



Install the OpenEdge Command Center

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Preface

Purpose

This manual describes the installation and configuration procedures of OpenEdge Command Center components - OpenEdge Command Center server and OpenEdge Command Center agent. It also describes how to manage OpenEdge Command Center services and set up TLS to establish a secure network channel for communication between the components of OpenEdge Command Center.

Audience

This manual is designed as a guide and reference for OpenEdge Administrator and technical personnel responsible for installing and configuring OpenEdge Command Center.

Organization

- [Install and configure OpenEdge Command Center](#) on page 9
This section provides information about the various tasks required for installing and configuring OpenEdge Command Center.
- [Install OpenEdge Command Center Agents](#) on page 25
This section provides information about the various tasks required for installing and configuring OpenEdge Command Center Agent.
- [Manage OpenEdge Command Center services](#) on page 35
This section provides information about how to create and manage services for the OpenEdge Command Center server and agents to start these components as system services.
- [Set up TLS](#) on page 39
This section provides information about how to Enable TLS to establish a secure network channel for communication between the components of OpenEdge Command Center.

Documentation conventions

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

Install and configure OpenEdge Command Center

Before you install OpenEdge Command Center, Progress recommends that you perform a set of planning tasks. These tasks include understanding the system requirements for the environment in which you plan to install OpenEdge Command Center, and determining the installation method to use.

Installation prerequisites

The OpenEdge Command Center server is supported on the following operating system platforms:

- Ubuntu 18.04 LTS
- Oracle Linux 8
- Red Hat Enterprise Linux 8
- SUSE Linux Enterprise Server 15
- CentOS Linux 8
- Windows Server 2016 (64-bit)
- Windows Server 2019 (64-bit)

Before you install OpenEdge Command Center, you must download MongoDB 4.2.12 or above and set up MongoDB with basic authentication mode.

Note: MongoDB 5.x is currently not supported by OpenEdge Command Center.

OpenEdge Command Center supports the following types of MongoDB:

- MongoDB Community Server

- MongoDB Atlas running on AWS, Azure, and Google Cloud Platform (GCP)
- MongoDB Enterprise Edition

Each version of MongoDB is available from the following location:

<https://www.mongodb.com>

Note the name and login credentials of a designated database user, which you need to provide during the OpenEdge Command Center installation.

Installation modes

There are several ways you can install OpenEdge Command Center:

- [Launch the OpenEdge Command Center installer](#) on page 11—Typically used for a complete installation of OpenEdge Command Center server and console components.
- [Install OpenEdge Command Center in high availability mode](#) on page 13—Installs multiple server instances to ensure an agreed level of operational performance, usually uptime, for a higher than normal period.
- [Silent installation of OpenEdge Command Center](#) on page 15—Installs OpenEdge Command Center from a script, which requires a two-step process. In the first step, you run the interactive installer and record your installation choices in a response file. You then use the response file to perform noninteractive, batch mode style installations on other machines.

You can also specify the mode in which you want to install OpenEdge Command Center:

- GUI mode—Launches the installer and prompts you for responses before uninstalling.
- Console/terminal mode—The install prompts are displayed on the console.
- Silent—The installer runs in the background without any interference with other processes. You can also record the response properties file and use it to install OpenEdge Command Center in silent mode.

Note: If you do not specify a mode, then the installer is launched in GUI mode.

For details, see the following topics:

- [Launch the OpenEdge Command Center installer](#)
- [Install OpenEdge Command Center in high availability mode](#)
- [Silent installation of OpenEdge Command Center](#)
- [Set up OpenEdge Command Center with MongoDB Atlas on AWS](#)
- [Deploy OpenEdge Command Center on Windows platform using a ZIP package](#)
- [Deploy OpenEdge Command Center on Linux platform using a TAR package](#)
- [Uninstall OpenEdge Command Center](#)
- [Upgrade OpenEdge Command Center](#)

Launch the OpenEdge Command Center installer

To install OpenEdge Command Center, download the software image from the Progress Software Download Center and launch the interactive installation program. The installation program is available for the Linux and Windows platforms. The installation files available for the platforms are as follows:

Platform	Installer file name
Windows	PROGRESS_OECC_SERVER_1.x.x_WIN_64.exe
Linux	PROGRESS_OECC_SERVER_1.x.x_LNX_64.bin

To launch the installer, you must have administrator privileges on the machine where you are installing OpenEdge Command Center Server. The installer prompts you to provide information including:

- The host where OpenEdge Command Center is installed.
- Information about available OpenEdge Command Center configurations.
- The database used with the OpenEdge Command Center.
- A designated user with super administrator privileges.

To install the OpenEdge Command Center, complete the following steps:

1. Close all other applications before beginning the installation process.
Other applications or tasks might interfere with the installation or use files that OpenEdge Command Center needs to complete the installation.

2. Change to the directory that contains the installer file.

3. Run the installer file to launch the installation procedure. For example, on the Linux platform:

```
prompt> ./PROGRESS_OECC_SERVER_1.1.0_LNX_64.bin
```

The installer prompts you to make installation choices and records them after the installation is complete.

4. Read the information on the **Introduction** page, verify that all the other applications are closed, and click **Next**.
5. Read the End User License Agreement (EULA). If the terms are acceptable, check **I accept the terms of the License Agreement**, and click **Next**.
6. On the **Host Configurations** page, enter the port number to be used by OpenEdge Command Center (the default is 8000).
7. If you want to enable the security layer, check **SSL/TLS** and specify the following details:
 - **Hostname**—The name of the OpenEdge Command Center host
 - **Key File**—The private key that is used for encryption
 - **Certificate file**—The public certificate of the CA that has signed the server's TLS certificate. Also known as the root certificate.

8. On the **Install Configurations** page:

- a. Enter the installation directory path. The default installation location for the Linux platform is `/usr/openedge_command_center`. The default location for the Windows platform is `C:\Progress\OpenEdge_Command_Center`.
- b. Select **Install as a service** if you want to install OpenEdge Command Center as a service. This provides you with the ability to launch OpenEdge Command Center as a service on Linux platforms.
- c. Enter the Data Directory path and click **Next**.

The default Data Directory path for the Linux platform is `/OpenEdge/Data`. Similarly, the default path for the Windows platform is `C:\OpenEdge\Data`.

