → **OpenEdge Management** → **License Update**. A message appears to remind you that the OpenEdge Management directory name cannot have spaces if you plan to do remote monitoring.
2. Click **Yes**. The **OpenEdge Management Installed Versions** dialog box appears.
3. Select one of the installed versions, and click **Next**. The **Welcome** dialog box appears.
4. Click **Next**. The **Serial & Control Numbers** dialog box appears.
5. Enter the serial and control numbers for the product you want to install, and click **Accept**. Repeat this step for each product you are installing.
6. When you finish, click **Done**.

## Updating configuration options

As you use OpenEdge Management, you can update configuration options. You can update the options you established when you first configured OpenEdge Management, and you can continue to make subsequent updates as you use OpenEdge Management and develop a greater understanding of which settings work best for your environment.

From the management console, select **Options**. The list frame shown in [Figure 8–1](#) opens.



**Figure 8–1: Options in list frame**

Specifically, you can make modifications in the following areas:

- **Authorized users** — Add or remove users; customize the operator role.
- **Configuration:**
  - **General** — Starts OpenEdge Management automatically when the AdminServer starts
  - **Email alerts** — Provides the e-mail address of the default recipient for e-mail notification when an alert is generated; also provide the SMTP mail server host name and port
  - **Resource monitoring** — Determines whether to automatically poll resources, generate alerts, collect trend data, and include status changes
  - **Graph cache** — Chooses the graph cache time period setting for resources and containers

- **User preferences** — Select the rate (if any) at which OpenEdge Management automatically refreshes; change the default polling attributes for resource monitors.
- **SNMP** — (If installed) Start or stop the SNMP Agent; change one or more of the following values: SNMP agent port, default SNMP trap port, default SNMP read community, default SNMP write community, and autostarting of SNMP.

## Updating OpenEdge Management Web server and OpenEdge Management Trend Database settings

You can further qualify current settings for the OpenEdge Management Web server and the OpenEdge Management Trend Database by choosing to use the HTTPS protocol for secure browser-to-instance or instance-to-instance communications. See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for details about using the secure protocol.



## Adding OpenEdge Management users as administrators or operators

OpenEdge Management provides two different user roles: administrator and operator. One predefined user with an administrator role is provided and is named **admin**.

An *administrator user* can add other users and specify their role. The administrator user has access to all OpenEdge Management functionality and can, for example, read all OpenEdge Management information, modify settings and configurations, set operations into action (such as starting or stopping the database), and delete resources and users from OpenEdge Management.

At a minimum, *operator users* can view configurations and configure their own views. Operators can also change their own passwords and descriptions. The operator role can be configured by administrators to give operator users access to more OpenEdge Management functionality.

If a user's role changes from administrator to operator and the user is logged on at the time, any operator restrictions become effective for that user immediately. In other words, the links or buttons, for example, that operators no longer have access to become disabled immediately for the affected user.

User accounts are defined solely within OpenEdge Management. They define who can log in to OpenEdge Management using a Web browser.

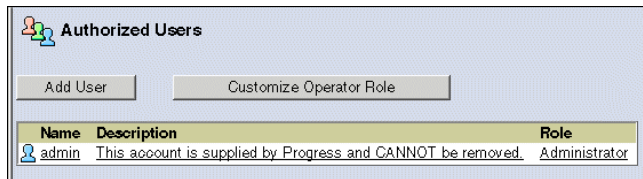
### Managing the authorized users list

The authorized users list provides information about users authorized to access OpenEdge Management.



## To view the list of authorized users:

1. From the menu bar, select **Options**.
2. Select **Authorized Users** in the list frame. The **Authorized Users** page appears:



The **Authorized Users** page shows the one predefined admin user. The list of users on the page is dynamic; the name and description details are added and removed from this list as you add and delete users.

Note that you cannot delete the predefined admin user, although you can modify its password.

## Customizing the operator role

As an administrator, you can determine which functionality operators can access. If you make no changes to the default permissions OpenEdge Management assigns to operators, the operators will be restricted to read-only permissions.

Note that the permissions you define affect all operators equally.



## To set up operator role customization:

1. From the **Authorized Users** page, click **Customize Operator Role**.

The **Operator Role Customization** page appears and consists of the following areas of operator permission: **Database operations**, **OpenEdge operations**, **Resource operations**, and **Task operations**, as shown:

| Database operations:           |                          |                          |                          |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| <b>Alerts</b>                  |                          |                          |                          |
| Clear Alerts                   | <input type="checkbox"/> |                          |                          |
| <b>Database</b>                |                          |                          |                          |
| Start/Stop Database            | <input type="checkbox"/> |                          |                          |
| Start/Stop Agent               | <input type="checkbox"/> |                          |                          |
| <b>Scripted Database</b>       |                          |                          |                          |
| Stop Agent                     | <input type="checkbox"/> |                          |                          |
| OpenEdge operations:           |                          |                          |                          |
| <b>Command and Control</b>     |                          |                          |                          |
| Start/Stop WebSpeed Broker     | <input type="checkbox"/> |                          |                          |
| Add/Trim WebSpeed Agent Pool   | <input type="checkbox"/> |                          |                          |
| Kill WebSpeed Agent Process    | <input type="checkbox"/> |                          |                          |
| Start/Stop AppServer Broker    | <input type="checkbox"/> |                          |                          |
| Add/Trim AppServer Server Pool | <input type="checkbox"/> |                          |                          |
| Kill AppServer Server Process  | <input type="checkbox"/> |                          |                          |
| Start/Stop NameServer          | <input type="checkbox"/> |                          |                          |
| Resource operations:           |                          |                          |                          |
|                                | <b>Create &amp; Edit</b> | <b>Delete</b>            |                          |
| <b>Resource Monitors</b>       |                          |                          |                          |
| Database Monitors              | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| WebSpeed Monitors              | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| AppServer Monitors             | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| NameServer Monitors            | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| File Monitors                  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Network Monitors               | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| System Monitors                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| <b>Library</b>                 |                          |                          |                          |
| Actions                        | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Search Criteria                | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Rule Sets                      | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Schedules                      | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Task operations:               |                          |                          |                          |
|                                | <b>Create &amp; Edit</b> | <b>Delete</b>            | <b>Run</b>               |
| <b>Reports</b>                 |                          |                          |                          |
| Report Templates               | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Reports                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>Jobs</b>                    |                          |                          |                          |
| Job Templates                  | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Jobs                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Choose one of the following methods to define operator functionality:
  - Select each individual option that you want to make available to operators.
  - Click **Select All** to choose all options.
  - Click **Select None** to clear all options.

---

**Note:** If you select the **Start/Stop Database** check box under **Database**, the **Start/Stop Agent** check box is automatically selected. You can, however, select **Start/Stop Agent** without selecting **Start/Stop Database**.

---

The only option under **Scripted Database** that is available to operators is to stop the remote database agent.

3. When you finish, click **Submit**.

## Adding a new user

If you are logged in as an administrator in OpenEdge Management, you can add new users.



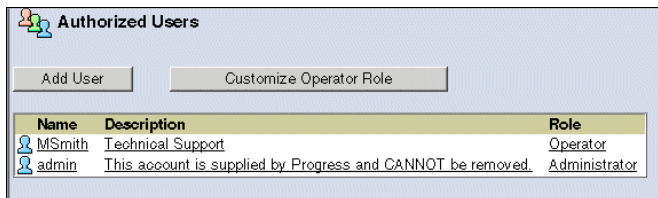
**To add a new user:**

1. From the **Authorized Users** page, click **Add User**. The **New User** window appears:

The screenshot shows a 'New User' dialog box. At the top, there's a title bar with a user icon and the text 'New User'. Below the title bar are two buttons: 'Save' and 'Cancel'. The main content area is titled 'Properties' and contains four fields: 'Name' (text input), 'Description' (text area), 'Role' (dropdown menu with 'Operator' selected), and 'Password' (text input). Below the 'Password' field is a 'Confirm Password' field.

2. Enter a unique user name in the **Name** field. The name can contain up to 32 alphanumeric characters. (Spaces are not allowed.)
3. Enter an optional description of the user.

4. Choose a role for the user: **Administrator** or **Operator**.
5. Enter a password for this user in the **Password** field. The password must be between 4 and 16 characters in length.
6. Re-enter the same password in the **Confirm password** field.
7. Click **Save**. The user name and description you added appear on the list of authorized users on the **Authorized Users** page, as shown:



## Changing passwords and descriptions

Whether you are an administrator or an operator, you can change your own unique password and/or your description from the **Authorized Users** page at any time. Administrators can edit anyone's password or description, but operators are restricted to editing only their own password and description.

If an administrator changes a user's password, that user is presented with a login screen when next accessing OpenEdge Management. When the user provides the correct password, the user can resume working in OpenEdge Management. If, however, the user does not enter the correct password, the user's login fails and access to OpenEdge Management is denied.



## To change the password and/or description:

1. Click the name of the user whose properties you want to change from the users listed on the **Authorized Users** page. The **User** page appears:

User: MSmith

Edit Copy Delete

**Properties**

|              |                   |
|--------------|-------------------|
| Name:        | MSmith            |
| Description: | Technical Support |
| Role:        | Operator          |

2. Click **Edit** or **Copy** to either edit the user details or copy them as the basis for another user. If you copy the details, you must change the user name, since duplicate user names are not allowed.

---

**Note:** If you change the password by entering the new password once in the **Password** field, you must also enter it again in the **Confirm Password** field.

---

3. Click **Save**. The **User** page redispays, showing any changes that you might have made to the user name or description details.

## Changing the Admin password

During the initial access of OpenEdge Management, you reset the OpenEdge Management-provided admin user's password on the **OpenEdge Management Configuration** page. Each subsequent update you make to the admin password must be done by using the **Authorized Users** page. See the steps in the [“Changing passwords and descriptions”](#) section on page 8–11 for information on performing this task.

## Deleting users

To delete users from the **Authorized Users** list, you must be logged on as an administrator. You cannot delete the OpenEdge Management-provided admin user.



### To delete users:

1. Select the user whom you want to delete from the **Authorized Users** list.
2. Click **Delete** at the top of the page. A confirmation window appears before the user's privileges are deleted.
3. Click **OK**. The deleted user's access to OpenEdge Management functionality is denied immediately.

## Changing configuration settings

You can change the following configuration settings by choosing **Options** from the OpenEdge Management menu:

- **General**
- **Email alerts**
- **Resource monitoring**

From **Options**, you can also:

- Set the graph cache.
- Change OpenEdge Management Web server and OpenEdge Management Trend Database protocol settings. See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for details.

## Changing general configuration settings

You can change the following current OpenEdge Management general configuration settings:

- The automatic starting of OpenEdge Management when the AdminServer starts.
- The action OpenEdge Management should perform, if any, when an internal OpenEdge Management alert is triggered. Set up the **On internal OpenEdge Management alerts perform action** panel to set an action for internal alerts, such as notification that the OpenEdge Management Trend Database is down. You can execute any action when an internal alert is triggered. For example, you can set an alert to trigger the **Default\_Action**, which is a OpenEdge Management-defined process that occurs in response to the status, availability, or performance of a monitored resource. In this situation, you can choose to associate the **Default\_Action** to OpenEdge Management Trend Database operations, or select **None** to indicate that no alert triggers.



