Progress®



Database Administration Tools

OpenEdge®

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Preface

Purpose

This book provides information about command-line, graphical interface, and browser-based tools for OpenEdge database administration.

Audience

This book is intended for database administrators who want to manage OpenEdge databases. It does not assume OpenEdge experience.

For the latest documentation updates go to https://docs.progress.com.

Organization

Proenv command-line tool on page 9

Introduces Proenv, a tool for running database administration utilities and commands. You can invoke utilities to perform key database tasks such as creating, monitoring, backing up, and repairing databases.

Data Administration and Data Dictionary tools on page 13

Introduces the graphical interface Data Administration (for Windows) and the character-based interface Data Dictionary (for UNIX). These tools let you perform tasks such as changing schemas, and dumping and loading data definitions, user table contents, and table partition definitions.

OpenEdge Explorer and OpenEdge Management tools on page 19

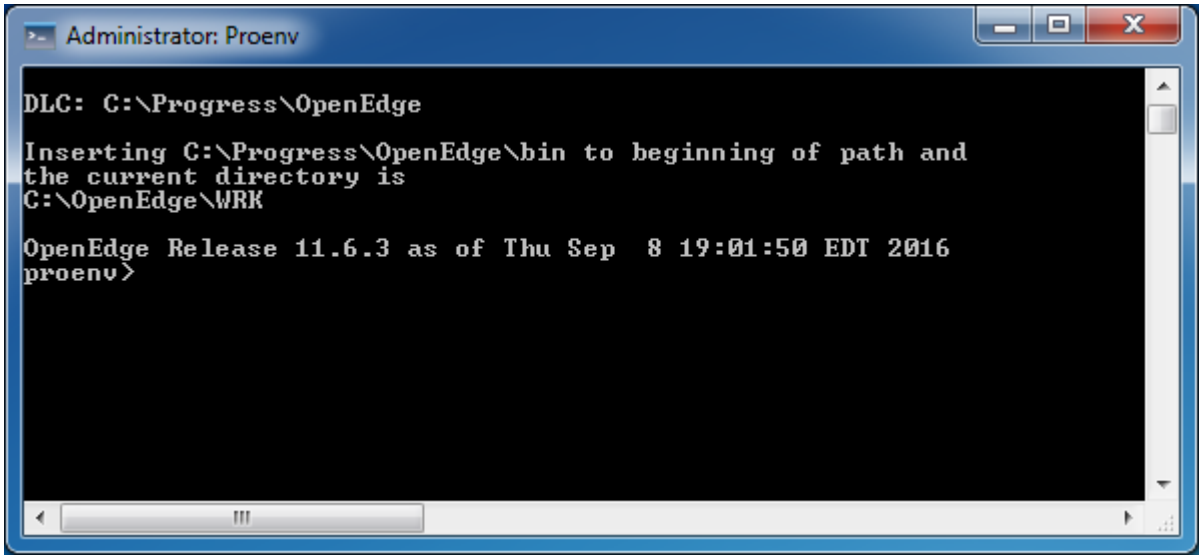
Introduces browser-based tools OpenEdge Explorer, which performs most database management tasks; OpenEdge Management, which lets you monitor system resources, configure alerts, and generate usage reports; and the OpenEdge Unified Broker administration framework, which lets you remotely manage OpenEdge resources that include PAS for OpenEdge, OpenEdge Web Server, OpenEdge RDBMS databases, and more.

Documentation conventions

See Documentation Conventions for an explanation of the terminology, format, and typographical conventions used throughout the OpenEdge content library.

1

Proenv command-line tool



Proenv is a command-line tool that sets up pointers to the OpenEdge RDBMS executables and the Proenv working directory. It enables you to invoke database administration utilities and commands.

Here are the key database administration utilities and commands that you can invoke in Proenv:

Utility	Action
PRODB	Create a new database.

Utility	Action
PROCOPY	Copy an existing database to a new database.
PRODEL	Delete a database.
PROSERVE	Start up a database.
PROSHUT	Shut down a database.
PROMON	Monitor statistical information about a running database.
PROBKUP	Back up a database.
PROREST	Restore a database.
PROSTRCT	• Create or repair a database. • Allocate space to a database. • Monitor physical attributes of a database.
PROUTIL	Manage and tune a database.

For details, see the following topics:

- Launching Proenv
- Directories established by Proenv

Launching Proenv

Here is how you launch Proenv:

In Windows, click **Start > All Programs > Progress > OpenEdge 11.6 > Proenv**.