Note: The Data Directory is a shared path, which is suitable for installing OpenEdge Command Center in high availability mode, as explained in [Install OpenEdge Command Center in high availability mode](#) on page 13.

9. On the **Database Configurations** page:

- a. Enter the **Hostname/IP Address** information.
- b. Enter the port number. (The default port number is 27017.)

Note: Specifying a port number is not required if you select **Yes** for **Use srv record**.

- c. Enter the credentials for an existing MongoDB user, as well as the database authentication type:

- Username
- Password
- Database authentication If the connection to the database is not successful, the installation cannot be completed.

10. On the **First User Setup** page, specify the following values for the super administrator:

- First Name
- Last Name
- Email
- Username—You must specify a minimum of 5 characters. The supported characters are: alphanumeric characters, period (.), underscore (_), and hyphen (-).
- Password—A valid password must contain the following:
 - 8-40 characters
 - Mixture of uppercase and lowercase letters
 - At least one number
 - At least one of the special characters: ! @ \$ % ^ & () _ + = [] |

The password must not contain your username or a previously-used password.

- Confirm Password

A user with super administrator privileges is created.

11. Review the following information before you complete the installation to ensure that it is correct:

- Product Name—OpenEdge Command Center.
- Install Folder—Path where OpenEdge Command Center is installed.
- Data Directory—Path where the database is installed.
- Disk Space Information—Amount of space required or occupied by OpenEdge Command Center.

12. The **Finish Installation** section indicates the successful installation of the OpenEdge Command Center.

Install OpenEdge Command Center in high availability mode

Installing OpenEdge Command Center in high availability mode provides failover capabilities in the event that one machine that runs OpenEdge Command Center becomes unavailable. When OpenEdge Command Center is configured for high availability, multiple installations of OpenEdge Command Center can be linked by the database. In the event of a planned or unplanned outage of an OpenEdge Command Center machine, other OpenEdge Command Center machines will balance the load without creating a negative impact on the end user.

To configure additional machines with OpenEdge Command Center, you install OpenEdge Command Center on each machine in the same way as you do for the first machine. However, when you specify a data directory on the **Install Configurations** page, you must specify the same data directory that you configured on the first machine. Then all the database connection details are picked up automatically, which makes for a simpler installation on the secondary machines.

Prerequisites

Before you install OpenEdge Command Center for high availability mode, complete the following steps:

1. Ensure that you have installed at least one instance OpenEdge Command Center on another machine before you begin to install it on a second.
2. Obtain the OpenEdge Command Center installer file that was used for the prior OpenEdge Command Center installation. For example, `PROGRESS_OECC_SERVER_1.x.x_LNX_64.bin` or `PROGRESS_OECC_SERVER_1.x.x_WIN_64.exe` for the Linux and Windows platform respectively.

Install OpenEdge Command Center

On each additional machine that you want in your high availability deployment of OpenEdge Command Center, complete the following steps:

1. Close all other applications before beginning the installation process.
Other applications or tasks might interfere with the installation or use files that OpenEdge Command Center needs to complete the installation.
2. Open a command window and change to the directory that contains the installer file.
3. Run the installer file to launch the installation procedure.
The installer prompts you to make installation choices and records them after the installation is complete.
4. On the **Host Configurations** page, enter the port number (the default port number is 8000).
5. On the **Install Configurations** page:
 - a. Enter the installation directory path. The default installation location for the Linux platform is `/usr/openedge_command_center`. The default location for the Windows platform is `C:\Progress\OpenEdge_Command_Center`.
 - b. Select **Install as a service** if you want to install OpenEdge Command Center as a service.
 - c. Enter the Data Directory path.
This is the shared data directory path that was configured during the installation of your first machine. The installer obtains the database configurations, first user information, and security configurations from this shared data directory. The installer does not prompt for backend configurations and first user setup details, but skips to the **Review** section.

6. Review and Finish the installation.

The installation of OpenEdge Command Center in high availability mode is complete.

Configure a load balancer

The following code example shows the configuration file, `Nginx.conf`, for the Nginx load balancer. To configure Nginx, modify this configuration file in the location shown in **bold**. In this location, you specify the IP address and port number of each OpenEdge Command Center host in your deployment.

```
user  nginx;
worker_processes  1;
```

```

error_log /var/log/nginx/error.log warn;
pid /var/run/nginx.pid;

events {
    worker_connections 1024;
}

http {
    map $http_upgrade $connection_upgrade {
        default upgrade;
        '' close;
    }
    include /etc/nginx/mime.types;
    default_type application/octet-stream;

    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
        '$status $body_bytes_sent "$http_referer" '
        '"$http_user_agent" "$http_x_forwarded_for"';

    access_log /var/log/nginx/access.log main;

    #sendfile on;
    #tcp_nopush on;

    keepalive_timeout 65;

    upstream backend {
        ip_hash;
        server ip-address:port;
        server ip-address:port;
    }

    server {
        listen 80;
        server_name $hostname;

        location / {
            proxy_pass http://backend;
            proxy_set_header X-Real-IP $remote_addr;
            proxy_set_header Host $host;
            proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
            proxy_http_version 1.1;
            proxy_set_header Upgrade $http_upgrade;
            proxy_set_header Connection $connection_upgrade;
        }
    }
}

```

Silent installation of OpenEdge Command Center

An interactive installation prompts you for information and records your values in a series of dialog boxes. The installation program immediately uses this data to set up OpenEdge Command Center.

By contrast, a silent installation performs an installation entirely by script, and is a two-step process:

1. When you start an interactive installation, the data that you enter is automatically recorded in a response file. The default name for this file is `response.properties`, and it is created in the `install` subdirectory of your OpenEdge Command Center installation directory.
2. The installation data that is captured in the response file becomes available for play back to perform a silent installation through a batch mechanism.

Response file contents

The data captured in the `response.properties` file provides a detailed snapshot of the installation choices made during an interactive installation.

