

# **Progress DataDirect® Drivers**

## **An Introduction to Distributing DataDirect Drivers**



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Progress DataDirect drivers provide applications with unparalleled access to industry-leading relational, big data, NoSQL and cloud data sources. As an OEM partner, you can embed our full breadth of ODBC and JDBC drivers into your application's data access layer as closed, password-protected components ready for distribution.

## What Does Distributing DataDirect Drivers Involve?

Distributing the drivers is a three-part process that consists of branding the drivers, installing them with your application's installer program, and enabling your application to unlock the drivers:

- **Branding**

Branding consists of renaming the driver and license files, and, most importantly, creating locked drivers that can only be used by your product. The DataDirect installation program makes this easy by guiding you through the entire branding process.

- **Installing the Driver Files**

Installing the drivers with your installation program requires modifying your product installer to load the branded driver files and, for ODBC drivers, adding the necessary entries to the system information files and environment variables.

- **Unlocking the Drivers**

Your application implements a special set of calls to unlock the drivers when connecting to your data source.

## Why do businesses become OEM partners?

OEM partners take advantage of the following benefits:

- **Protection Against Driver Conflicts**

By uniquely naming files and locking the drivers, you prevent driver conflicts that can occur when customers install your application alongside other software. This means that the drivers and configurations you tested are the same ones your customers are using, guaranteeing that your application performs exactly as you designed.

- **Locked Drivers**

In addition to ensuring your application is using the correct driver, locking the drivers also prohibits unauthorized applications from accessing your drivers. Using closed, password-protected drivers assures that other applications are not taking advantage of your driver's performance or competing with your application for connectivity resources.

- **Integrated User Experience**

Distributing the drivers allows you to transparently integrate the drivers with your application. In addition to installing the drivers with your application, you are able to determine file name prefixes, customize error messages, and replace graphics with your company logo, transforming the drivers into a seamless extension of your application.

- **A Single Resource for Technical Support**

With Progress's comprehensive technical support services, you will no longer need to chase multiple vendors to resolve connectivity issues. Our award-winning support team is available 24 hours a day to diagnose your connectivity problem and provide solutions--regardless of the cause. This includes access to support from technology companies such as IBM, Oracle and Microsoft through our membership with the TSANet alliance.

- **Access to the Latest Data Sources**

Progress is continuously adding support for the latest data sources and platforms, providing unmatched access to your data.

- **Progress Performance**

Installing the drivers with your application provides your customers with the high-performance connectivity, advanced features, security, and reliability that Progress DataDirect offers.

- **Simplified User Experience**

Becoming an OEM partner simplifies your users' experience with your product. By distributing the drivers with your application, you eliminate the need for customers to research, license, and install their own drivers. This allows your customers to use the best version of your application right out of the box.

[Click here to learn more about what we do for tech companies.](#)

The following sections guide you through the process of branding, installing, and unlocking the drivers.

## Branding the Product

Branding the standard commercial Progress DataDirect drivers allows you to distribute the drivers with your application as closed, password-protected drivers.

Branding renames the driver and license files and encodes them with a 2-character prefix of your choosing. The prefix you enter replaces default characters. For example, if you enter *gg* as the prefix for the 64-bit ODBC driver for Amazon Redshift, the default file name of `ddrsftnn.dll` becomes `ggrsftnn.dll`.

The installation program (or script, for UNIX/Linux) for Progress DataDirect drivers enables you to install and brand from downloaded files or a network directory. Using the installation program is a quick and efficient way to brand your drivers.

## Branding Using the Installation Program

This section demonstrates how to brand ODBC and JDBC drivers using the product installation program. The examples used correspond to the GUI version of the installer. However, you can also brand the drivers using the command-line version of the installation program. In addition, the installation program can be used to create a response file for a silent installation when multiple identical installations are desired.

Before you brand the drivers, you must complete the following steps:

- Acquire the product package and an OEM IPE key (control number). Download information and the IPE key are provided in the OEM Welcome email.
- Register a password through the Progress DataDirect Inside Connection site. Doing this means that you always have a resource from which to retrieve it.
- Register for a 2-character prefix through the Progress DataDirect Inside Connection site to avoid file name conflicts with other Progress DataDirect drivers, DataDirect Connect Series drivers, or DataDirect Cloud drivers that may be installed on a user's system.

**Note:** The OEM Partners section of the Progress DataDirect Web site is password-protected. As part of your OEM agreement, Progress DataDirect provides you with the appropriate location and passwords for the site.

## Branding the ODBC Drivers

Once you have the product package, the IPE key, a registered password, and a registered 2-character prefix, you are ready to begin the branding process.

To brand your Progress DataDirect for ODBC drivers, take the following steps:

1. Run the installation program found in the product package.
2. After accepting the terms of the license agreement and identifying an installation directory, select **OEM or Licensed installation** and then enter your product licensing information and your IPE key (control number).
3. Select **Branded Installation** and enter the appropriate information in the Product Branding window.