In UNIX, at the command prompt enter:

```
[installation-path]/bin/proenv
```

If your Proenv path in UNIX is already set at installation time, you can simply enter:

```
proenv
```

Directories established by Proenv

When you start Proenv, it does the following:

- Sets the default DLC directory to the location of the OpenEdge installation.
- Establishes the default Proenv directory.
- Adds the DLC environment variable (`%DLC%` in Windows and `$DLC` in UNIX) to your computer's `PATH` environment variable.

The default directories for Windows and UNIX are:

Operating system	Default DLC directory	Default Proenv directory
Windows	`C:\Progress\OpenEdge`	`C:\OpenEdge\WRK`
UNIX	`/usr/dlc`	`/usr/wrk`

When you use Proenv, you should be mindful of your working directory because your database files are stored in it. You can change the working directory to any directory of your choice using the cd command.

In Windows, suppose you want to change the default working directory to `C:\OpenEdge\WRK\dba\db`. Enter:

```
cd C:\OpenEdge\WRK\dba\db
```

In UNIX, you can use the cd command to switch to a directory of your choice.

2

Data Administration and Data Dictionary tools

OpenEdge RDBMS provides two Data tools to perform database administration tasks:

- Data Administration (for Windows)
- Data Dictionary (for UNIX)
- With these tools, you can perform the following database administration tasks:
- Perform schema changes.
- Dump and load data definitions, table contents, sequences, and sequence values.
- Dump and load user table contents, security domains, security permissions, and database identification properties.
- Dump and load audit policies and audit data, if OpenEdge auditing is used.
- Dump and load definitions and data for table partitions, partition policies, and partition policy details, if OpenEdge Table Partitioning is used.
- Dump and load definitions and data for tenants and tenant groups, if OpenEdge Multi-tenancy is used.
- Dump and load SQL objects and data, if OpenEdge SQL is used.
- Edit data security.
- Configure user security, domains, and authentication systems.
- Configure encryption policies for objects in an encryption-enabled database.

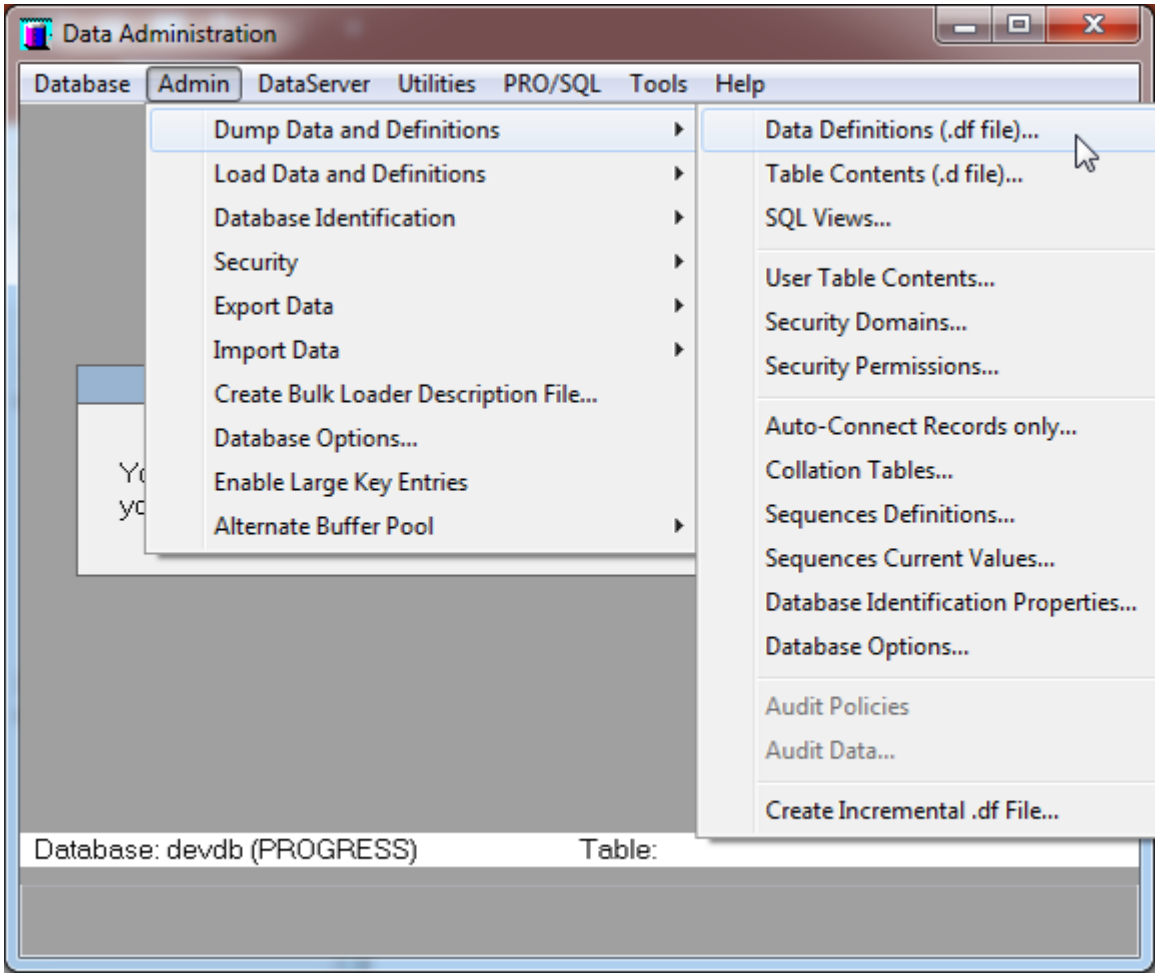
Note: Data Administration and Data Dictionary are an integral part of OpenEdge RDBMS; they do not require a separate license.