The `response.properties` file includes:

- Host configurations
- Install configurations
- Database configurations
- First user setup

The following example shows an excerpt from the automatically-generated `response.properties` file:

```
# Wed Nov 11 03:12:34 EST 2020
# Replay feature output
# -----
# This file was built by the Replay feature of InstallAnywhere.
# It contains variables that were set by Panels, Consoles or Custom Code.
```

```
#Host Configurations
#-----
OECC_PORT=8000
OECC_SSL_SELECTED=1
OECC_HOST_NAME=centos7164
OECC_SSL_KEY_FILE=/tmp/key
OECC_SSL_CERTIFICATE_FILE=/tmp/cert
```

```
#Install Configurations
#-----
USER_INSTALL_DIR=/usr1/OECC
OECC_INSTALL_AS_SERVICE=1
OECC_DATA_DIR=/OpenEdge/Data1
```

```
#Database Configurations
#-----
MONGO_DB_HOST=IP-address
MONGO_DB_SRV_NO=1
MONGO_DB_PORT=27017
MONGO_DB_SRV_YES=0
MONGO_DB_USER=myAdmin
MONGO_DB_PASS=password
MONGO_DB_AUTH_DB=admin
```

```
#First User Setup
#-----
OECC_FIRST_USER_NAME=admin
OECC_FIRST_USER_LAST_NAME=user
OECC_USER_EMAIL=admin@progress.com
OECC_USER_NAME=admin
OECC_USER_PASSWORD=password
OECC_USER_CONF_PASSWORD=password
```


Create the response file

To create a response file:

1. Open a command window and change to the directory that contains the OpenEdge Command Center installer file, `PROGRESS_OECC_SERVER_1.x.x_LNX_64.bin` or `PROGRESS_OECC_SERVER_1.x.x_WIN_64.exe` for the Linux and Windows platform respectively.
2. Enter the following command to record installation choices in the `response.properties` file:
 - For the Linux platform, `PROGRESS_OECC_SERVER_1.x.x_LNX_64.bin -r /response.properties-file`
 - For the Windows platform, `PROGRESS_OECC_SERVER_1.x.x_WIN_64.exe -r /response.properties-file`
3. Run the OpenEdge Command Center installer file by performing the steps in [Launch the OpenEdge Command Center installer](#) on page 11.

Note: You can cancel the GUI installer after you have entered all the required information for the `.properties` file.

4. The `.properties` file is generated. You can rename the file, if necessary.

Run the silent installation

1. Open a command window and change to the directory that contains the `response.properties` file.
2. Enter the following command:
 - For the Linux platform, `./PROGRESS_OECC_SERVER_1.x.x_LNX_64.bin -i silent -f /response.properties-file`
 - For the Windows platform, `PROGRESS_OECC_SERVER_1.x.x_WIN_64.exe -i silent -f /response.properties-file`

After you enter the command, the OpenEdge Command Center silent installation runs without your intervention.

Note: You can modify the contents of the `response.properties` file, but Progress recommends that you do not change any of the parameters other than passwords.

Set up OpenEdge Command Center with MongoDB Atlas on AWS

MongoDB Atlas is a fully managed, database-as-a-service (DBaaS) platform managed and administered by MongoDB. OpenEdge Command Center can be deployed with MongoDB as a managed database service from a cloud vendor.

To set up OpenEdge Command Center with MongoDB Atlas:

1. Ensure that you have a MongoDB Atlas installation with valid credentials and host name URL.
2. Launch the OpenEdge Command Center installer, as described in [Launch the OpenEdge Command Center installer](#) on page 11, and enter the **Host Configurations** and **Install Configurations** information.
3. On the **Database Configuration** page, enter the **Hostname/IP Address** information.
4. Select **Yes** for **Use SRV Record**. A service record is a specification of data in the domain name system defining the location that is, the host name and port number of servers for specified services.
5. Enter the username and password of the MongoDB Atlas instance.
6. Enter the Authentication Database information (set to **Admin** by default).
7. Click **Next**, and finish the remainder of the installations steps.

After the installation is complete, OpenEdge Command Center is set up with MongoDB Atlas in the cloud.

Deploy OpenEdge Command Center on Windows platform using a ZIP package

You can use installation package, to deploy the OpenEdge Command Center server on different Windows platforms. You can download the installation package, `PROGRESS_OECC_SERVER_1.x.x_WIN_64.zip`, from the Progress Software Download Center.

Before you deploy OpenEdge Command Center, you must set up MongoDB as the configuration database.

To deploy the OpenEdge Command Center server on a Windows platform, complete the following steps:

1. On your Windows computer, create a folder for OpenEdge Command Center installation files. For example, `C:\OECC_SERVER`.
2. In the installation folder, create a `conf` folder. For example, `C:\OECC_SERVER\conf`.
3. On your Windows computer, create a server data folder for the OpenEdge Command Center server data files. For example, `C:\OECC_DATA\data`.
4. In the server data folder, create another `conf` folder. For example, `C:\OECC_DATA\data\conf`.
5. Extract the `PROGRESS_OECC_SERVER_1.x.x_WIN_64.zip` file to the installation folder (`C:\OECC_SERVER`).
6. In the extracted folder, browse to the `orig` folder. Copy the specified files from the `orig` folder, place them in the folders you created, and rename them as follows:

File in the <code>orig</code> folder	New location and file name
<code>db-config.json.orig</code>	<Server data folder>\conf\db-config.json For example, <code>C:\OECC_DATA\data\conf\db-config.json</code>
<code>firstuser-config.json.orig</code>	<Server data folder>\conf\firstuser-config.json For example, <code>C:\OECC_DATA\data\conf\firstuser-config.json</code>

File in the orig folder	New location and file name
system-config.json.orig	<Server data folder>\conf\system-config.json For example, C:\OECC_DATA\data\conf\system-config.json
server-config.json.orig	<Installation folder>\conf\server-config.json For example, C:\OECC_SERVER\conf\server-config.json

7. Open the <Server data folder>\conf\db-config.json file in an editor and provide the following details of MongoDB:

- **dbHostNameAndPort:** The IP address and port of the MongoDB database. For example, 172.29.16.152:27017.
- **user and password:** The credentials used by the OpenEdge Command Center server to access the MongoDB database.
- **authSource:** Set the value to admin.