**To change the general settings:**

1. From the OpenEdge Management menu bar, select **Options→ Configuration→ General**. The **OpenEdge Management General Configuration** page appears in the detail frame and displays the current values, as shown:

OpenEdge Management General Configuration

Submit Cancel

**Current general settings**

☒ Start OpenEdge Management automatically? [Help](#)

None Action to perform on internal OpenEdge Management alerts.

2. Change one or both of the settings for the following options, as needed:
  - Select the **Start OpenEdge Management automatically** check box to start OpenEdge Management automatically when the AdminServer starts.
  - Click the **Action to perform on internal OpenEdge Management alerts** option to specify an action that OpenEdge Management performs when an internal alert is triggered.
3. Click **Submit**. The **OpenEdge Management General Configuration** page refreshes to reflect the changes you have made.

## Changing e-mail alerts settings

You can change the current e-mail alert configuration settings.



**To change the e-mail alerts settings:**

1. From the OpenEdge Management menu, select **Options**→**Configuration**→**Email alerts**. The **OpenEdge Management Email Alerts Configuration** page appears in the detail frame and displays the current e-mail alert settings, as shown:

OpenEdge Management Email Alerts Configuration

Submit Cancel

Current email alert settings

Mail server (SMTP) host name: namail Help

Mail server (SMTP) port: 25

Default recipient email address: aspauldi@progress.com

Require SMTP user name and password? ☐

Mail server (SMTP) user name:

Mail server (SMTP) user password:

Mail server (SMTP) user passwordConfirm:

2. Change one or more of the settings.
3. Click **Submit**.

## Changing resource monitoring settings

You can enable or disable the following current resource monitoring settings:

- Polling for all resources
- Generating alerts
- Collecting of resource trend data
- Including resource status changes in the trending

Each option is set independently of the others, with the exception of **Include status changes**. If you do not select the **Collect trend data** option, the **Include status changes** option is disabled.

These resource monitor options allow you to disable specific OpenEdge Management functionality. For example, if you know that your OpenEdge Management Trend Database is going to be taken down for maintenance, you could elect to turn off trending, but let the rest of the OpenEdge Management functionality continue to run.



### To change the resource monitoring settings:

1. From the OpenEdge Management menu, select **Options**→**Configuration**→**Resource monitoring**. The **OpenEdge Management Resource Monitoring Configuration** page appears in the detail frame, as shown:

2. Select or clear each option.
3. Click **Submit**.

## Setting the graph cache

OpenEdge Management graphing includes a persistent data cache. You determine how long you want to keep graph data cache persisted on a per resource instance basis. The default graph cache setting is 48 hours; however, you can change the setting to whatever value you want. Keep in mind that if you change the setting to a longer period of time, more disk space is used to store the growing cache. Additionally, the more data that has been stored, the more data there is to be represented in a graph, and the higher the CPU use will be at the time a graph using the data is created.

It is recommended that you start with the 48-hour default graph cache setting. You can then increase the value if you want, perhaps by small increments to see what the impact is to the disk space and CPU activity. You might consider setting certain resource types to the 48-hour default, and set others to a different time period, such as twelve hours, to save memory and CPU.

You select the graph cache settings for resources by choosing **Options** in the management console.



## To set the graph cache:

1. From the OpenEdge Management menu bar, choose **Options**→ **Configuration**→ **Graph cache**. The **Graph Cache Database Configure** page appears:

**Graph Cache Database Configure**  
Oct 17, 2006 5:45:37 PM

**Time period setting to apply to selected resources**

Sample time period to collect:  ☒ hours ☐ days

**Resources to operate on**

| Available Filter                                         | Available                                 | Selected                                  |
|----------------------------------------------------------|-------------------------------------------|-------------------------------------------|
| List resource of type:<br><input type="text" value="*"/> |                                           |                                           |
| for container:<br><input type="text" value="*"/>         |                                           |                                           |
| <input type="button" value="Apply Filter"/>              | <input type="button" value="Select All"/> | <input type="button" value="Select All"/> |

**Warning**

Use this functionality with care. Substantial increases in the time period of retention of graph cache samples will result in large increases in disk space consumed by the graph cache samples (especially with regards to Database resources). Larger graph caches may also noticeably slow creation of graphs due to more substantial paging requirements to access the data.

2. In the **Sample time period to collect field**, type the graph cache time period you want to apply to the resources you plan to select. Then choose **hours** or **days**. The default time period is **48 hours**.


3. Select the resources to which you want the graph cache time period to apply to by following these steps:
  - a. In the **List resource of type** field, optionally select resource types either by choosing from the available resources or by choosing the wildcard ( \* ).
  - b. In the **for container** field, optionally select the containers either by choosing from those available or by choosing the wildcard.

---

**Note:** When you use the wildcard, OpenEdge Management includes all *current* resources of the type or all container(s) you select. The wildcard does not apply, however, to any resources or containers you subsequently create. If you create a new resource, resource type, or container, you must set its graph cache time period.

---

4. Click **Apply Filter**. The resource types that match the filter specifications appear in the **Available** list, as shown in the following example:


**Graph Cache Database Configure**  
Oct 17, 2006 5:54:56 PM

**Time period setting to apply to selected resources**  
Sample time period to collect:  ☒ hours ☐ days

**Resources to operate on**

| Available Filter                                         | Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Selected |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| List resource of type:<br><input type="text" value="*"/> | *<br>nbaspauldixp2.AppServer.asbroker1 <2 days><br>nbaspauldixp2.AppServer.esbbroker1 <2 days><br>nbaspauldixp2.AppServer.icfrepos <2 days><br>nbaspauldixp2.CPU.CPU <2 days><br>nbaspauldixp2.Database.Backorders <2 days><br>nbaspauldixp2.Database.FathomTrendDatabase <2 days><br>nbaspauldixp2.Disk.Disk-0_C: <2 days><br>nbaspauldixp2.FileSystem.FileSys-C:_ <2 days><br>nbaspauldixp2.Memory.Memory <2 days><br>nbaspauldixp2.WebSpeed.wsbroker1 <2 days><br>nbaspauldixp2.WebSpeed.wsdynamics1 <2 days> |          |

**Warning**  
Use this functionality with care. Substantial increases in the time period of retention of graph cache samples will result in large increases in disk space consumed by the graph cache samples (especially with regards to Database resources). Larger graph caches may also noticeably slow creation of graphs due to more substantial paging requirements to access the data.


5. Select the resources:

- To select all the resources in the **Available** list, click **Select All**. Then click the right arrow.
- To choose one or more individual resources, highlight and click each resource you want to include; then click the right arrow.

The resources appear in the **Selected** list. The information in angle brackets to the right of each resource name is the current graph cache setting for that resource.

6. Review the **Selected** list. When you finish, click **Apply to selected**, as shown:

*Apply to  
selected*

**Graph Cache Database Configure**  
Oct 17, 2006 5:54:56 PM

Time period setting to apply to selected resources

Sample time period to collect:  ☒ hours ☐ days

Apply to selected

Resources to operate on

Available Filter

List resource of type:

for container:

Apply Filter

Available

\*  
nbaspauldixp2.AppServer.asbroker1 <2 days>  
nbaspauldixp2.AppServer.esbbroker1 <2 days>  
nbaspauldixp2.AppServer.icrepos <2 days>  
nbaspauldixp2.Database.Backorders <2 days>  
nbaspauldixp2.Database.FathomTrendDatabase <2 days>  
nbaspauldixp2.WebSpeed.wsbroker1 <2 days>  
nbaspauldixp2.WebSpeed.wsdynamics1 <2 days>

Selected

nbaspauldixp2.CPU.CPU <2 days>  
nbaspauldixp2.Disk.Disk-0\_C\_ <2 days>  
nbaspauldixp2.FileSystem.FileSys-C\_ <2 days>  
nbaspauldixp2.Memory.Memory <2 days>

Select All


Select All

**Warning**

Use this functionality with care. Substantial increases in the time period of retention of graph cache samples will result in large increases in disk space consumed by the graph cache samples (especially with regards to Database resources). Larger graph caches may also noticeably slow creation of graphs due to more substantial paging requirements to access the data.

A message appears similar to the following (depending on which resources you select) confirming the resources you are about to affect:

Microsoft Internet Explorer



Confirm your desire to set the following resource(s) to retain graph samples for up to 24 hours. Increasing the retention time may substantially increase the disk space used by the graph sample database in the Fathom work area.


nbaspauldixp2.CPU.CPU <2 days>  
nbaspauldixp2.Disk.Disk-0\_C\_ <2 days>  
nbaspauldixp2.FileSystem.FileSys-C\_ <2 days>  
nbaspauldixp2.Memory.Memory <2 days>

OK

Cancel

8-20

7. Click **OK** to confirm. The **Graph Cached Database Configure** page appears.
8. To verify that the time period was changed correctly for the resources you selected, choose the resources and containers, and click **Apply Filter**. The **Available** list shows the resources whose graph cache time period is still set to the 48-hour default as well as those whose time period you have changed (perhaps to 24 hours), as shown in the following example:


**Graph Cache Database Configure**  
 Oct 17, 2006 6:00:16 PM

**Time period setting to apply to selected resources**  
 Sample time period to collect:  ☒ hours ☐ days

**Resources to operate on**

| Available Filter                                         | Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Selected                                  |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| List resource of type:<br><input type="text" value="*"/> | nbaspauldixp2.AppServer.asbroker1 <2 days><br>nbaspauldixp2.AppServer.esbbroker1 <2 days><br>nbaspauldixp2.AppServer.icfrepos <2 days><br>nbaspauldixp2.CPU.CPU <1 day><br>nbaspauldixp2.Database.Backorders <2 days><br>nbaspauldixp2.Database.FathomTrendDatabase <2 days><br>nbaspauldixp2.Disk.Disk-0_C_ <1 day><br>nbaspauldixp2.FileSystem.FileSys-C_ <1 day><br>nbaspauldixp2.Memory.Memory <1 day><br>nbaspauldixp2.WebSpeed.wsbroker1 <2 days><br>nbaspauldixp2.WebSpeed.wsdynamics1 <2 days> | <input type="button" value="Select All"/> |

**Warning**  
 Use this functionality with care. Substantial increases in the time period of retention of graph cache samples will result in large increases in disk space consumed by the graph cache samples (especially with regards to Database resources). Larger graph caches may also noticeably slow creation of graphs due to more substantial paging requirements to access the data.

## Setting user preferences

You can establish your own preferences for the following OpenEdge Management features:

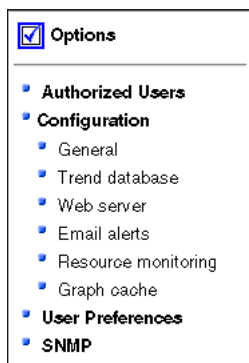
- The OpenEdge Management console page refresh rate
- The default polling and trending attributes for your OpenEdge Management resources: database, file, network, OpenEdge server, and system

You make these selections on the **User Preferences** page.



**To set user preferences for page refresh and default polling and trending:**

1. Select **Options** from the OpenEdge Management console menu bar. A list of options appears in the list frame, as shown:



2. Select **User Preferences**. The **User Preferences** page appears.
3. Continue with the [“Setting the page refresh option”](#) section on page 8–22.