Next, you will learn how to launch and then navigate within each of these tools.

For details, see the following topics:

- Navigating within the Data Administration tool in Windows
- Navigating within the Data Dictionary tool in UNIX

Navigating within the Data Administration tool in Windows



In Windows, you can use the graphical user interface Data Administration tool to perform database administration tasks.

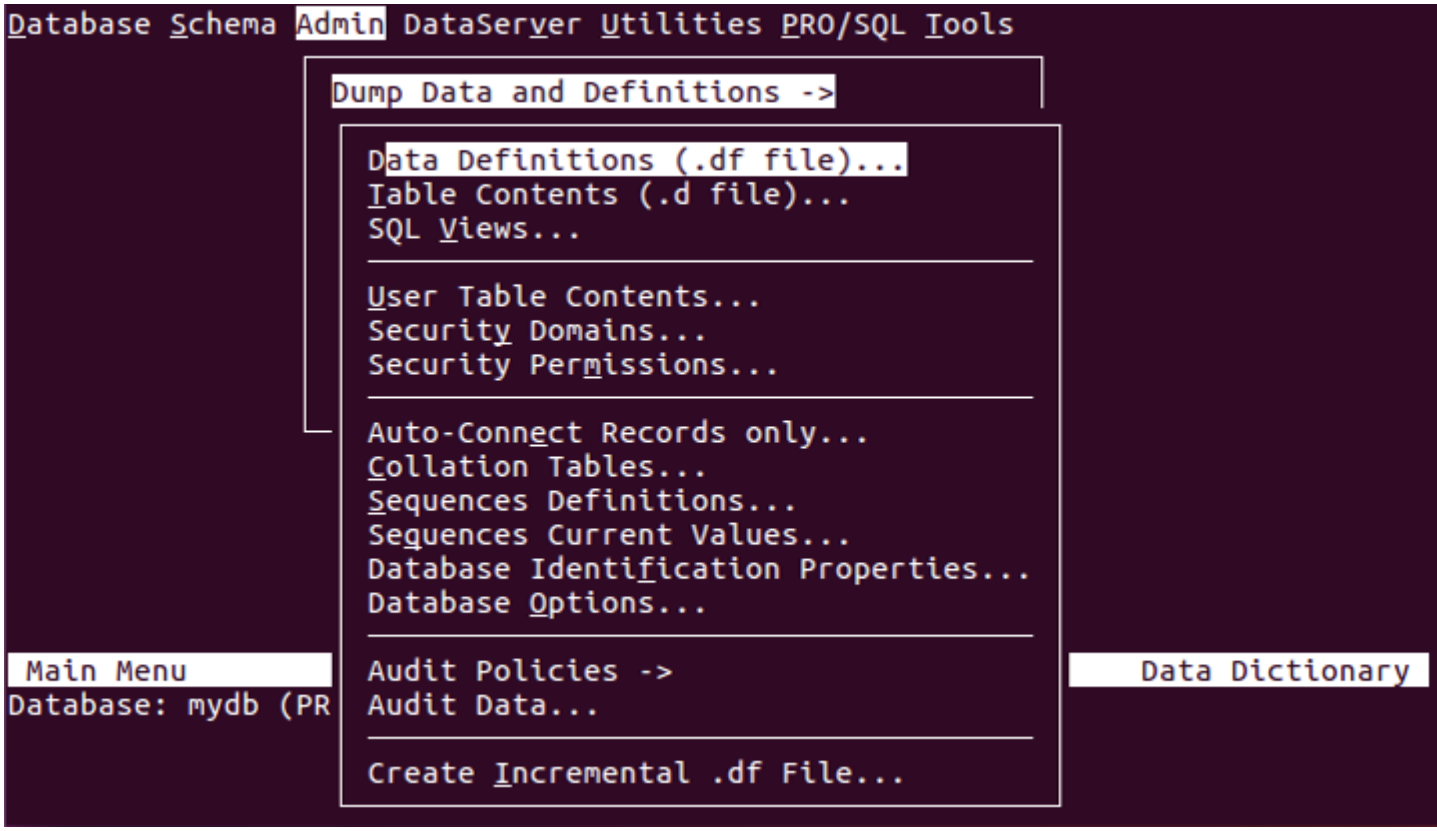
The following table describes how to launch and navigate within each phase of the Data Administration tool.