An example of the db-config.json file is as follows:

```
{
  "dbHostNameAndPort": "172.29.17.112:27017",
  "srvRecord": false,
  "connectOptions": {
    "useNewUrlParser": true,
    "useCreateIndex": true,
    "useFindAndModify": false,
    "autoIndex": true,
    "poolSize": 10,
    "bufferMaxEntries": 0,
    "connectTimeoutMS": 10000,
    "socketTimeoutMS": 45000,
    "useUnifiedTopology": true,
    "auth": {
      "user": "username",
      "password": "password"
    },
    "authSource": "admin"
  },
  "tls": false
}
```

8. Save the changes and close the file.

9. Open the <Server data folder>\conf\firstuser-config.json file in an editor and provide the following details of the first user:

- **firstName and lastName:** First and last names of the first user.
- **userName:** The username used by the first user to access OpenEdge Command Center.
- **email:** The email address of the first user.
- **password:** The password used by the first user to access OpenEdge Command Center.
- **description:** A description text about the first user.

10. Save the changes and close the file.

11. Open the <Installation folder>\conf\server-config.json file in an editor and provide the following details:
 - `port`: The port on which the OpenEdge Command Center server starts.
 - `dataDir`: The path to the server data folder. For example, `C:\\OECC_DATA\\data` or `C:/OECC_DATA/data`.
12. Save the changes and close the file.
13. Start the OpenEdge Command Center server from a command shell opened in the **Run as administrator** mode. For example:


```
C:\OECC_SERVER > oeccserver.bat start
```

Deploy OpenEdge Command Center on Linux platform using a TAR package

You can download the installation package, `PROGRESS_OECC_SERVER_1.x.x_LNX_64.tar.gz`, from the Progress Software Download Center and use it to deploy the OpenEdge Command Center server on a Linux 64-bit platform.

Before you deploy OpenEdge Command Center, you must set up MongoDB as the configuration database.

To deploy the OpenEdge Command Center server on a Linux platform, complete the following steps:

1. On your Linux computer, create a folder for OpenEdge Command Center installation files. For example, `/usr/OECC_SERVER`.

Note: Ensure that the folder name does not have any space because the Linux platform does not support spaces in the file path.

2. In the installation folder, create a `conf` folder. For example, `/usr/OECC_SERVER/conf`.
3. On your Linux computer, create a server data folder for the OpenEdge Command Center server data files. For example, `/usr/OECC_DATA/data`.
4. In the server data folder, create another `conf` folder. For example, `/usr/OECC_DATA/data/conf`.
5. Extract the `PROGRESS_OECC_SERVER_1.x.x_LNX_64.tar.gz` file to the installation folder (`/usr/OECC_SERVER`).
6. In the extracted folder, browse to the `orig` folder. Copy the specified files from the `orig` folder, place them in the folders you created, and rename them as follows:

File in the <code>orig</code> folder	New location and file name
<code>db-config.json.orig</code>	<Server data folder>/conf/db-config.json For example, <code>/usr/OECC_DATA/data/conf/db-config.json</code>
<code>firstuser-config.json.orig</code>	<Server data folder>/conf/firstuser-config.json For example, <code>/usr/OECC_DATA/data/conf/firstuser-config.json</code>

File in the orig folder	New location and file name
system-config.json.orig	<Server data folder>/conf/system-config.json For example, /usr/OECC_DATA/data/conf/system-config.json
server-config.json.orig	<Installation folder>/conf/server-config.json For example, /usr/OECC_SERVER/conf/server-config.json

7. Open the <Server data folder>/conf/db-config.json file in an editor and provide the following details of MongoDB:

- **dbHostNameAndPort:** The IP address and port of the MongoDB database. For example, 172.29.16.152:27017.
- **user and password:** The credentials used by the OpenEdge Command Center server to access the MongoDB database.
- **authSource:** Set the value to admin.

An example of the db-config.json file is as follows:

```
{
  "dbHostNameAndPort": "172.29.17.112:27017",
  "srvRecord": false,
  "connectOptions": {
    "useNewUrlParser": true,
    "useCreateIndex": true,
    "useFindAndModify": false,
    "autoIndex": true,
    "poolSize": 10,
    "bufferMaxEntries": 0,
    "connectTimeoutMS": 10000,
    "socketTimeoutMS": 45000,
    "useUnifiedTopology": true,
    "auth": {
      "user": "username",
      "password": "password"
    },
    "authSource": "admin"
  },
  "tls": false
}
```

8. Save the changes and close the file.

9. Open the <Server data folder>/conf/firstuser-config.json file in an editor and provide the following details of the first user:

- **firstName and lastName:** First and last names of the first user.
- **userName:** The username used by the first user to access OpenEdge Command Center.
- **email:** The email address of the first user.
- **password:** The password used by the first user to access OpenEdge Command Center.
- **description:** A description text about the first user.

10. Save the changes and close the file.

11. Open the `<Installation folder>/conf/server-config.json` file in an editor and provide the following details:
 - `port`: The port on which the OpenEdge Command Center server starts.
 - `dataDir`: The path to the server data folder. For example, `/usr/OECC_DATA/data`.
12. Save the changes and close the file.
13. Start the OpenEdge Command Center server from a Linux shell opened with the Super User or **root** privileges. For example:

```
./oeccserver.sh start
```

Uninstall OpenEdge Command Center

The `uninstall` executable file consolidates and formalizes the actions required to remove an OpenEdge Command Center instance. The `uninstall` file is located in the `uninstall` subdirectory of the OpenEdge Command Center installation directory and also in the **Home** directory.

1. Open a command window and change to the `uninstall` subdirectory of the OpenEdge Command Center installation directory. For example:

```
prompt> cd /usr/openedge_command_center/uninstall
```

2. Enter the following command:

```
./Uninstall OpenEdge Command Center -i mode
```

In the preceding command, *mode* represents one of the following parameters:

- `gui`—Launches the uninstaller in GUI mode and prompts you for responses before uninstalling.
- `console`—Launches the uninstaller in console mode and displays prompts in the console.

Note: If you do not specify a mode parameter, then the uninstaller is launched in GUI mode.

Upgrade OpenEdge Command Center

You can upgrade an older version OpenEdge Command Center to the latest version using the OpenEdge Command Center installer. You can download the latest version of the installer from the [Progress Software Download Center](#).

It is recommended that you shut down the OpenEdge Command Center server before you start upgrade process.