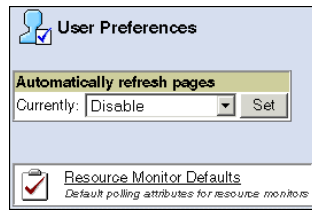
### Setting the page refresh option

From the **User Preferences** page, you can choose if and when you want the OpenEdge Management pages to refresh.

Consider your page refresh needs closely before establishing a setting. Frequent refreshing of menu, list, and detail frames adds to the processing time used by OpenEdge Management.



The current setting appears in the **Currently** field, as shown in [Figure 8–2](#).



**Figure 8–2: Refresh Pages page**

The following refresh options are available:

- **Disable**
- **Every 30 seconds**
- **Every 45 seconds**
- **Every minute**
- **Every 2 minutes**
- **Every 5 minutes**
- **Every 10 minutes**
- **Every 30 minutes**



### To change the refresh setting:

1. From the **Currently** drop-down list, select a new option.
2. Click **Set**. The following activities occur:
  - The menu and detail frames are immediately refreshed.
  - The objects in the menu frame refresh according to your new setting.
  - Any time the list frame displays the **Alert List** page or the **Resources** page, these objects will be refreshed according to the new setting selected.

Remember that you can always click the **Refresh** icon, shown below, in the list control bar in the lower-left corner of the console:



---

**Note:** For more information about using the console, see the *OpenEdge Management: Resource Monitoring Guide*.

---

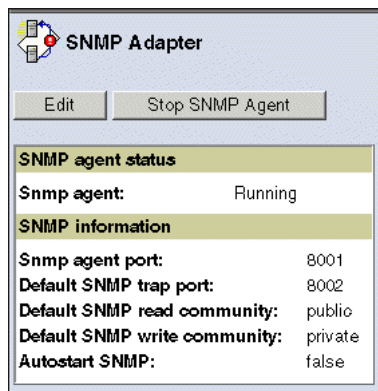
## Changing the SNMP Adapter settings

If you have installed the SNMP Adapter, you can change the current SNMP Adapter settings.



### To change the SNMP Adapter settings:

1. Select **Options**→**Configuration**→**SNMP**. The **SNMP Adapter** page appears in the detail frame and displays the **SNMP agent status** and current settings:



You can also start or stop the SNMP agent from the **SNMP Adapter** page.

2. Click **Edit**. Change one or more of the following settings:
  - **Snm agent port** — The port number of the host machine on which the SNMP management agent resides. The SNMP agent translates the requests from the SNMP management console and interprets MIB variables. The default port number is 8001.
  - **Default SNMP trap port** — The default port number to which traps are sent. The number is 8002.
  - **Default SNMP read community** — The community that specifies who has permissions to read which variables.
  - **Default write community** — The community that specifies who has permissions to write which variables. (In the case of the OpenEdge Management MIB, the values are read-only.)
  - **Autostart SNMP** — The option to autostart the SNMP agent.
3. Click **Submit**.

## Setting resource monitor defaults

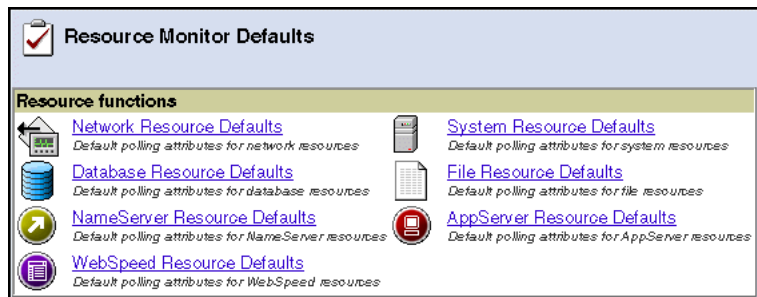
From the **User Preferences** page, you can set default polling and trending attributes for the following resources:

- Network
- Database
- System
- File
- NameServer
- AppServer
- WebSpeed



To choose the default options:

1. Click **Resource Monitor Defaults**. The **Resource Monitor Defaults** page appears:



2. Click a resource category. The defaults page for that category appears.
3. Select the defaults.
4. When you finish setting the defaults, click **Submit**. A message appears confirming that the defaults have been successfully updated.



To return to the original OpenEdge Management defaults, click **Restore Defaults**.

For more information about selecting resource monitor defaults for system, network, and file resources, see the relevant sections in the *OpenEdge Management: Resource Monitoring Guide*. For more information about selecting resource monitor defaults for databases, see the relevant section in the *OpenEdge Management: Database Management Guide*. For more information about selecting resource monitor defaults for OpenEdge server components, see the relevant section in the *OpenEdge Management: Servers Guide*.

## Using the command-line interface

OpenEdge Management provides a command-line interface that performs OpenEdge Management functions without the use of the graphical user interface.

---

**Note:** To use the command-line interface, HTTP must be enabled with **localhost** defined as a trusted client. See [Chapter 9, “Setting up Secure Communications for OpenEdge Management,”](#) for details.

---

Specifically, the command-line interface allows you to:

- Start, query, and stop OpenEdge Management
- Dump the contents of the OpenEdge Management configuration database to a readable form (an XML file) and, in the event of a catastrophic failure, use the backup dump file to restore the database
- Access command-line help.

You can also use the command-line interface to work with alerts in the following ways:

- Clear an alert
- Enable and disable polling
- Work with alert commands

For details about working with alerts in the command line, see the *[OpenEdge Management: Alerts Guide and Reference](#)*.

## Using the OpenEdge Management environment window

As a convenience, you can execute both OpenEdge Management and OpenEdge command-line utilities from an OpenEdge Management environment window. Access this window by choosing **Start**→**Programs**→**OpenEdge Management**→**Set OpenEdge Management Environment**. The environment window sets the shell environment variables needed for executing both OpenEdge Management and OpenEdge commands, as shown in [Figure 8–3](#).

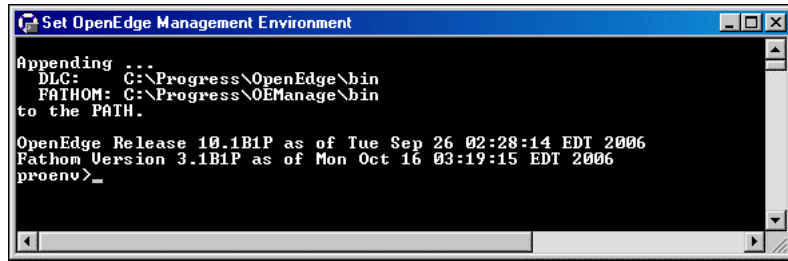


Figure 8–3: Set OpenEdge Management Environment window

## Starting, querying, and stopping OpenEdge Management

Use the following syntax to start, query, or stop OpenEdge Management from the command line:

### Syntax

```
fathom [-start | -query | -stop] <option>
```

[Table 8–1](#) describes the options you can use when starting or stopping OpenEdge Management.

Table 8–1: Options for starting and stopping OpenEdge Management (1 of 2)

| Option syntax   | Description                                                                                   |
|-----------------|-----------------------------------------------------------------------------------------------|
| -host           | Host where the AdminServer process resides.                                                   |
| -port           | Port where the AdminServer runs. Default is 20931.                                            |
| -timeout <time> | Time, in seconds, for OpenEdge Management to wait for a response. The default is 240 seconds. |

**Table 8–1: Options for starting and stopping OpenEdge Management**(2 of 2)

| Option syntax                                | Description                                                                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>-user &lt;user-name&gt;</code>         | Username on machine where the AdminServer resides. The default is current user.                                                                                                                                  |
| <code>-password &lt;user-password&gt;</code> | Password associated with the specified username. This is not needed for local connection.<br><br><b>Note:</b> Use of the <code>-password</code> parameter might allow others to see your password in clear text. |

**Examples**

You want to connect to your AdminServer but you do not want to wait more than five minutes for the connection to be made. Enter the following syntax to start OpenEdge Management from the command line (and assume that the AdminServer port is the default of 20931):

**Syntax**

```
fathom -start -timeout 300
```

Enter the following syntax to stop OpenEdge Management from the command line and specify that the command-line interface tool wait five minutes before reporting an error (and assume that the AdminServer port is the default of 20931):

**Syntax**

```
fathom -stop -timeout 300
```

To learn the execution status of OpenEdge Management with an AdminServer port number of 1905, enter the following syntax:

**Syntax**

```
fathom -query -port 1905
```



## Dumping, backing up, and restoring the OpenEdge Management configuration database

Using the command-line interface, you can dump the OpenEdge Management configuration database, even while OpenEdge Management is running, to a readable XML file. You can use the dump file as a backup of the configuration database; in the event of a catastrophic failure, you can use the backup dump file to restore the OpenEdge Management configuration database. Because the dump file is readable, you can also use the file when you are performing diagnostics.

You can also perform a dump and load to reduce the disk space that the OpenEdge Management configuration database is using.

### Dumping the OpenEdge Management configuration database

You can dump the OpenEdge Management configuration database to a file whose name you specify by typing the following command:

```
fathom -dump <filename>
```

The resulting file will be in XML format and will contain an XML representation of all definitions in the OpenEdge Management configuration database. You can use this resulting file either as a potential single-file backup of the database or to assist with diagnostics regarding database performance.

Note that you can run the dump command when both the AdminServer and OpenEdge Management are running, or when they are both not running. You cannot dump the configuration if OpenEdge Management is a plugin of the AdminServer but has been stopped.

You can also use the `-httpport` argument, as follows, to identify the port of the OpenEdge Management Web server:

```
fathom -httpport <port-number> -dump <filename>
```

## Restoring the OpenEdge Management configuration database from a backup file

You can load a dump file you created from the OpenEdge Management configuration database. To run the load command, be sure that OpenEdge Management is offline; if OpenEdge Management is running, you must stop the AdminServer before you run the command.

To load the file, type the following command:

```
fathom -load <filename>
```

The `-load` command recreates the OpenEdge Management configuration database and populates it with definitions in the file whose name you specify.

## Reducing OpenEdge Management configuration database disk space usage

You can perform both the `-dump` and `-load` commands to reduce the amount of disk space consumed by the OpenEdge Management configuration database. You might want to perform this reduction in space if OpenEdge Management has been performing a lot of resource modifications over an extended period of time, in which case some database fragmentation might have occurred causing more disk space to be consumed than is actually required.

Note that OpenEdge Management must be offline when you run the `-load` command.

If OpenEdge Management is online, be sure to stop the AdminServer.



### To dump the data, do the following:

1. Back up the `fathom.o*` files that are in the following location:

```
<OpenEdgeManagement-install-dir>\config
```

2. Remove the `fathom.o*` files from the location identified in [Step 1](#).
3. Copy the `fathom.xml` file to the `\config` directory.
4. Restart the AdminServer.