Phase	Description
Launch the Data Administration tool	Click **Start > All Programs > Progress > OpenEdge 11.6 > Data Administration**. The Data Administration window opens.
Connect to a database	Click Database > Connect and then click Browse and navigate to the directory where your database resides. Double-click the .db file of the database to select it. • To access the database in multi-user mode, click Options, select the Multiple Users check box, and then click OK. • To access the database in single-user mode, click OK. You are connected to the database as indicated by the database's status in the lower-left corner.

Manage a database	The Data Administration tool has two menus:
	• The Database menu enables you to create a new database, connect to an existing database, generate reports of database objects, and disconnect from a database.
	• The Admin menu enables you to perform a number of tasks including:
	  • Perform schema changes.
	  • Dump and load data definitions, table contents, sequences, and sequence values.
	  • Configure user security, domains, and authentication systems.

Disconnect from a database	Click **Database > Disconnect** and then click **Yes** and **OK** to disconnect from your database.
Exit the Data Administration tool	Click **Database > Exit** to exit from the Data Administration tool.

Navigating within the Data Dictionary tool in UNIX



In UNIX, you can use the character-based user interface **Data Dictionary** tool to perform database administration tasks. Because the Data Dictionary tool is character-based, you use the **Tab** and arrow keys to move around and the **Enter** key to accept inputs.

The following table describes how to launch and navigate within each phase of the Data Dictionary tool.

Phase	Description

Launch the Data Dictionary tool	At the UNIX command prompt, launch **Proenv**:
	`proenv`
	Launch the **Data Dictionary** tool using this command:
	`pro -p dict.p`
	The **Data Dictionary** window opens, with the Database menu active.
	Note: The PRO command is used to launch a character-based single-user interactive client session. You will learn more about using the PRO command in Lesson 4, “Starting Up and Shutting Down a Database.”

Phase	Description
Connect to a database	Press **Enter** on the **Database** menu, navigate to **Connect**, and then press **Enter**. The **Connect Database** window opens. In the **Physical Name** field, navigate to **Files** and then to the directory where your database resides. Navigate to the .db file of the database and then press **Enter** to select it. The **Data Dictionary** window opens. • To access the database in multi-user mode, navigate to the **Multiple Users** check box, and then press **Enter**. • To access the database in single-user mode, navigate to **OK** and then press **Enter**. You are connected to the database as indicated by the database's status in the lower-left corner.

Manage a database	The **Data Administration** tool has two menus:
	• The **Database** menu enables you to create a new database, connect to an existing database, generate reports of database objects, and disconnect from a database.
	• The **Admin** menu enables you to perform a number of tasks including:
	  • Perform schema changes.
	  • Dump and load data definitions, table contents, sequences, and sequence values.
	  • Configure user security, domains, and authentication systems.

Disconnect from a database	Navigate to **Database > Disconnect** and then press **Enter** on **Yes** and press **Enter** on **OK** to disconnect from the database.
Exit the Data Dictionary tool	Navigate to **Database > Exit** and then press **Enter** to exit from the Data Dictionary tool.

3

OpenEdge Explorer and OpenEdge Management tools

OpenEdge also provides two browser-based tools to perform database administration tasks:

- OpenEdge Explorer
- OpenEdge Management

By default, OpenEdge Explorer is installed with OpenEdge RDBMS. You can simply use it.

OpenEdge Management is a superset of OpenEdge Explorer. It is a standalone product. You must have a separate license to install and use it.