To upgrade OpenEdge Command Center, complete the following steps:

1. Launch the OpenEdge Command Center installer on the computer with the older version of OpenEdge Command Center.
2. Read the information on the **Introduction** page, verify that all other applications are closed, and click **Next**.
The installer detects the older installation of OpenEdge Command Center on the computer and prompts you to confirm if the upgrade needs to be made.
3. To proceed with the upgrade, click **Continue**.
4. On the **Review** page, the installer displays the following information about the existing installation:
 - **Product Name**—OpenEdge Command Center.
 - **Install Folder**—Path where OpenEdge Command Center is installed.
 - **Link Folder**—Path where the database is installed.
 - **Disk Space Information**—Amount of space available and required by OpenEdge Command Center.

Check the information and click **Install**.

The new version OpenEdge Command Center is installed and configured using the configurations of the existing installation.

If the OpenEdge Command Center server is set up as a service, the OpenEdge Command Center console automatically opens in a web browser after the upgrade is complete.

Revert to the previous installation

When you upgrade the OpenEdge Command Center installation, the `backup` folder is created in the OpenEdge Command Center installation directory. The `backup` folder contains configurations and data of the previous installation.

To revert to the previous installation, complete the following steps:

1. Shut down the OpenEdge Command Center server.
2. Copy the configuration and data files from the `backup` folder and replace the files in the OpenEdge Command Center installation directory.
3. Restart the OpenEdge Command Center server.

Install OpenEdge Command Center Agents

OpenEdge Command Center is an add-on product to OpenEdge. It can be downloaded and installed independently of OpenEdge. After installing OpenEdge Command Center, use the agent installer to install and configure an agent. Download the setup file to your local machine.

Before you install the OpenEdge Command Center agent on a single machine or network, make sure that your environment meets the hardware and software requirements described in the [OpenEdge Platform and Product Availability Guide](#) on the [Progress Information Hub](#). You can also refer the document for information on compatibility of OpenEdge Command Center with OpenEdge releases.

Note: OpenEdge Command Center agents are supported only on 64-bit platforms. They are supported on all operating systems that support OpenEdge 12.2.5 and later releases, such as Windows, Linux, AIX, and Solaris. The JDK requirements of agents comply with OpenEdge 12.2.x JDK requirements.

To install an agent, complete the following steps:

1. From a command window, change to the directory that contains the agent installation file. The name of the installation file is platform-dependent, as follows:

Platform	Installer file name
Windows	PROGRESS_OECC_AGENT_1.x.x_WIN_64.exe PROGRESS_OECC_AGENT_1.x.x_WIN_64.zip
Linux	PROGRESS_OECC_AGENT_1.x.x_LNX_64.bin PROGRESS_OECC_AGENT_1.x.x_LNX_64.tar.gz
AIX	PROGRESS_OECC_AGENT_1.x.x_AIX_64.bin
Solaris	PROGRESS_OECC_AGENT_1.x.x_SOL_64.bin

2. Run the installer file. For example:

```
./PROGRESS_OECC_AGENT_1.x.x_LNX_64.bin
```

By default, the installer runs in graphical mode. However, if you are running the installation in VM that does not support graphical mode, then the installation runs in console mode. The installer prompts you to make installation choices and records them after the installation is complete.

3. Read the information on the **Introduction** page, verify that all the other applications are closed, and click **Next**.
4. Read and accept the End User License Agreement (EULA), and click **Next**.
5. On the **Install Configurations** page, enter the following information:
 - a. In **Agent Installation Directory**, you can optionally choose a nondefault directory in which you want to install the agent.
 - b. Check the **Install Agent as a service** option if you want to install the agent as a service. (When this option is enabled, the agent is automatically launched as a service.)
 - c. In **Java Home Directory**, specify the root directory in which the JDK is installed. The directory must match the one that is defined as the `JAVA_HOME` environment variable.
 - d. Click **Next**.
6. On the **Server Connections** page, enter the following information:
 - a. In **Upload OECC Agent Key File**, you can optionally specify an OECC Agent Key JSON file to autofill the fields on this page. If you specify this file, skip to Step d.
 - b. In **Server Host Name**, specify the name of the host machine on which you are installing the agent.
 - c. In **Server Port**, specify:
 - **Server Host Name**
 - **Server Port**

Check the Server Secure Connection to enable agent communication in secure mode using Secure Web Socket. This option is disabled by default.

- **Agent Key Name**
- **Agent Key**

Note: Optionally, you can leave the preceding four fields blank and, after installation, update the agent properties manually to specify these entities.

The agent key name and agent key can be generated on OpenEdge Command Center. For more information, see 'Generate new agent keys' in *Use the OpenEdge Command Center*.

d. Click **Next**.

7. On the **OpenEdge Installation Directories** page, browse to the OpenEdge installation directory and select the instance you want to map with the agent, then click **Next**.

8. Review the information you have provided before completing the installation and click **Next**.

The **Installation Complete** section indicates the successful installation of the OpenEdge Command Center.

9. Click **Done** to complete the agent installation.

For details, see the following topics:

- [Silently install OpenEdge Command Center agents](#)
- [Deploy OpenEdge Command Center agent on Windows platform using a ZIP package](#)
- [Deploy OpenEdge Command Center agent on Unix platform using a TAR package](#)
- [Uninstall OpenEdge Command Center agents](#)
- [Upgrade OpenEdge Command Center agent](#)

Silently install OpenEdge Command Center agents

To silently install an OpenEdge Command Center agent, you create a response file that is based on a template. You then run the response file as a script.

Response file template

The following code snippet provides a template for creating an agent silent installation script.

```
# Tue Mar 09 02:46:56 EST 2021
# Replay feature output
# -----
# This file was built by the Replay feature of InstallAnywhere.
# It contains variables that were set by Panels, Consoles or Custom Code.

#Install Configurations
#-----
USER_INSTALL_DIR=
OECC_AGENT_AS_SERVICE=0
OECC_JAVA_HOME=

#Server Connection
```

```
#-----
AGENT_KEY_FILE=
SERVER_HOST_NAME=
SERVER_PORT=
AGENT_KEY=
AGENT_KEY_NAME=
SERVER_SEC_CONNECTION=0

#OpenEdge Installations
#-----
OE_INSTALL_DIR_1=
OE_INSTALL_DIR_2=
```

When you create the response file based upon the preceding template, enter values for the following variables within this template:

For the following variable specify the following
USER_INSTALL_DIR	The directory in which you want to install the agent. Note that the directory must be empty, otherwise installation is terminated
OECC_AGENT_AS_SERVICE	Whether to install the agent as a service. The possible values are: <ul style="list-style-type: none"> 0—The agent is not started as a service automatically after installation is complete. 1—The agent is started automatically after installation is complete.
OECC_JAVA_HOME	The directory that contains the JDK, which must be version 11.0.4 or later.
AGENT_KEY_FILE	The fully-qualified path of the JSON file that contains the server information.
SERVER_HOST_NAME	The IP address of the OpenEdge Command Center server. Specify a value if AGENT_KEY_FILE is not specified. (If AGENT_KEY_FILE is already specified, specifying a value here is optional.)
SERVER_PORT	The OpenEdge Command Center server port number. Specify a value if AGENT_KEY_FILE is not specified. (If AGENT_KEY_FILE is already specified, specifying a value here is optional.)
AGENT_KEY	The key assigned to the agent. Specify a value if AGENT_KEY_FILE is not specified. (If AGENT_KEY_FILE is already specified, specifying a value here is optional.)

For the following variable specify the following
SERVER_SEC_CONNECTION	Whether a secure transport is used to communicate with OpenEdge Command Center server. The possible values are: <ul style="list-style-type: none"> 0—Specifies that a secure transport is not used. 1—Specifies that a secure transport is used.
OE_INSTALL_DIR_1	(Optional) A directory that contains an OpenEdge installation.
OE_INSTALL_DIR_2	(Optional) A second directory that contains an OpenEdge installation.

Run the silent installation

To run a silent installation of the agent:

1. Open a command window and change to the directory that contains the silent installation response file.
2. Enter the following command:

```
PROGRESS_OECC_AGENT_1.x.x_platform -i silent -f /response-file-name
```

In the preceding command:

- *platform* represents the operating system-specific suffix of the installer file name. For example, WIN_64.exe or LNX_64.bin.
- *response-file-name* represents the name of the silent installation response file.

After you enter the preceding command, the agent installation runs without intervention.

A log file of the installation procedure is available in the `logs` subdirectory of the agent installation directory.

Deploy OpenEdge Command Center agent on Windows platform using a ZIP package

You can use installation package, `PROGRESS_OECC_AGENT_1.x.x_WIN_64.zip`, to deploy an OpenEdge Command Center agent on a Windows 64-bit computer with a PAS for OpenEdge installation. The installation package can be deployed on all Windows platforms that support OpenEdge 12.2.5 and later releases. You can download the installation package from the Progress Software Download Center.

To deploy the OpenEdge Command Center agent on a Windows platform, complete the following steps:

1. On the Windows computer that hosts the PAS for OpenEdge installation you want to monitor, create a folder for the OpenEdge Command Center agent installation files. For example, `C:\OECC_AGENT`.
2. Extract the contents of the `PROGRESS_OECC_AGENT_1.x.x_WIN_64.zip` file to the installation folder (`C:\OECC_AGENT`).
3. In the extracted folder, browse to the `orig` folder. For example, `C:\OECC_AGENT\orig`.

4. Copy the following files from the `orig` folder:

- `installationsInfo.json.orig`
- `java.properties.orig`
- `serverInfo.json.orig`

5. Place the copied files in the `conf` folder of the extracted files. For example, `C:\OECC_AGENT\conf`.

6. Rename the copied files in the `conf` folder as follows:

File name in the <code>orig</code> folder	File name in the <code>conf</code> folder
<code>installationsInfo.json.orig</code>	<code>installationsInfo.json</code>
<code>java.properties.orig</code>	<code>java.properties</code>
<code>serverInfo.json.orig</code>	<code>serverInfo.json</code>

7. Open the `\conf\serverInfo.json` file in any text editor and provide the following details:

- `host`: The IP address of the OpenEdge Command Center server.
- `port`: The port number of the OpenEdge Command Center server.
- `agentKey` and `agentKeyName`: Generate agent key and agent key name in the OpenEdge Command Center console and enter the respective values.

For more information, see 'Generate new agent keys' in *Use the OpenEdge Command Center*.

8. Save the changes and close the file.

9. Open the `\conf\java.properties` file in any text editor and provide the path to the root directory in which the JDK is installed. For example, `JAVA_HOME=C:/jdk11.0.4_x64`.

10. Save the changes and close the file.

11. Open the `\conf\installationsInfo.json` file in any text editor. For the `path` field, enter the path to the OpenEdge installation directory that you want to monitor. For example, if the OpenEdge instance you want to monitor is installed at `C:\Progress\OpenEdge` on your computer, enter the value of path as `C:\\Progress\\OpenEdge` or `C:/Progress/OpenEdge`.

12. Save the changes and close the file.

13. Start the OpenEdge Command Center agent from a command shell opened in the **Run as Administrator** mode. For example:

```
C:\OECC_AGENT > oeccagent.bat start
```

Note: Do not use the Proenv environment command shell to start the OpenEdge Command Center agent. It can result in errors.

Deploy OpenEdge Command Center agent on Unix platform using a TAR package

You can use installation package, `PROGRESS_OECC_AGENT_1.x.x_LNX_64.tar.gz`, to deploy an OpenEdge Command Center agent on a Unix 64-bit computer with a PAS for OpenEdge installation. The installation package can be deployed on all Unix platforms that support OpenEdge 12.2.5 and later releases. You can download the installation package from the Progress Software Download Center.

To deploy the OpenEdge Command Center agent on a Unix platform, complete the following steps:

1. On the Unix computer that hosts the PAS for OpenEdge installation you want to monitor, create a folder for the OpenEdge Command Center agent installation files. For example, `/usr/OECC_AGENT`.

Note: Ensure that the folder name does not have any space because the Unix platform does not support spaces in the file path.

2. Extract the contents of the `PROGRESS_OECC_AGENT_1.x.x_LNX_64.tar.gz` file to the installation folder (`/usr/OECC_AGENT`).
3. In the extracted folder, browse to the `orig` folder. For example, `/usr/OECC_AGENT/orig`.
4. Copy the following files from the `orig` folder:
 - `installationsInfo.json.orig`
 - `java.properties.orig`
 - `serverInfo.json.orig`
5. Place the copied files in the `conf` folder of the extracted files. For example, `/usr/OECC_AGENT/conf`.
6. Rename the copied files in the `conf` folder as follows:

File name in the <code>orig</code> folder	File name in the <code>conf</code> folder
<code>installationsInfo.json.orig</code>	<code>installationsInfo.json</code>
<code>java.properties.orig</code>	<code>java.properties</code>
<code>serverInfo.json.orig</code>	<code>serverInfo.json</code>

7. Open the `/conf/serverInfo.json` file in any text editor and provide the following details:
 - `host`: The IP address of the OpenEdge Command Center server.
 - `port`: The port number of the OpenEdge Command Center server.
 - `agentKey` and `agentKeyName`: Generate agent key and agent key name in the OpenEdge Command Center console and enter the respective values.