## Accessing command-line help

To access help about any command-line option, use the following:

```
fathom -help -command
```

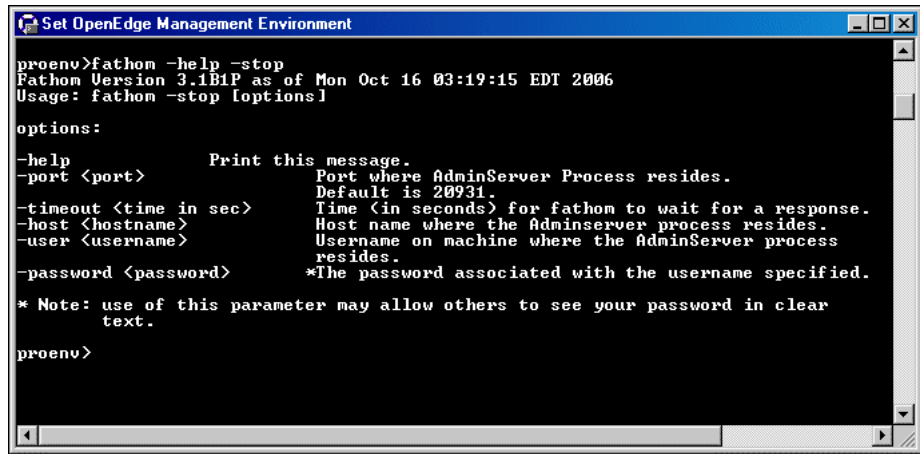
To access help for the `-clear` alert command when you have changed the default Web server port to 8080, enter the following command:

```
fathom -httpport 8080 -help -clear
```

To access help for the `-stop` command, enter the following:

```
fathom -help -stop
```

The help information shown in [Figure 8-4](#) appears.



```

Set OpenEdge Management Environment
proenv>fathom -help -stop
Fathom Version 3.1B1P as of Mon Oct 16 03:19:15 EDT 2006
Usage: fathom -stop [options]

options:
-help          Print this message.
-port <port>   Port where AdminServer Process resides.
               Default is 20931.
-timeout <time in sec> Time <in seconds> for fathom to wait for a response.
-host <hostname>      Host name where the Adminserver process resides.
-user <username>      Username on machine where the AdminServer process
                     resides.
-password <password> *The password associated with the username specified.

* Note: use of this parameter may allow others to see your password in clear
      text.
proenv>

```

**Figure 8-4:** Command-line help for `-stop`

## Setting the log level for the AdminServer log file

The AdminServer log (`admserv.log`) records AdminServer activity. The log is located in the OpenEdge Work directory. You can determine how much information is written to the log file by setting the log level.



### To set the log level in Windows or on UNIX:

1. Open the following file in a text editor:

```
OpenEdge-install-dir\properties\AdminServerPlugins.properties
```

2. Locate the `[PluginPolicy.Progress.AdminServer]` section.
3. Add the following to the `jvmargs` line:

```
-DLogLevel=n
```

In which *n* is a number from 1 to 5. The default is 3. Log level 5 provides the highest level of verbose information.

4. Save the file.

---

# Setting up Secure Communications for OpenEdge Management

---

As you monitor resources and trend data using OpenEdge Management, one of your primary considerations will be the security of the data as it is transferred over the Internet.

This chapter describes how to use the HTTPS protocol with the OpenEdge Management Web server and the OpenEdge Management Trend Database, as outlined in the following sections:

- [Transferring data securely with the HTTPS protocol](#)
- [Understanding common SSL terminology](#)
- [Getting started: using the OpenEdge Management demo certificate](#)
- [Changing Web server settings](#)
- [Changing OpenEdge Management Trend Database settings](#)
- [Using SSL with OpenEdge Management](#)
- [Using your own certificate](#)
- [Using the keytool utility](#)
- [For additional information about using HTTPS](#)

## Transferring data securely with the HTTPS protocol

As you work with OpenEdge Management, you want to ensure that data being transferred between the Web browser and the OpenEdge Management Web server is secure. You may also require the same level of security when you trend performance data if the trend database is located on a remote machine. In cases in which you are sending or receiving sensitive data, the security of the communications is essential.

You can use the HTTPS protocol for communications between the Web browser and the OpenEdge Management Web server as well as between an OpenEdge Management instance and a remote trending database. The HTTPS protocol with Secure Sockets Layer (SSL) encrypts data through the use of a public/private key pair and a signed certificate, thereby making sure that both the client and the server (or, as in the case of OpenEdge Management, a Web browser and the OpenEdge Management Web server) can authenticate each other's identity. If you are trending data to a remote database, you can ensure that communication between the two machines is secure.

Both Netscape and Microsoft Internet Explorer support SSL.

### Using the OpenEdge Management demo or your own certificate

To help you get started using the SSL protocol, OpenEdge Management includes a demo keystore and certificate, valid for approximately one year, that you can set up on a nonproduction system. If you prefer (or if you want to set up SSL on a production system), you can generate your own certificate or use one that you acquire from a certificate authority.

Instructions for setting up SSL by either method are provided here.

# Understanding common SSL terminology

As you prepare to establish secure communications of OpenEdge Management-related data, there are several terms with which you should be familiar.

## **Data encryption**

A method of translating data into a code that is indecipherable without a special key or password. The sender of the data encrypts it, and the receiver of the data decrypts it.

Encrypted data is also known as *cipher text*.

## **SSL handshake**

A communication that allows the server to identify (authenticate) itself to the client by sending a certificate. The client uses the certificate to verify that the sender is who it claims to be.

## **Public and private key pair**

The combination of a sender's *public key*, which is common knowledge, and a *private key*, which is known only by the recipient of an Internet communication. For example, if a server wants to send a secure communication to a client, the server uses the private key to encrypt the contents of the message. The client then uses its public key to decrypt the encrypted message.

## **Keystore**

A database that functions as a repository for the certificates and keys.

## **Keytool**

A key and certificate management utility, developed by Sun Microsystems, that allows you to administer your own private/public key pairs and associated certificates. You then use these keys and certificates for self-authentication (in which you authenticate yourself to other users or services) using digital signatures.

## **X.509**

A commonly used standard for defining digital certificates.

## **Certificate**

An attachment included in a network communication for the purposes of security. A certificate allows the recipient of the communication to verify that the sender is as claimed and allows the recipient to return to the sender an encrypted response.

A certificate is issued by a Certificate Authority (CA).

Each certificate is a dated entity that has a limited lifespan. A typical certificate is issued for a year; however, a trial certificate will likely be valid for a shorter period of time, perhaps for fourteen days.

You can typically obtain a 14-day trial certificate from a certificate/security company such as Verisign (<http://www.verisign.com>).

### **Certificate Authority**

A provider of encrypted digital certificates. The CA signs the certificate request and chains it to its root certificate.

### **Root certificate**

A certificate that identifies the Certificate Authority. A root certificate is self-signed, meaning it does not chain to another certificate to establish trust. If a certificate user, such as a browser, does not recognize a particular certificate, it walks the chain for a parent that it does know, until it reaches the root.

### **Digital signature**

A signature on a certificate from a trusted Certificate Authority.

### **procertm utility**

A utility you can use to add any Certificate Authority's root certificate to the trend trust keystore, if the root certificate is not already there. You can also use the procertm utility to convert digital certificates between certificate file types (.der and .pem).



## Getting started: using the OpenEdge Management demo certificate

If you want to get up and running with SSL quickly, you can use the demo certificate that OpenEdge Management provides and set up the HTTPS protocol for OpenEdge Management Web server and remote OpenEdge Management Trend Database communications.

---

**Caution:** This demo certificate is not intended for use in a production environment.

---

### Configuration update errors or warnings

In the event that you make an update to the Web server or OpenEdge Management Trend Database configuration and the update is not successful, an error message appears, describing the issue. Additionally, a red letter X appears next to the field that prompted the generation of the error. The presence of one or more errors stops the update; click **OK** to close the error message.

If you make an update to the configuration and a warning is generated, an alert box appears and describes the particular warning. Additionally, a blue question mark appears next to the field that prompted the warning. Unlike what happens when an error is detected during a configuration update, the warning does not stop the update from proceeding; it is simply an informational reminder to you that you might want to reconsider how you are configuring OpenEdge Management.

If you make a change in configuration and the change does not appear to have taken effect, consult the AdminServer log (admserv.log), which is located in your OpenEdge Work directory, for details.

### Identifying trusted clients

As you update the configuration of either the Web server or the OpenEdge Management Trend Database, you can optionally identify one or more trusted clients who are allowed to connect to the OpenEdge Management instance using the designated protocol. If you want to list more than one trusted client, separate each entry by a comma.

You can use the trusted clients feature to allow a few well-known clients (or even an entire subnet) to connect unsecured to OpenEdge Management for convenience and possible performance reasons, while requiring all other clients to use a secured connection. For example, you might want to establish that you use the HTTP protocol for intranet connections and the HTTPS protocol for any Internet connections (for example, coming through a firewall).

You can identify a trusted client by using any of the following formats:

- DNS name (for example, **pcjoe**)
- A dot-formatted address string (for example, **123.123.123.123**)
- A wildcard dot-formatted address string (for example, **123.123.123.\***)

Independent of how you configure trusted clients, you are always able to connect from the local host. If you leave the trusted clients list empty, any client can connect.

## Reconnecting to OpenEdge Management after updates

Note that changes you make to the configuration might require that you reconnect (log in again) to OpenEdge Management. If logging in again is necessary, you will be prompted to do so.

## Changing Web server settings

When you perform the initial OpenEdge Management configuration, you identify the Web server port you plan to use. Although you cannot choose to use the HTTPS protocol when you are making your initial configuration decisions regarding the Web server (as described in [Chapter 6, “Setting Up OpenEdge Management for the First Time”](#)), you can make that choice afterwards by updating the configuration options. You can change the port number, and you can also decide whether to use HTTP only, HTTPS (SSL) only, or both HTTP and HTTPS (SSL). If you choose to use both the HTTP and HTTPS protocols, you can define for both protocols a list of trusted clients.

For example, you might prefer to restrict the ones you want to talk to OpenEdge Management without SSL. For HTTP, you might put the local host (or create a subnet of local users to use HTTP) as the trusted client. For HTTPS, you can open data transfer to anyone, keeping in mind that it might add some overhead to communications.

---

**Note:** To use the existing command-line interface, HTTP must be enabled with **localhost** defined as a trusted client.

---



### To change the Web server settings:

1. Select **Options**→ **Configuration**→ **Web server**. The **OpenEdge Management Web Server Configuration** page appears in the detail frame and displays the current Web server settings.
2. Choose from the following protocol options:
  - If you want to allow HTTP connections, select the **Enable HTTP protocol** option. Type the port number in the **HTTP port** field.
  - If you want to allow HTTPS connections, select the **Enable HTTPS protocol** option. Type the port number in the **HTTPS port** field.
  - If you want to allow both HTTP and HTTPS connections, select both the **Enable HTTP protocol** option and the **Enable HTTPS (SSL) protocol** option. Then type the port numbers in the **HTTP port** field and the **HTTPS port** field.

3. Choose one:

- If you want to work with the demo keystore, click **Submit**. See the “[Using SSL with OpenEdge Management](#)” section on page 9–18 for details about using an HTTPS connection.
- If you are an advanced user and you want to change keystore information, continue with the “[Using advanced HTTP and HTTPS options with the OpenEdge Management Web server](#)” section on page 9–8.