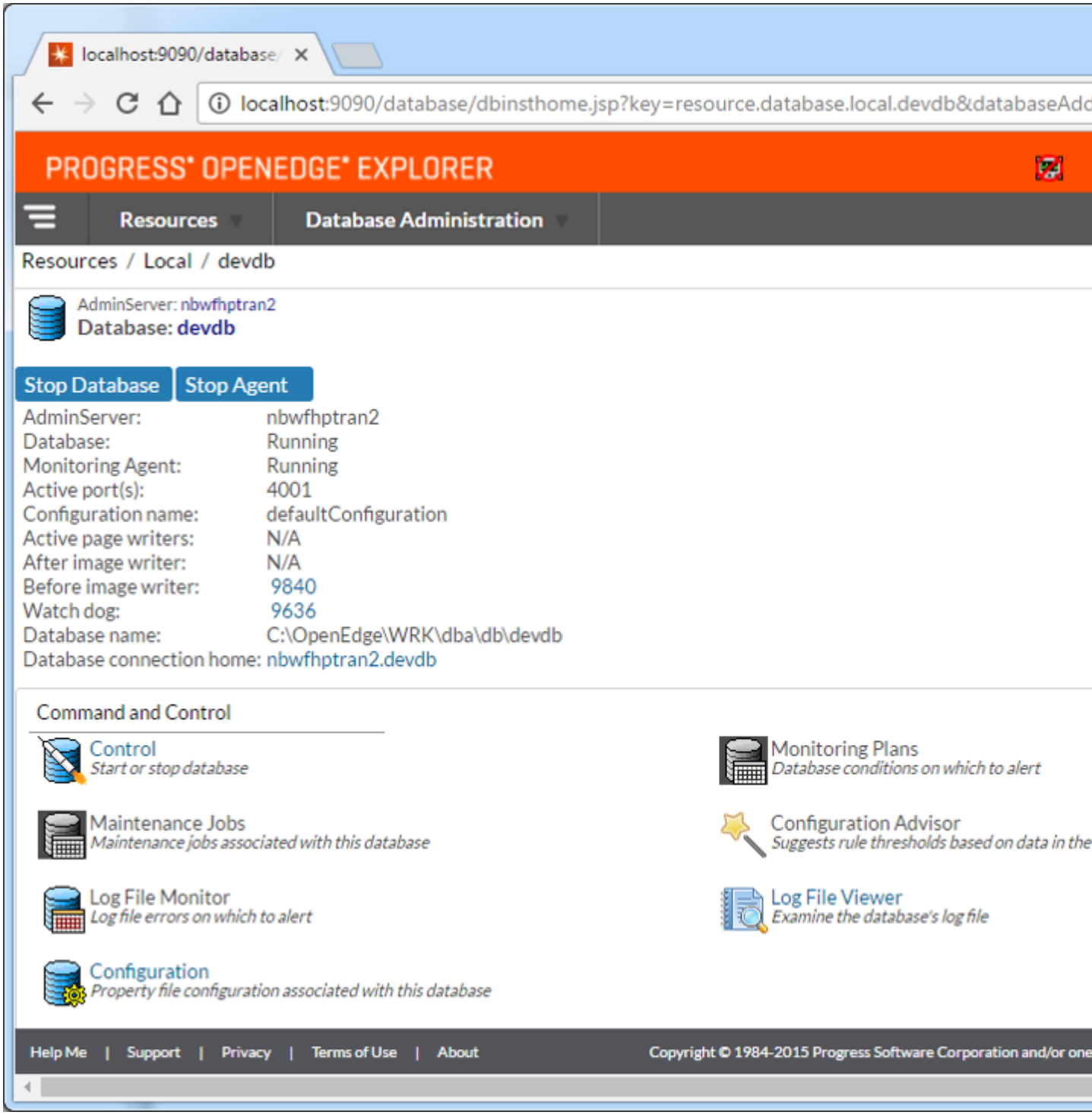
Both these tools are available in Windows and UNIX.

In this section, you will learn how to use OpenEdge Explorer to perform most database administration tasks. For those administration tasks that can only be performed in OpenEdge Management, you will learn how to perform them using OpenEdge Management.

For details, see the following topics:

- OpenEdge Explorer
- OpenEdge Management
- OpenEdge Unified Broker administration framework
- Procedure: Setting up OpenEdge Explorer

OpenEdge Explorer



OpenEdge Explorer enables you to perform the following tasks:

- Configure database resources.
- Set database configuration properties.