For more information, see 'Generate new agent keys' in *Use the OpenEdge Command Center*.

8. Save the changes and close the file.

9. Open the `/conf/java.properties` file in any text editor and provide the path to the root directory in which the JDK is installed. For example, `JAVA_HOME=/opt/jdk11.0.4_x64`.
10. Save the changes and close the file.
11. Open the `/conf/installationsInfo.json` file in any text editor. For the `path` field, enter the path to the OpenEdge installation directory that you want to monitor. For example, if the OpenEdge instance you want to monitor is installed at `/usr/Progress/OpenEdge` on your computer, enter the value of `path` as `/usr/Progress/OpenEdge`.

If you have multiple OpenEdge installations, add more `path` fields and enter the installation directory path of the other OpenEdge installations on the computer. For example:

```
"installations" : [ {  
  "path" : "/usr/124dlc"  
}, {  
  "path" : "/usr1/122dlc"  
} ]
```

12. Save the changes and close the file.
13. Start the OpenEdge Command Center agent from a Unix shell opened with the Super User or **root** privileges. For example:

```
./oeccagent.sh start
```

Note: Do not use the `Proenv` environment command shell to start the OpenEdge Command Center agent. It can result in errors.

Uninstall OpenEdge Command Center agents

The `uninstall` executable file consolidates and formalizes the actions required to remove an OpenEdge Command Center agent instance. The `uninstall` file is located in the `uninstall` subdirectory of the agent installation directory.

1. Open a command window and change to the `uninstall` subdirectory of the agent installation directory. For example:

```
prompt> cd C:\Progress\OECC_Agent\uninstall
```

2. Enter the following command:

```
prompt> Uninstall OECC Agent
```

The uninstaller runs in interactive mode, prompting you to confirm your uninstallation choices.

Note: If the agent was installed silently, then by default the uninstall process also runs silently.

On Windows platforms, you can also uninstall the agent by completing the following steps:

1. Select the **Start** button, then choose **Settings > Apps**.
2. Scroll to and select **OpenEdge Command Center Agent**, then click **Uninstall**.

Upgrade OpenEdge Command Center agent

You can upgrade an older version OpenEdge Command Center agent to the latest version using the agent installer. You can download the latest version of the installer from the [Progress Software Download Center](#). Click the **Open Download Center** link and log in using your Progress SSO credentials. From the product list, select **Progress OpenEdge**, and then select the appropriate OpenEdge version. To download OpenEdge Command Center components, you must select OpenEdge 12.2.x or later. From the **New Release** tab, select the link for OpenEdge Command Center, and then download the required installation files.

It is recommended that you shut down the OpenEdge Command Center agent before you start upgrade process.

To upgrade the OpenEdge Command Center agent, complete the following steps:

1. Launch the OpenEdge Command Center agent installer on the computer with the older version of the agent.
2. Read the information on the **Introduction** page, verify that all other applications are closed, and click **Next**.

The installer detects the older installation of the agent on the computer and prompts you to confirm if the upgrade needs to be made.

3. To proceed with the upgrade, click **Continue**.
4. On the **Review** page, the installer displays the following information about the existing agent installation:

- **Product Name**—OpenEdge Command Center Agent.
- **Install Folder**—Path where the OpenEdge Command Center agent is installed.
- **Link Folder**—Path where the database is installed.
- **Disk Space Information**—Amount of space available and required by the OpenEdge Command Center agent.

Check the information and click **Install**.

The new version OpenEdge Command Center agent is installed and configured using the configurations of the existing installation.

Revert to the previous installation

When you upgrade the OpenEdge Command Center agent installation, the `backup` folder is created in the agent installation directory. The `backup` folder contains configurations and data of the previous installation.

To revert to the previous installation, complete the following steps:

1. Shut down the OpenEdge Command Center agent.
2. Copy the configuration and data files from the `backup` folder and replace the files in the agent installation directory.
3. Restart the OpenEdge Command Center agent.

Manage OpenEdge Command Center services

You can create services for the OpenEdge Command Center server and agents to start these components as system services.

For details, see the following topics:

- [Manage agent services](#)
- [Manage services for OpenEdge Command Center server](#)

Manage agent services

After you start an agent, the status of the agent is updated in the **Command Center Agents** page. Note that the status of an agent cannot be updated from the OpenEdge Command Center. You can create the OpenEdge Command Center agent service to start an agent as a system service.

Note: Do not use the Proenv environment command shell to start the OpenEdge Command Center agent. It can result in errors.

To create, start, stop or delete an agent service:

1. From a command window that is set with administrator privileges, change to the `conf` subdirectory of the OpenEdge Command Center agent installation directory.
2. Run the following command:

Windows:

```
OECCAgentService.bat create|start|stop|delete
```

Linux, Solaris, and AIX:

```
OECCAgentService.sh create|start|stop|delete
```

When you run a create command, the agent service is created with different names on these platforms because the service naming conventions differ across the platforms. For example, the length of a service name on the AIX platform cannot be more than 29 characters. The details of services created on different platform are as follows:

Platform	Service Name
Windows	Progress OpenEdge Command Center Agent
Linux and Solaris	Progress-OpenEdge-Command-Center-Agent
AIX	ProgressOECommandCenterAgent

Note: The agent maintains two log files for capturing the following messages:

- Agent-related error messages
- Agent-related standard output messages
- Agent service-related messages regarding agent create, start, stop, and delete operations

These log files are named `oecc-agent.out<timestamp>.log` and `oecc-agent.err<timestamp>.log`. On Windows, AIX, and Linux platforms, these files are maintained in the `agent-install-dir/logs` directory by default.