### Using advanced HTTP and HTTPS options with the OpenEdge Management Web server

You can use the following advanced options when configuring OpenEdge Management to use HTTP or HTTPS:

- Use a Trust Keystore other than the demo provided by OpenEdge Management.
- Identify trusted clients for HTTP and/or HTTPS.



### To use the advanced options:

1. From the **OpenEdge Management Web Server Configuration** page, click **Advanced Options**. The expanded **OpenEdge Management Web Server Configuration** page appears:

The screenshot shows the 'OpenEdge Management Web Server Configuration' window. At the top, there are 'Submit' and 'Cancel' buttons. Below them is a section titled 'Current web server settings' with a note: 'Note, if you change the HTTP / HTTPS port, you'll need to reconnect to OpenEdge Management using the new port after submitting your changes.' There are 'Help' and 'Hide Options' buttons. The 'Enable HTTP protocol?' checkbox is checked, with the 'HTTP port' set to 9090. The 'Enable HTTPS (SSL) protocol?' checkbox is unchecked, with the 'HTTPS port' set to 9443. Below this is the 'HTTP Configuration' section with a 'Trusted clients: (comma-delimited list)' field. The 'HTTPS Configuration' section includes 'Identity Keystore' with a note: 'Note, if you change any of the identity keystore information, you'll need to reconnect to OpenEdge Management after submitting your changes.' It contains fields for 'Keystore path name' (prefilled with 'C:\Progress\OEManage\config\demo\WebServerIdentityKeystore.jks'), 'Keystore pass phrase' (masked with dots), 'Alias' (prefilled with 'demo'), 'Alias pass phrase' (masked with dots), and 'Trusted clients: (comma-delimited list)'.

2. Under **HTTP Configuration**, type the name of one or more trusted clients in the **Trusted clients** field. If you type more than one trusted client, use a comma-delimited list.

You can identify trusted clients by machine name, subnet, or IP address.

Under **HTTPS Configuration**, notice that the following fields are prefilled with data taken from the demo keystore, which is `demoWebServerIdentityKeystore.jks`:

- **Keystore path name**
- **Keystore pass phrase**
- **Alias**
- **Alias pass phrase**

The **Keystore pass phrase**, **Alias**, and **Alias pass phrase** are all case-sensitive.

Notice also the following details related to the demo certificate information provided by OpenEdge Management:

- **Owner** — The Common (CN) and Organization (O) name components of the Distinguished Name (DN), whose public key the certificate identifies. For the demo, the owner is Demo or localhost, Progress Software Corp.

Note that most popular browsers expect the common name portion of the owner name to be the DNS host name of the machine that is using the certificate for SSL. If a certificate has a different common name, as does the OpenEdge Management demo certificate, the browser notifies you of the difference when you connect to a Web server using this certificate.

- **Issuer** — The Common (CN) and Organization name components of the Distinguished Name (DN), the organization that signed the certificate.
  - **Type** — The type of certificate. X.509 is the most widely accepted format and is currently the only format supported by the JDK keytool. This is also the default format used by SSL.
  - **Public key** — The algorithm used to generate the public/private key pair. This should always be RSA, which is the only algorithm that Netscape and Internet Explorer browsers recognize.
  - **Signature algorithm** — The algorithm used by the CA to sign the certificate.
  - **Version** — The version of the X.509 standard that applies to this certificate. There are currently three certificate versions: V1, V2, and V3.
  - **Valid from** — The dates for which the certificate is valid.
3. Type the name of one or more trusted clients in the **Trusted clients** field. If you type more than one trusted client, use a comma-delimited list.
  4. Click **Submit**. A message appears confirming that the configuration has been successfully updated.
  5. Click **OK**.

Note that changes you make to the configuration might require you to reconnect (log in again) to OpenEdge Management.

## Changing OpenEdge Management Trend Database settings

You determine whether the OpenEdge Management Trend Database stores trend data in a local or remote OpenEdge Management database. For trending to a local database, you specify the local database path name and the local database port when you initially configure OpenEdge Management. For trending to a remote OpenEdge Management instance, you specify the remote OpenEdge Management host name and the OpenEdge Management Web server port. (These initial configuration steps are described in [Chapter 6, “Setting Up OpenEdge Management for the First Time.”](#))

Although you cannot choose to use the HTTPS protocol when you are making your initial configuration decisions regarding the location of the OpenEdge Management Trend Database, you can make that choice afterwards by updating the configuration options. If you have a client that needs to get through a firewall, you can also configure trending to use a proxy server instead of connecting directly to the Internet.

For HTTPS, you can open data transfer to anyone, keeping in mind that it might add some overhead to communications.

If you choose to trend to a scripted database and use the HTTPS protocol, the machine on which the database resides must have HTTPS enabled in the Web server configuration.



### To store trend data in a managed OpenEdge Management database:

1. Select **Trend database** in the list frame. The **OpenEdge Management Trend Database Configuration** page appears in the detail frame and displays the current trend database settings.
2. Select **Store trend data in a local OpenEdge Management database**.
3. Type the database path name (for example, **C:\Progress\OEManage\db\Fathom.db**). (Note that the inclusion of the **.db** extension is optional when you provide the path name.)
4. Type the database port number (for example, **1234**).
5. Click **Submit**.



### To store trend data in a remote OpenEdge Management instance:

1. Select **Trend database** in the list frame. The **OpenEdge Management Trend Database Configuration** page appears in the detail frame and displays the current trend database settings.
2. Select **Store trend data in a remote OpenEdge Management instance**.
3. Type the host name in the **OpenEdge Management host name** field.
4. Type the remote OpenEdge Management Web server port number in the **OpenEdge Management port** field. Typically, the number is **9090** for HTTP or **9443** for HTTPS.
5. To use HTTPS, select the **Use HTTPS (SSL) protocol** option.
6. Choose one:
  - If you want to work with the demo keystore and are not using a proxy server, click **Submit**. See the [“Using SSL with OpenEdge Management”](#) section on page 9–18 for details about using an HTTPS connection.
  - If you are an advanced user and you want to change keystore information or use a proxy server, continue with the [“Using advanced HTTPS options when trending remotely”](#) section on page 9–12.

## Using advanced HTTPS options when trending remotely

If you want to use HTTPS for communications with a remote OpenEdge Management Trend Database, you can also use the following advanced options:

- A Trust Keystore other than the demo provided by OpenEdge Management
- A proxy server





To use the advanced options:

1. From the **OpenEdge Management Trend Database Configuration** page, click **Advanced Options**. The expanded **OpenEdge Management Trend Database Configuration** page appears:

Under HTTPS Configuration, the full path name to the demo keystore (demoTrendTrustKeystore.zip) appears in the **Keystore path name** field.

---

**Note:** Although the demo keystore is a .zip file, the .zip file format is not a requirement for a keystore. You can also use a .cer file or a .pem file as the keystore.

---

2. To use a keystore other than the demo, type the keystore name in the **Keystore path name** field.
3. If you want to use a proxy server, do the following:
  - a. Select the **Use a Proxy server** check box.
  - b. Type the host name in the **Proxy host name** field.
  - c. Type the server port number in the **Proxy server port** field.

4. Click **Submit**. A message appears confirming that the configuration has been successfully updated.
5. Click **OK**.

Note that changes you make to the configuration might require you to reconnect (log in again) to OpenEdge Management.

## Using the procertm utility

If you are using HTTPS for communications with a remote OpenEdge Management Trend Database, you use the demo keystore — `demoTrendTrustKeystore.zip` — to validate the SSL connection from the OpenEdge Management installations that are trending to a remote management console (the location of the OpenEdge Management Trend Database). The Digital Certificate that identifies the Certificate Authority who issued the remote management console's digital certificate must be in the `demoTrendTrustKeystore.zip` for the validation to succeed.

The `demoTrendTrustKeystore.zip` file contains a number of trusted root digital certificates for an OpenEdge Management demo and common, public Certificate Authorities. It is not typically necessary for you to modify the file; however, the `demoTrendTrustKeystore.zip` file contains neither the digital certificate for every public Certificate Authority nor certificates for any privately run company Certificate Authority.

You can obtain the distributed list of certificates by running the `procertm` utility and listing the contents of the `demoTrendTrustKeystore.zip` file certificate store. You can also use the `procertm` utility to add any Certificate Authority's root certificate to the `demoTrendTrustKeystore.zip`, if not already there.

If the remote management console's issuing Certificate Authority is not already present, you must first follow these steps:

1. Contact the CA who issued the management console's digital certificate and obtain the CA's trusted Root Digital Certificate. This may be returned in either PEM (`.0`, `.txt`, or `.pem`) or DER (`.cer` or `.crt`) format.
2. If the CA root digital certificate is in a PEM format (with a file extension of `.0`, `.txt`, or `.pem`), use the `procertm` tool to convert it to DER format (identified with a `.cer` file extension).
3. Use the `procertm` tool to import the DER-formatted CA digital certificate into the `demoTrendTrustKeystore.zip` certificate store.

## Managing the trust keystore with procertm

You run the procertm utility from a command line using the following syntax:

### Syntax

```
procertm [options] cert_store
```

Where:

- `cert`

The path to the digital certificate you want to import, export, or remove. This is used with the `-i`, `-e`, and `-r` options. When importing, the path is relative to the working directory. When exporting or removing digital certificates from `cert_store`, the path is the full digital certificate path specified in `cert_store`. Subdirectories should be specified with a forward slash (/). You can use multicharacter (\*) and single-character (?) wildcards in the `cert` filename and file extension.

- `cert_store`

The path to the zip or jar certificate store file. If the certificate store file does not exist, and you are importing digital certificates, a new file is created.

When you run procertm, it performs the options in the following order:

1. Imports any certificates specified with the `-i` option from the working directory into `cert_store`. If a certificate is not found, a warning message displays.
2. Exports any certificates specified with the `-e` option from `cert_store` to the working directory. If a certificate is not found, a warning message displays.
3. Removes any certificates specified with the `-r` option from `cert_store`. If a certificate is not found, a warning message displays.
4. Shows the resulting `cert_store` file contents, if the `-l` option is specified.
5. Prints any digital certificate list information, if the `-p` option is specified.

You can provide the following options in any combination and in any order:

- `-v`  
  
Prints verbose information about the progress of the digital certificate's import and export. When used with `-l`, additional digital certificate field information is printed.
- `-l`  
  
Lists the contents of the `cert_store` file after all import, export, and remove operations are completed.
- `-p`  
  
Prints the digital certificate list the `cert_store` contents to the file `cert_store.dcl`, after all import, export and remove operations are completed.
- `-i cert`  
  
Imports certificate file(s) matching `cert` to `cert_store` from the working directory. The `cert_store` file is created as required. You can specify this option multiple times. See the definition of `cert`.
- `-e cert`  
  
Exports the certificate file(s) matching `cert` from `cert_store` to the working directory. Any subdirectories are created if required. You can specify this option multiple times. See the definition of `cert`.
- `-r cert`  
  
Removes the certificate file(s) matching `cert` from `cert_store`. You can specify this option multiple times. See the definition of `cert`.
- `-d`  
  
Sets the working directory path where certificates are imported from or exported to. The default is the current working directory.