- Start and stop databases on local and remote computers.
- Dump data definitions and table contents to external files.
- Load data definitions and table contents from external files.
- Configure users, authentication systems, and data security.
- View performance summary and user activity statistics of a database.
- View the log file of a database.

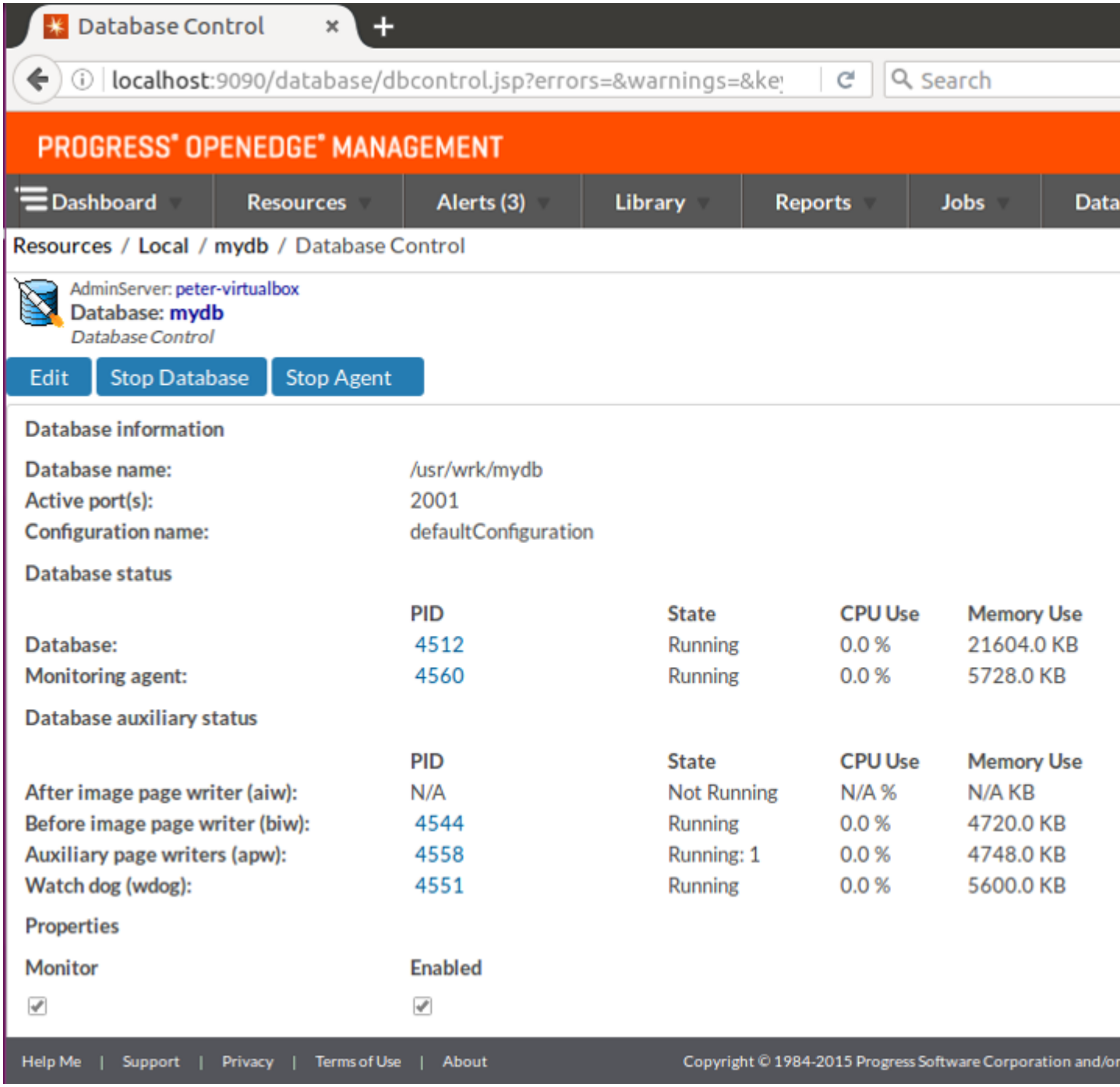
If you implement OpenEdge multi-tenancy, OpenEdge Explorer enables you to perform the following tasks:

- Configure users, domains, tenants, and tenant groups.
- Dump and load tenant and tenant group contents.

If you implement OpenEdge table partitioning, OpenEdge Explorer enables you to perform the following tasks:

- Configure partitioned tables, partition policies, and partition policy details.
- Dump and load table partitions, partition policies, and partition policy details.