On Solaris platforms, the log file names and locations for agent-related messages are the same as for Windows, AIX, and Linux. However, agent *service*-related messages (that is, for agent service create, start, stop, and delete operations) are placed in the `/var/svc/log/application-Progress-OpenEdge-Command-Center-Agent:default.log` file.

On Linux platforms with `systemd` version earlier than 236, agent logs are not generated in the `agent-install-dir/logs` directory. This occurs only when the OpenEdge Command Center agent is started as a service. Therefore, on these Linux systems, Progress recommends that you run the following command to generate agent logs:

```
journalctl -u Progress-OpenEdge-Command-Center-Agent
```

Manage services for OpenEdge Command Center server

You can create the OpenEdge Command Center server service on a Linux 64-bit platform to start OpenEdge Command Center as a system service.

To create, start, stop, or delete the OpenEdge Command Center service:

1. From a command window that is set with administrator privileges, change to the conf subdirectory of the OpenEdge Command Center installation directory.
2. Run the following command:

```
oeccservice.sh create|start|stop|delete
```

When you run the create command, the `Progress-OpenEdge-Command-Center-Server` service is created.

Set up TLS

Enable TLS to establish a secure network channel for communication between the components of OpenEdge Command Center. You can enable TLS for the following communication channels:

- Communication between the OpenEdge Command Center server and agents.
- Communication between the OpenEdge Command Center server and the MongoDB configuration database.

Note: It is recommended that you configure OpenEdge Command Center in TLS mode for your production environments.

For details, see the following topics:

- [Set up TLS for OpenEdge Command Center server and agent communication](#)
- [Set up TLS for OpenEdge Command Center and MongoDB communication](#)

Set up TLS for OpenEdge Command Center server and agent communication

To establish a secure network channel for communication between the OpenEdge Command Center server and an agent, you can enable TLS.

To set up a TLS connection between the OpenEdge Command Center server and an agent:

1. Open a command window and change to the OpenEdge Command Center installation directory.
2. Open the file `conf/server-config.json` in an editor.
3. Make the following changes:
 - For `key`, enter the path of the private key that is used for encryption.
 - For `certificate`, enter the path of the public certificate of the CA that has signed the server's TLS certificate. Also known as the root certificate.
 - Set `isServerSecured` to `true`.
4. Save your changes to `conf/server-config.json`.
5. Start the OpenEdge Command Center server (notice that the console is started on the HTTPS transport).
6. In a command window on the agent host machine, change to the OpenEdge Command Center agent installation directory.
7. Open the `conf/serverInfo.json` file in an editor, set `isServerSecured` to `true`, and save your changes.
8. On the agent host machine, import the OpenEdge Command Center server public certificate into the Java keystore.
9. Start the agent.

After the agent is started, the TLS handshake with the OpenEdge Command Center server occurs and a secure channel is established.

For information about how to generate a self-signed certificate, see the following Knowledge Base articles:

- <https://knowledgebase.progress.com/articles/Knowledge/000027719>
- <https://knowledgebase.progress.com/articles/Article/P150008>

Set up TLS for OpenEdge Command Center and MongoDB communication

You can enable TLS for secure communication between the OpenEdge Command Center server and MongoDB. You can configure the following types of authentication:

- Server authentication
- Mutual authentication

Server authentication

When using server authentication, the MongoDB server sends a certificate to the OpenEdge Command Center server to authenticate itself and ensure secure communication. To configure TLS server authentication:

1. In MongoDB installation, open the `bin/mongod.cfg` file in an editor.

Note: If the MongoDB installation is on the Linux platform, open the `etc/mongod.conf` file.

2. In the `network interface` section of the file, add the `tls` node.

3. In the `tls` node, add the following fields and enter the required values:

Field	Description
<code>mode</code>	Set value to <code>requireTLS</code> or <code>preferTLS</code> .
<code>certificateKeyFile</code>	Path of the public certificate of the MongoDB server that is signed by the Certificate Authority (CA).

4. Save your changes to the `bin/mongod.cfg` or `etc/mongod.conf` file and restart the MongoDB server.
5. In the OpenEdge Command Center server installation, open the `data/conf/db-config.json` file in an editor.
6. Add the `tls` field and set its value to `true`.
7. In `connectionOptions`, add the `sslCA` field.
8. For `sslCA`, enter the path of the public certificate of the CA that is used to validate the certificates presented by the OpenEdge Command Center server.
9. Save your changes to the `data/conf/db-config.json` file and restart the OpenEdge Command Center server.

After the OpenEdge Command Center server is started, the TLS handshake with the MongoDB server occurs and a secure channel is established.

Mutual authentication

When using mutual authentication, the OpenEdge Command Center server and the MongoDB server authenticate with each other before creating a secure communication channel. To configure TLS mutual authentication:

1. In MongoDB installation, open the `bin/mongod.cfg` file in an editor.

Note: If the MongoDB installation is on the Linux platform, open the `etc/mongod.conf` file.

2. In the `network interface` section of the file, add the `tls` node.
3. In the `tls` node, add the following fields and enter the required values:

Field	Description
<code>mode</code>	Set value to <code>requireTLS</code> or <code>preferTLS</code> .
<code>certificateKeyFile</code>	Path of the public certificate of the MongoDB server that is signed by the CA.
<code>CAFile</code>	Path of the file that contains the certificate chain for verifying the OpenEdge Command Center server's certificates.

4. Save your changes to the `bin/mongod.cfg` or `etc/mongod.conf` file and restart the MongoDB server.
5. In the OpenEdge Command Center server installation, open the `data/conf/db-config.json` file in an editor.
6. Add the `tls` field and set its value to `true`.
7. In `connectionOptions`, add the following fields and enter the required values:

Field	Description
sslCA	Path of the public certificate of the CA that is used to validate the certificates presented by the MongoDB server.
sslKey	The private key used for encryption.
sslCert	Path of the public certificate of the OpenEdge Command Center server that is signed by the CA.

8. Save your changes to the `data/conf/db-config.json` file and restart the OpenEdge Command Center server.

After the OpenEdge Command Center server is started, the TLS handshake with the MongoDB server occurs and a secure channel is established.

For more information about configuring MongoDB for TLS, see the following articles:

- <https://docs.mongodb.com/manual/tutorial/configure-ssl/>
- <https://docs.mongodb.com/manual/tutorial/configure-ssl-clients/>