## Converting digital certificates with procertm

You can use the `procertm` utility to convert digital certificates between `.DER` and `.PEM` file formats. To convert files from one file format to the other, use the following command line syntax:

### Syntax

```
procertm -c in_cert out_cert
```

Where:

- `in_cert`

The digital certificate whose file format you want to convert.

- `out_cert`

The file format to which you want to convert the digital certificate. `Procertm` performs the conversion based on the file-extension type. For example, if `in_cert` has a file extension type of `.crt` and `out_cert` has a file extension type of `.pem`, `in_cert` is converted from `.der` to `.pem` format and written to the file `out_cert`.

## Using SSL with OpenEdge Management

Once you configure the Web server to use SSL, enable the HTTPS protocol on a port, and identify a valid identity keystore and certificate, you can connect to OpenEdge Management using the HTTPS protocol.

In the browser's **Address** field, type the following command:

```
https://<host-name>:<port-number>
```

Where:

- *host-name*

Either the DNS name or the dot-formatted address where OpenEdge Management is running.

- *port-number*

The port on which HTTPS is listening for SSL connections.

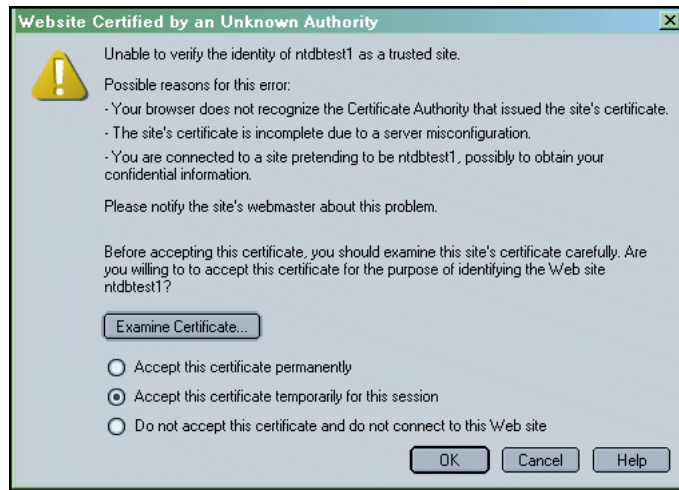
The OpenEdge Management login window appears.

### Detecting a certificate from an unknown Certificate Authority

If the browser determines that the certificate uses an unknown CA (as is the case with the OpenEdge Management demo certificate), a message appears informing you of this fact. Depending on the version of the browser, the content of the message varies.

## When browsing in Netscape

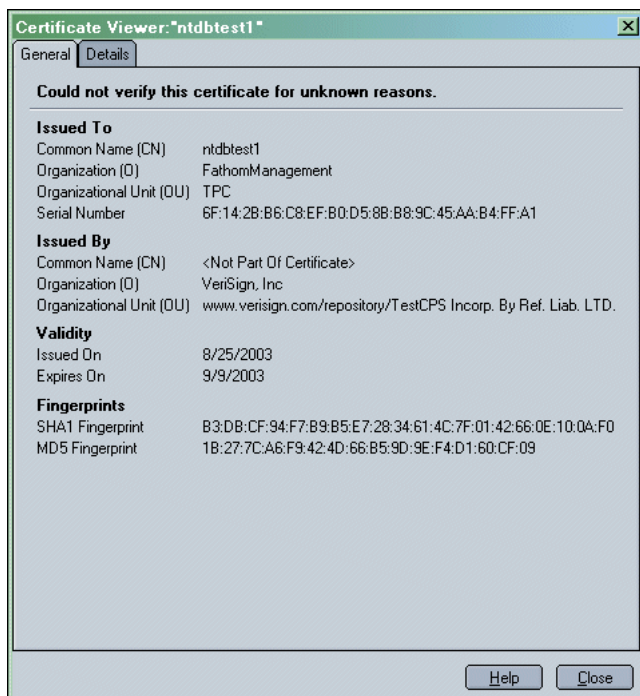
If you are using the Netscape browser and attempt to connect to a Web site whose certificate uses an unknown CA, you see the message shown in [Figure 9–1](#).



**Figure 9–1: Unknown authority in Netscape**

At this point, you can click either **Cancel** or **Examine Certificate**. If you click **Cancel**, you close the message without accepting the certificate. You will then be prompted each subsequent time you attempt to connect to the machine with the unknown CA.

If you click **Examine Certificate**, you see the details shown in [Figure 9–2](#).



**Figure 9–2: Certificate details**

Click **Close** to return to the previous window, where you have the following three choices:

- **Accept the certificate temporarily for this session**

If you select this option (which is the default), you will be prompted each and every time you attempt to connect to the Web site from this browser. You can then accept the certificate on a session-by-session basis.

- **Accept the certificate permanently**

If you select this option, the certificate is imported into your browser. You will not be prompted when you next connect to the Web site from this browser.

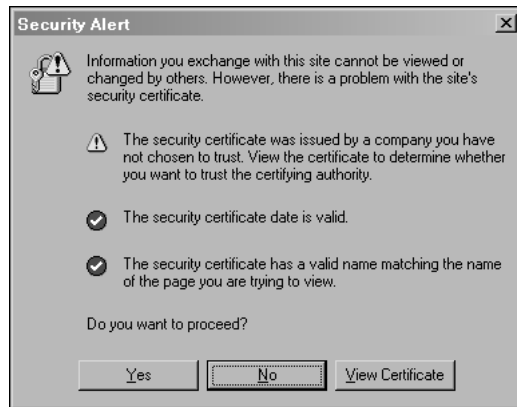
- **Do not accept the certificate and do not connect to this Web site**

If you select this option, your browser session terminates.



## When browsing in Internet Explorer

If you are using the Internet Explorer browser and attempt to connect to a Web site whose certificate uses an unknown CA, you see the message shown in [Figure 9–3](#).



**Figure 9–3: Security Alert dialog in Internet Explorer**

You have the following three choices:

- Click **Yes** to accept the certificate for the current session only.
- Click **No** to terminate the session.
- Click **View Certificate**.

The certificate appears, as shown in [Figure 9-4](#).



**Figure 9-4: Certificate details**

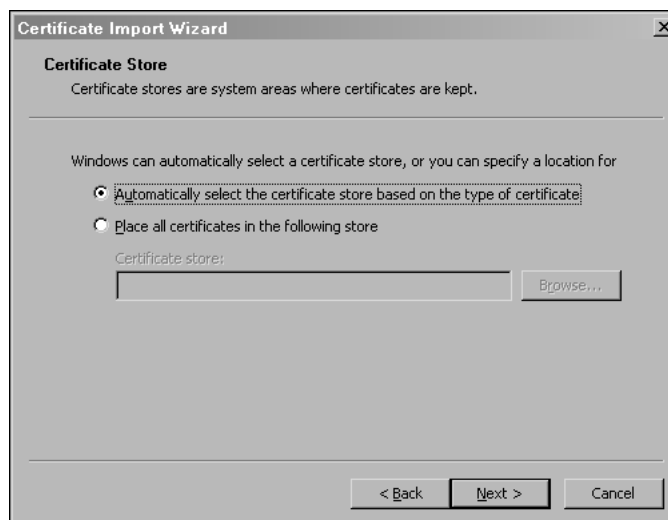
The certificate contains three tabs of information: **General**, **Details**, and **Certification Path**.

**To install the certificate:**

1. Click **Install Certificate**. The **Certification Import Wizard** launches:



2. Click **Next**. The Wizard continues:



3. Accept the defaults, and click **Next**. The Wizard completes:



4. Click **Finish**. A message appears informing you that the import was successful.

---

**Note:** If you are using the certificate for testing purposes only, you can remove the certificate from the browser at any time.

---

## Using your own certificate

If you want to use a certificate other than the demo included with OpenEdge Management, you can do either of the following:

- Generate your own certificate (to be placed in a JSEE-compatible keystore) by using the keytool utility. See the [“Using the keytool utility”](#) section on page 9–26 for details.
- Use an existing certificate that you have already acquired from a third-party CA. To use the existing certificate, follow the [“Step 3: Importing the CA Certificate”](#) section on page 9–31 and the [“Step 4: Importing the signed certificate to the store”](#) section on page 9–31.

## Using the keytool utility

You can use a valid certificate that you have already acquired from a CA, or you can use the keytool utility to take you through the following four steps to obtain and import your own certificate:

1. Creating a keystore repository and generating a key
2. Generating a certificate request
3. Importing the CA's root certificate
4. Importing the signed identity certificate to the store

### Step 1: Creating a keystore repository

Before you obtain a digital certificate, you must create a keystore repository to hold the identity and CA certificates. Creating a keystore repository will also put a self-signed certificate and key pair into the store.

---

**Note:** For improved readability of the command-line samples in this document, each command-line option appears in its own line. However, you must actually type the command as one continuous string, without including any return characters.

---

To create the repository, type the following command **all on one line**:

```
Keytool
-genkey
-dname "CN=<mypc>, OU=<dept.> O=<company>, L=<city>, S=<state>, C=<country>"
-alias <alias>
-keypass <alias-passphrase>
-keystore <OpenEdgeManagement-install>/config/myIdentityKeystore.jks
-storepass <keystore passphrase>
-validity <days>
-keyalg rsa
-keysize 1024
```

Where:

- `-genkey`  
Creates the public/private key pair and wraps the public key into a self-signed certificate.
- `-dname`  
Defines the distinguished name string that identifies your site, as described in [Table 9–1](#).

**Table 9–1: Distinguished name string components**

| Component | Description                                                                                                                                   |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CN</b> | The common name, which is typically the host name for the system. (If you do not type the host name, you will get an alert from the browser.) |
| <b>OU</b> | The name of your organization or department.                                                                                                  |
| <b>O</b>  | The name of your company.                                                                                                                     |
| <b>L</b>  | The name of your city.                                                                                                                        |
| <b>S</b>  | The name of your state.                                                                                                                       |
| <b>C</b>  | The name of your country.                                                                                                                     |

- `-alias`  
A value that identifies a specific certificate/key pair. You must provide a unique alias for each certificate/key pair in a keystore. In the example shown here, the alias is **Acme**.
- `-keypass`  
A password that you will use to access a specific certificate/key pair. In the example shown here, the keypass is **coyote**.
- `-keystore`  
The full path (relative to the OpenEdge Management install directory) and the name of the keystore file you want to create.  
  
In the example shown here, `myIdentityKeystore.jks` is the repository name, and it is stored in the `<OpenEdgeManagement-install>\config` directory, the default location.

- -storepass

A password for the keystore file. In the example shown here, the storepass is **roadrunner**.

- -validity

The length of time, in days, that the certificate can be used. The default is 90 days.

- -keyalg

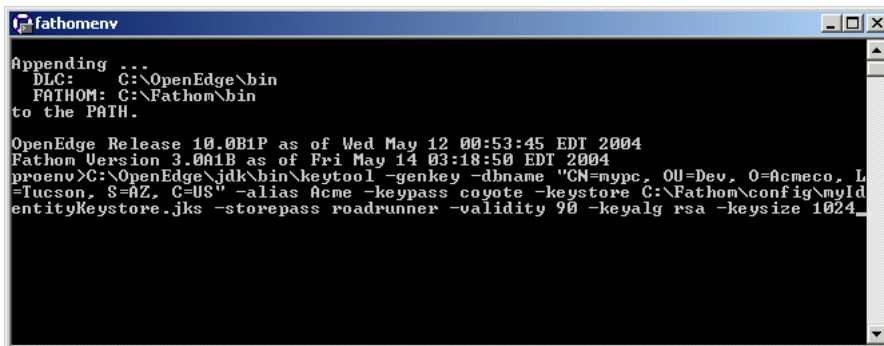
The algorithm being used to create the certificate signature.