OpenEdge Management



OpenEdge Management has all the functions of OpenEdge Explorer and additional features. The additional features of OpenEdge Management enable you to:

- Monitor operational views of a running database such as vital signs, memory resources, storage areas, transactions, and page writers.
- Monitor system resources.

- Configure rule sets, alerts, jobs, and resource-monitoring plans.
- Generate resource usage reports.
- Analyze historical data for resource usage trends.

The following table lists the menus along with their descriptions:

Menu	Enables you to …
Alerts	View alerts and sort them by criteria such as resource name, alert name, last occurrence, and severity code.
Library	Create rule sets, schedules, search criteria, and perform actions based on them. It also allows you to export and import components such as rule sets, schedules, and actions.
Reports	Create and view reports and view report history.
Jobs	Create jobs such as database analysis, online and offline backups, and database restorations. It also allows you to view jobs and job history.

OpenEdge Unified Broker administration framework

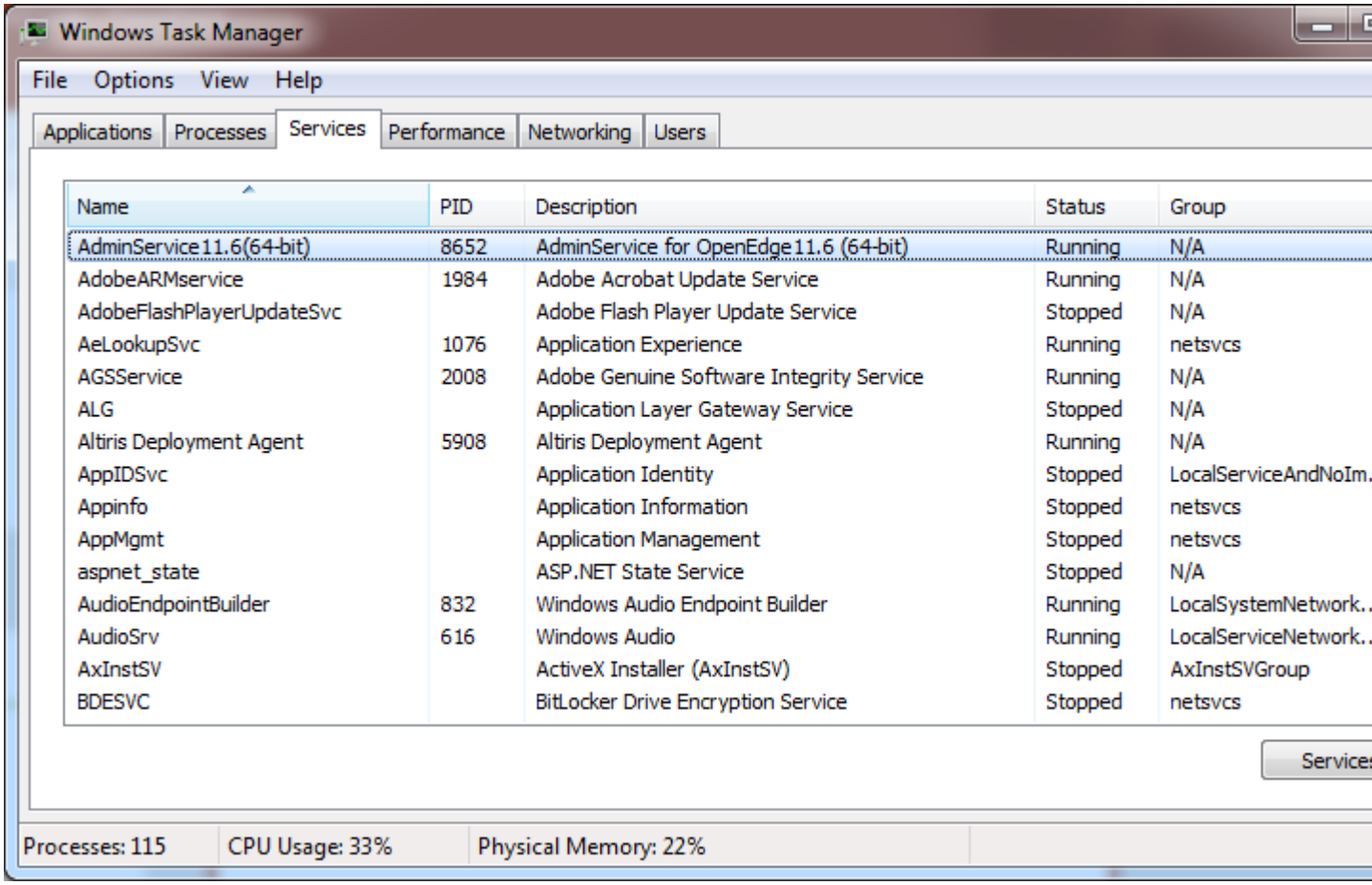
OpenEdge Explorer and OpenEdge Management are part of the OpenEdge Unified Broker administration framework. The framework provides a standard method for managing the OpenEdge resources installed on different operating systems such as Windows and UNIX.