Use this option to override the default value of **dsa** by specifying **rsa**, which is the default used by the Jetty Web server and required by Internet Explorer and Netscape.

- -keysize

The default key size of 1024; other values include 512 and 2048.

A sample appears as shown in [Figure 9–5](#).



```
fathomenv
Appending ...
DLC: C:\OpenEdge\bin
FATHOM: C:\Fathom\bin
to the PATH.

OpenEdge Release 10.0B1P as of Wed May 12 00:53:45 EDT 2004
Fathom Version 3.001B as of Fri May 14 03:18:50 EDT 2004
proenv>C:\OpenEdge\jdk\bin\keytool -genkey -dname "CN=mypc, OU=Dev, O=AcmeCo, L
=Tucson, S=AZ, C=US" -alias Acme -keystore C:\Fathom\config\myId
entity\keystore.jks -storepass roadrunner -validity 90 -keyalg rsa -keysize 1024
```

**Figure 9–5: Creating a keystore**

The command shown in [Figure 9–5](#) accomplishes the following:

- Generates a public/private key pair for the entity whose distinguished name (DN) has a common name (CN) of **mypc**, the organizational unit (OU) **Dev**, the company (O) **AcmeCo**, the city (L) **Tucson**, the state (S) **AZ**, and the country (C) **US**.
- Establishes that the certificate is valid for **90** days and is associated with the private key in a keystore entry referred to by the alias **Acme**.
- Assigns to the private key the keypass (password) **coyote**.



- Creates the keystore named `myIdentityKeystore` in the `<OpenEdgeManagement-install-dir>\config` directory.
- Assigns to the keystore the storepass (password) **roadrunner**.
- Uses the **rsa** key-generation algorithm to create the keys.
- Establishes the size for each key as **1024**.
- Creates a self-signed certificate that includes the public key and the distinguished name details.

Note that if you choose not to type the entire command, you can begin by typing only the `-genkey` command. The utility then prompts you for each of the subsequent pieces of information.

## Step 2: Generating a certificate request

Now that you have created a self-signed certificate, you want to request a signed certificate from a Certificate Authority, so that the certificate is more apt to be trusted by others.



### To request the certificate:

1. Execute the following command, typing it as **one continuous string** without including any return characters:

```
Keytool -certreq  
-alias acme  
-file d:\work\acme.csr  
-keypass coyote  
-keystore d:\work\fathomstore  
-storepass roadrunner
```

Where:

- `-certreq`

Generates a Certificate Signing Request (CSR).

- `-file d:\work\acme.csr`

Specifies the path to and name of the file that is generated to hold the certificate request information. Generally, the naming convention used to identify a CSR is to add .csr to the end of the file name. In the example shown here, the file is d:\work\acme.csr.

2. Submit the certificate request to a Certificate Authority (or to your own company's certificate authority, such as Microsoft's Certificate Authority). The submittal of the request is usually done by copying the contents of the file into the appropriate field into a Web page generated by your chosen certificate authority's Web site; however, the process for submitting the CSR is dependent upon the certificate authority.

The CA will typically authenticate you as the requestor and return a certificate, signed by the CA, authenticating your public key.

3. When you receive the reply (usually sent by e-mail), copy the contents starting with **---Begin Certificate** and ending with **--- End Certificate** into a file with a .cer extension.

In this case, the CA will actually return a chain of certificates; each certificate authenticates the public key of the signer of the previous certificate in the chain.

4. Download the CA's root certificate for use in the Web server identity keystore.

If necessary, obtain the CA's root certificate from your certificate authority to use in your browser and for remote trending. This certificate is used on the client side (browser) to authenticate the root signer and also needs to be added to the certificate keystore file. If the CA certificate is from a well-known authority such as Verisign, then it may not be necessary to install the CA certificate into the client-side browser as most browsers already include support for well-known certificate authorities.

If the CA is not one that is included in the `trendtrustkeystore.zip`, you must get the CA's certificate and add it.

You must now update the keystore file (created in the [“Step 1: Creating a keystore repository”](#) section on page 9–26) by importing the CA certificate and your new site certificate.

## Step 3: Importing the CA Certificate

Once you receive the signed certificate from the CA, you must import it.

To import the certificate, execute the following command, typing it as one continuous string without including any return characters:

```
keytool -import  
-alias ca  
-file d:\work\ca.cer  
-keypass ca  
-keystore d:\work\fathomstore  
-storepass roadrunner
```

Where:

- `-import`  
Causes the certificate to be imported into the keystore file.
- `-alias`  
Refers to the new CA certificate.
- `-file`  
Refers to the path to and name of the file that contains the CA certificate.

## Step 4: Importing the signed certificate to the store

To add the signed certificate to the store, execute the following command, typing it as **one continuous string** without including any return characters:

```
Keytool -import  
-alias acme  
-file d:\work\acme.cer  
-keypass coyote  
-keystore d:\work\fathomstore  
-storepass roadrunner
```

The CA needs to be distributed to the clients. You can do this either by loading the CA certificate file manually into the browser, or, upon connecting to the OpenEdge Management Web server the first time, choosing to download and install the CA certificate.

# For additional information about using HTTPS

The topic of secure data transfer is a large and complex one. The information provided here is intended to provide you with the details necessary to set up HTTPS connections for OpenEdge Management. However, there are numerous additional resources to which you can refer for more general information about HTTPS and SSL.

Current additional resources are listed in [Table 9–2](#). Note, however, that links are subject to change.

**Table 9–2: Additional SSL resources**

| For further information about . . . | See . . .                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trial certificates                  | <a href="http://www.verisign.com">http://www.verisign.com</a><br><a href="http://www.rsa.com">http://www.rsa.com</a>                                                                                                                                                                                                                                                                          |
| SSL                                 | <a href="http://java.sun.com/j2ee/1.4/docs/tutorial/doc/Security6.html">http://java.sun.com/j2ee/1.4/docs/tutorial/doc/Security6.html</a><br><a href="http://www.rsasecurity.com/standards/ssl/basics.html">http://www.rsasecurity.com/standards/ssl/basics.html</a><br><a href="http://wp.netscape.com/security/techbriefs/ssl.html">http://wp.netscape.com/security/techbriefs/ssl.html</a> |
| Keytool                             | <a href="http://java.sun.com/products/jdk/1.2/docs/tooldocs/solaris/keytool.html">http://java.sun.com/products/jdk/1.2/docs/tooldocs/solaris/keytool.html</a>                                                                                                                                                                                                                                 |
| Server certificates                 | <a href="http://java.sun.com/j2ee/sdk_1.2.1/techdocs/guides/ejb/html/Security7.html">http://java.sun.com/j2ee/sdk_1.2.1/techdocs/guides/ejb/html/Security7.html</a><br><a href="http://java.sun.com/j2ee/tutorial/1_3-fcs/doc/Security10.html">http://java.sun.com/j2ee/tutorial/1_3-fcs/doc/Security10.html</a>                                                                              |

---

# Glossary

---

## A

### **Access Control List (ACL)**

A table of authorized user account information that OpenEdge Management creates based on the authorized users that you define. Note that these OpenEdge Management user accounts are not operating system accounts.

### **Action**

A user-defined process set up to automatically occur in response to the status, availability, or performance information of a monitored resource.

### **Administrator**

A user who has access to all OpenEdge Management functionality without restrictions.

### **Alerts**

An indication that a noteworthy event has occurred in a monitored resource.

See also **Asynchronous alert**, **Internal alert**, and **Polled alert**.

### **Aliasing**

An event in which the server sends the client to a different Web page without informing the client.

### **Asynchronous alert**

An onscreen notification generated by an OpenEdge Management resource the moment a specific condition is detected, regardless of the resource's polling interval. An asynchronous alert can identify violations related to mission-critical and time-sensitive activities.

### **Authorized users**

Any individuals (administrators or operators) identified to OpenEdge Management on the Authorized Users page.

### **Autobaselining**

See **Configuration Advisor**.

### **Auto-start Option**

An indication that OpenEdge Management will be automatically started when the AdminServer is started.

## **B**

### **Bar chart**

A time-based chart that shows how a resource changes over time.

### **Baseline value**

A number that serves as the base for calculating a set of possible threshold settings based on your system's past activity for a specific rule. Baseline values are used by the Configuration Advisor.

### **Bookmark**

A user-defined identifier that is inserted into your log file to indicate the exact point from which the log file monitor is reading data.

### **Bulk Clear**

Simultaneous clearing of all alerts that meet specified criteria.

## **C**

### **Certificate**

An attachment included in a network communication for the purposes of security. A certificate allows the recipient of the communication to verify that the sender is as claimed and allows the recipient to return to the sender an encrypted response.

A certificate is issued by a Certificate Authority (CA).

See also **Root certificate**.

**Certificate Authority**

A provider of encrypted digital certificates. The CA signs the certificate request and chains it to its root certificate.

**Cipher text**

Encrypted data.

**Collection**

A group of resources (known also as members) that you define. You group resources into a collection based on criteria that you find valuable when grouped and viewed together.

**Collection view**

A view of individual viewlets. Each viewlet summarizes particular content, such as which resources have alerts or which active monitoring plans exist.

**Configuration Advisor**

An OpenEdge Management feature that can determine optimum threshold settings for specific polled rules.

**Configuration process**

The process of making and recording decisions about OpenEdge Management's setup and operation.

**Console**

See **OpenEdge Management console**.

**Container**

A named instance of an AdminServer that is either running OpenEdge Management or has been configured to be monitored by OpenEdge Management.

**Content rule**

An HTTP monitor rule that indicates content details such as whether a hash value comparison should be performed or a search should be performed on a given page for the search string you specify.

**Cron expression**

An expression you can use to establish more complex scheduling of jobs or reports.

**Custom job**

A user-defined task that is executed according to a user-defined schedule.

See also **Database maintenance job** and **Job**.

### **Custom view**

An OpenEdge Management view that you create to define exactly what type of information you want to see. The information appears in a tabular and/or graphical format and provides you with a quick visual assessment of the status of each of your various resources.

## **D**

### **Database Compaction**

The process of compacting data in the OpenEdge Management Trend Database by using an OpenEdge Management database maintenance job template.

### **Database maintenance job**

An OpenEdge Management-supplied, specialized job template from which job instances can be created. The predefined database jobs address fundamental OpenEdge database maintenance activities.

See also **Custom job** and **Job**.

### **Database migration utility**

An OpenEdge Management utility that allows a database to be recognized and managed by the Progress Explorer, the AdminServer, and OpenEdge Management.

### **Database resource discovery**

The process by which OpenEdge Management automatically recognizes a database managed by the AdminServer and Progress Explorer.

### **Database rule sets**

See **Rule sets**.

### **Data encryption**

A method of translating data into a code that is indecipherable without a special key or password.