Specifically, the OpenEdge Unified Broker administration framework enables you to use OpenEdge Explorer or OpenEdge Management to manage the following OpenEdge resources remotely:

- Classic OpenEdge Application Server
- Progress Application Server for OpenEdge (PAS for OpenEdge)
- AppServer Internet Adapter
- OpenEdge RDBMS databases (Personal, Workgroup, and Enterprise)
- OpenEdge Replication (Basic and Plus)
- DataServers (ODBC, Oracle, and Microsoft SQL Server)
- NameServer
- SonicMQ Adapter
- OpenEdge Web Server
- WebSpeed
- Web Services Adapter

The controlling component of the OpenEdge Unified Broker administration framework is the AdminServer.

AdminServer



The AdminServer enables you to configure and manage OpenEdge resources in your installation. By default, it is installed on each Windows or UNIX system where OpenEdge RDBMS is installed.

Here are the key characteristics of the AdminServer:

- The AdminServer works as a high-level management process:

In Windows, it starts automatically when the operating system boots up.

In UNIX, it must be started explicitly.

- OpenEdge resources can be configured to start automatically when the AdminServer starts.
- All OpenEdge resources register with the AdminServer at startup.
- The AdminServer uses a defined TCP/IP port address through which OpenEdge Explorer or OpenEdge Management is used to remotely administer OpenEdge resources.

Before you can use OpenEdge Explorer or OpenEdge Management, you must ensure that the AdminServer is running.

Ensuring that the AdminServer is running

In Windows, the AdminServer automatically starts up as a service. To ensure that the AdminServer is running, start the **Windows Task Manager** and select the **Services** tab. The status of Progress OpenEdge AdminServer Service should be **Running**. In case the service is not running, right-click the service and then click **Start Service**.

In UNIX, you use the PROADSV utility to start, stop, and query the AdminServer. You must have root or super user privileges to execute this command. The syntax for using PROADSV is:

```
proadsv –start|-stop|-query –port port-number|port-name
```

Where:

`port-number`	The number of the port on which the AdminServer is running. The default port number is 20931.
`port-name`	The name of the port on which the AdminServer is running.

Note: You should automate the task of starting the AdminServer by using a UNIX shell script.

Suppose you want to start the AdminServer in UNIX. Enter:

```
proadsv –start –port 20931
```

To determine if the AdminServer is running, enter:

```
proadsv –query –port 20931
```

Procedure: Setting up OpenEdge Explorer

Before you can start using OpenEdge Explorer, you have to set it up.

Follow these steps to set up OpenEdge Explorer:

Steps	Action
1	Launch the Web browser of your choice.
2	Enter the URL for OpenEdge Explorer using this syntax: `http://host-name:port-number` **Note:** The default port number for the WebServer for OpenEdge Explorer is 9090. The **Authentication** page opens.
3	In the **Username** field, enter **admin**. This is the username of the **Admin** user.

Steps	Action
4	In the **Password** field, enter **admin**. This is the default password of the **Admin** user.
5	Click **Login**. The **Configuration** page opens.
6	In the **Admin password** section, change the default password of the **Admin** user.
7	Ensure that the **Autostart OpenEdge Explorer** check box is selected. This will start OpenEdge Explorer the next time the AdminServer starts.
8	Click **Submit**, and then click **Submit**. The **Initial Configuration Completed** page opens.
9	Click **Start Using OpenEdge Explorer**. The OpenEdge Explorer page opens.

Note: If you use OpenEdge Management, you follow a similar procedure to set it up.

After you set up OpenEdge Explorer, you can access it using a Web browser. For example, in Windows or UNIX, you can launch OpenEdge Explorer by entering the following URL in a Web browser:

```
http://localhost:9090
```

In Windows, you can also launch OpenEdge Explorer by clicking **Start > All Programs > Progress > OpenEdge 11.6 > OpenEdge Explorer**.