### **Default rules**

OpenEdge Management-provided default settings. You can use these default values when defining rules for resource monitors. Default rules are set up at the resource type level, and you can override them at the individual resource level.



**Detail frame**

The right frame of the OpenEdge Management console. The detail frame displays information and tools related to the selection made in the list frame.

**Detail menu**

A DHTML menu available in select spots in the OpenEdge Management console. The content of the menu varies depending on where it appears, and its commands enable you to perform a number of common OpenEdge Management tasks.

**Digital signature**

A signature on a certificate from a trusted Certificate Authority.

**Disabled database**

A database deleted through Progress Explorer that continues to display in OpenEdge Management.

**Discovery**

See **Network discovery process** and **OpenEdge server discovery process**.

## E

**Encryption**

See **Data encryption**.

**Exit code**

A numeric value that indicates whether or not a job-related process has succeeded. Typically, an exit code of zero indicates success, while a nonzero code indicates an error.

When an action is associated with a job's exit code, OpenEdge Management can ensure that the specified action occurs.

See also **Job chaining**.

**Export**

To place a copy of an OpenEdge Management component's definition into a file that you can then import and use on another machine.

## F

### **fmconfig utility**

The utility you run to enable remote resource monitoring.

### **Fully qualified resource key**

The most complete reference to a resource. The default format for a fully qualified resource key identifies each resource by its container name, the resource category to which the resource belongs, and the specific resource type and associated resource name.

## G

### **Gluing**

The requirement of associating one OpenEdge Management installation with one OpenEdge product installation.

### **Group**

A collection of users who share the same user privileges. Specific to OpenEdge Management usage, a group identifies personnel who can create or maintain a job on supported UNIX platforms.

## H

### **Handshake**

A communication that allows the server to identify (authenticate) itself to the client by sending a certificate. The client uses the certificate to verify that the sender is who it claims to be.

### **HTML compliance**

The requirement for certain values entered in fields on OpenEdge Management pages to adhere to formatting rules and conventions that the HyperText Markup Language honors. For example, you cannot enter spaces between words or use special characters such as an asterisk (\*), ampersand (&), or period.

### **HTTP monitor**

An OpenEdge Management-supported resource monitoring feature that allows you to monitor various aspects of a Universal Resource Locator (URL).

## I

### **Import**

To add a component definition from an import file to your project.

### **Internal alert**

An onscreen notification automatically generated to inform you of events that occur internal to OpenEdge Management and for which you cannot set up specific alert definitions.

### **Initialization file**

A text file that provides all the information necessary to run a batch mode OpenEdge Management installation on UNIX.

## J

### **Job**

General term used to identify a task executed at regularly scheduled intervals. OpenEdge Management supports two types of jobs: custom and database maintenance.

See also **Custom job** and **Database maintenance job**.

### **Job chaining**

Linking individual job instances together in a sequence based on the presence of a specific exit code. Using the value of an exit code that occurs in response to a job having been run, you can determine the processes, or control the flow of processes, that occur once one job ends and the next one begins.

See also **Exit code**.

### **Job instance**

An individual job derived from a job template. A job instance has schedules that define when OpenEdge Management runs these jobs.

See also **Job template**.

### **Job template**

A template that provides predefined, common values from which individual jobs, called job instances, can be created and separately maintained.

See also **Job instance**.

## K

### **Keystore**

A database that functions as a repository for the certificates and keys.

### **Keytool**

A key and certificate management utility, developed by Sun Microsystems, that allows you to administer your own private/public key pairs and associated certificates. You then use these keys and certificates for self-authentication (in which you authenticate yourself to other users or services) using digital signatures.

## L

### **Legend**

Information in a graphical view that describes the data being presented.

### **List frame**

The vertical frame that displays on the left side of the OpenEdge Management console and displays items related to the selection made in the menu bar.

### **Log file monitor rule sets**

A set of rules that you can define and then associate with one or more log file monitor resources.

## M

### **Managed database**

A database that the Progress Explorer client and the AdminServer recognize and manage.

### **Management Console**

See **OpenEdge Management console**.

### **Menu bar**

A horizontal bar at the top of the OpenEdge Management console that lists the following options: My Dashboard, Alerts, Resources, Library, Reports, Jobs, Options, and Help. The menu bar also displays the name of the machine and the username entered in the **Logon** window.

**Meter chart**

A chart giving a metered view of information. Used when showing a snapshot in time.

**Monitor**

The combination of a resource, schedule, and rules.

**Monitoring plan**

A block of time that a resource is to be monitored and the processing rules that are to be checked during the defined time frame. The basic elements used by all resource monitoring plans are schedules, rules, alerts, and actions.

**My Dashboard page**

A default page that OpenEdge Management creates for each user. From this page, you can create private or shared collections and views.

## N

**Network discovery process**

The process of searching for ports that are already known to your system when creating or maintaining OpenEdge Management network resources.

**Network resources**

Applications and other databases that might not be part of your OpenEdge application environment but that OpenEdge Management supports. The supported network resources are TCP port, UDP port, HTTP, and Ping (ICMP).

## O

**OpenEdge Management console**

A Web-based interface used to access all of OpenEdge Management's functionality.

**OpenEdge Management system architecture**

OpenEdge Management is comprised of four components:

- A Web-based management console, which provides a central location for viewing and configuring resources that are monitored by OpenEdge Management.
- Components to monitor database, system, network, file, and OpenEdge server resources.

- A database, called the OpenEdge Management Trend Database, which stores all data collected by agents for use in reporting.
- The OpenEdge Management process running as a thread in the AdminServer.

### **OpenEdge Management Trend Database**

A database that stores all data collected by OpenEdge Management agents.

### **OpenEdge Management Web server**

A component of the OpenEdge Management architecture that allows you to connect to OpenEdge Management through the Web-based management console. By default, OpenEdge Management uses port 9090 for this Web server when configured to use HTTP and port 9443 when configured to use HTTPS.

### **OpenEdge server discovery process**

The process OpenEdge Management uses to detect new OpenEdge server-related resources and automatically create default monitoring plans for them.

### **OpenEdge servers**

Any of three OpenEdge server products that OpenEdge Management can monitor and manage: AppServer, NameServer, and WebSpeed Transaction Server.

### **Operator**

A user role whose access to overall OpenEdge Management functionality is restricted. By default, a user in the operator role is allowed only to view most functionality. (An administrator can customize the operator role to allow greater access.)

## **P**

### **Pie chart**

A chart used to represent more than one kind of information.

### **Pin up chart**

A pin up representation of either an OpenEdge Management database view or custom view.

### **Ping status**

One of three statuses returned when the presence of a resource has been checked: failure, passed, and unreachable.

**Polled alert**

An onscreen notification generated when the polling schedule defined for a monitored resource detects an error or other condition.

**Private/public key pair**

The combination of a sender's public key, which is common knowledge, and a private key, which is known only by the recipient of an Internet communication.

**Procertm utility**

A utility you can use to add any Certificate Authority's root certificate to the trend trust keystore, if the root certificate is not already there. You can also use the procertm utility to convert digital certificates between certificate file types (.der and .pem).

## R

**Redirection**

An event in which the server informs the client that it is being redirected, and sends the client to the new page.

**Reglue**

A command that allows you to change the association between an OpenEdge Management installation and an OpenEdge installation without necessarily having to uninstall and then reinstall OpenEdge Management. This command is available only on the UNIX platform.

**Remote monitoring**

Monitoring of the following resources on a remote machine: database, file, CPU, memory, disk, file system, or OpenEdge server components.

**Report instance**

The entity you schedule to run in order to produce report results. The report instance identifies the details to be reported on.

**Report template**

The interface through which you define the characteristics of a report.

**Resource**

A specific component of your system that is monitored by OpenEdge Management, such as database, files, database and log files, CPU, memory, disk, file system, OpenEdge server (AppServer, NameServer, or WebSpeed Transaction Server), TCP, UDP, and HTTP ports, and Ping (ICMP).

**Resource viewlet**

A viewlet (in an OpenEdge Management custom view) that provides details specific to a single instance of a resource.

**Response file**

A text file that provides all the information necessary to run a silent or batch mode OpenEdge Management installation in Windows.

**Root certificate**

A certificate that identifies the Certificate Authority. A root certificate is self-signed, meaning it does not chain to another certificate to establish trust. If a certificate user, such as a browser, does not recognize a particular certificate, it walks the chain for a parent that it does know, until it reaches the root.

**Rule definitions**

The specific attributes of a resource to be monitored.

**Rule Summary**

A list of the rules and rule sets that are applied to a particular monitoring plan.

**Rules**

Criteria by which a resource's performance is measured.

**Rule set**

A set of rules that you can define, store in the OpenEdge Management Component Library, and then associate with one or more database resources, log file monitor resources, or OpenEdge server resources (AppServer, NameServer, or WebSpeed Transaction Server). You can share rule sets among resources that belong to the same resource type.

OpenEdge Management provides default rule sets and also supports user-defined rule sets.



## S

### **Schedule**

A specific time frame defined for a resource monitor or job.

For a resource, the time frame defines when a set of monitoring rules is active. The schedule defines the block of time in which polling occurs (for example, 9:00AM–5:00 PM).

For a job, the time frame defines when the job will be executed. The schedule defines how frequently an individual job occurs (for example, every fifteen minutes).

### **Scripted database**

A database that is not currently listed among the database resources that the AdminServer manages.

### **Secure Sockets Layer (SSL)**

A protocol used for secure transmission of data across the Internet.

### **Search criteria**

User-defined literals or Perl 5 regular expressions you submit to run searches within a log file or database log file.

### **Set OpenEdge Management environment**

A utility that sets the shell environment variables needed for executing both OpenEdge Management and OpenEdge commands.

### **SNMP Adapter**

A product that allows you to run the OpenEdge Management SNMP agent and configure it to throw traps to an SNMP Adapter console.

### **SNMP trap action**

A specific type of action that allows OpenEdge Management resource-related event notifications to be sent to your SNMP management console.

### **Stacked column chart**

A chart representing both the breakdown of different data types and the total of those data types together.

### **Standard viewlet**

A viewlet (in a custom view) that is predefined by OpenEdge Management and used to display information about either multiple resources or no resources at all.

### **Status rule**

An HTTP monitor rule that can indicate whether the URL you are monitoring was redirected and if the GET method was successful and accomplished within the time range you specified.

## **T**

### **Traps**

See **SNMP trap action**.

### **Trend, Trending**

The process of identifying and storing data in the OpenEdge Management Trend Database.

### **Truncate Action**

An option you specify when defining a log file monitor resource monitor. This option identifies where the marker will be set within the file when the log file has been truncated.

## **U**

### **Unglue command**

The command you run to uninstall OpenEdge Management on UNIX.

## **V**

### **Valid data sample**

As determined by the Configuration Advisor, a data sample that is determined to be other than a null value (any whole number that is less than zero).

### **View**

Detailed information about a resource that appears in the detail frame. Views present a resource's data in both tabular and graphical formats.

See also **Collection view**.

**Viewlet**

An individual pane of information in an OpenEdge Management custom view.

See also **Resource viewlet** and **Standard viewlet**.

**X****X.509**

A commonly used standard for defining digital certificates.



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