- **User Name:** Type your name.
- **Company Name:** Type your company name. This name is used in the license file and appears on the Version tab when displaying the properties of a DLL.
- **Serial Number:** Type the serial number that was provided by Progress in the Serial Number field.
- **New Prefix:** Type the 2-character prefix that you registered with Progress DataDirect to encode the driver and license files. For example, if you brand the MongoDB driver with the prefix gf, the installer renames this file to `gfmongonn.dll`.
- **Product Name:** Type your product name.
- **Password:** Type the password you registered through the Partners section of the Progress DataDirect Web site. This password is locked into the branded driver license file to prevent unauthorized applications from using the branded drivers.
- **Message Prefix:** Type an error message prefix for the branded drivers.

After branding, driver error messages are displayed with this prefix. For example, if `xyzcompany` is your message prefix, the driver error message:

```
[DataDirect][MongoDB ODBC Driver] Object has been closed
```

becomes:

```
[xyzcompany][MongoDB ODBC Driver] Object has been closed
```

- **Branding Suffix:** Optionally, type a branding suffix for the branded drivers. The suffix can consist of a maximum of two numeric characters (0 to 9).

After branding, the driver file names are displayed with this suffix. For example, if you brand the Amazon Redshift Wire Protocol driver with the prefix `gf` and the branding suffix `17`, the files are renamed as `gfrshft17.dll`.

4. Optionally, select the appropriate check box to create default data sources.
5. Review the pre-installation summary and make changes if needed. Click **Install** to generate a branded installation of the driver to the directory you have specified.

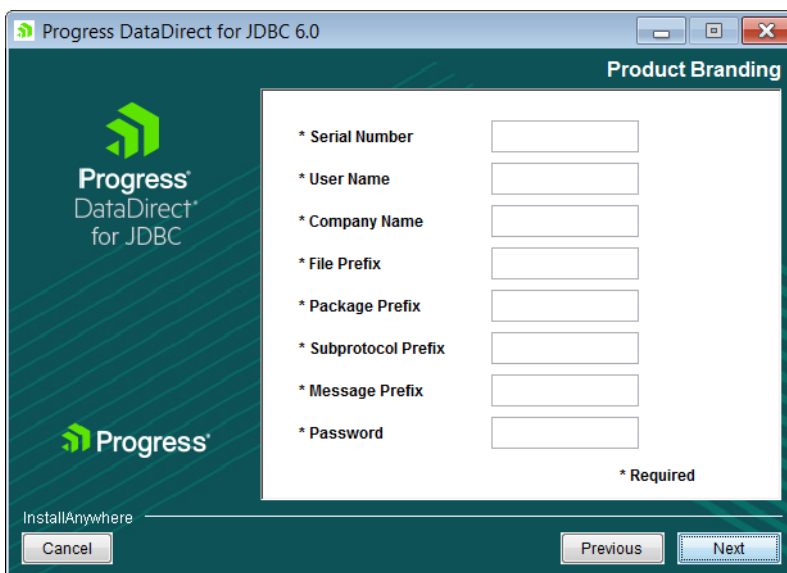
See [Branding Results](#) on page 7 (ODBC Drivers) for a summary of the results produced by this branding process.

## Branding the JDBC Drivers

Once you have the product package, the IPE key, a registered password, and a registered 2-character prefix, you are ready to begin the branding process.

To brand your Progress DataDirect for JDBC drivers, take the following steps:

1. Run the installation program found in the product package.
2. After accepting the terms of the license agreement and identifying an installation directory, select **OEM or Licensed installation** and then enter your product licensing information and your IPE key (control number).
3. Select **Branded Installation** and enter the appropriate information in the Product Branding window.



- **Serial Number:** Type the serial number that was provided by Progress DataDirect in the Serial Number field.
- **User Name:** Type your name.

- **Company Name:** Type your company name.
- **File Prefix:** Type the 2-character file prefix you registered through the OEM Partners section of the Progress DataDirect Web site. This prefix is added to DataDirect file names. For example, if `dx` is your file prefix, `mongodb.jar` becomes `dxmongodb.jar`.
- **Package Prefix:** Type a package prefix for the branded driver. The package prefix replaces the DataDirect prefix of `com.ddtek` in all the classes within the driver jar file when you brand a driver. For example, if `com.xyzcompany.xyzdivision` is your package prefix, the MongoDB driver class:

```
com.ddtek.jdbc.mongodb.MongoDBDriver
```

becomes:

```
com.xyzcompany.xyzdivision.jdbc.mongodb.MongoDBDriver
```

- **Subprotocol Prefix:** Progress DataDirect drivers are registered with a URL subprotocol of the form `datadirect:drivername`, for example, `datadirect:mongodb`. To replace `datadirect` in the subprotocol of a branded driver with your company name, type a prefix in this field. For example, if `xyzcompany` is your subprotocol prefix, the URL:

```
jdbc:datadirect:mongodb://server1:27017
```

becomes:

```
jdbc:xyzcompany:mongodb://server1:27017
```

- **Message Prefix:** Type an error message prefix for the branded drivers.  
After branding, driver error messages are displayed with this prefix. For example, if `xyzcompany` is your message prefix, the driver error message:
- ```
[DataDirect][MongoDB JDBC Driver] Object has been closed
```
- becomes:
- ```
[xyzcompany][MongoDB JDBC Driver] Object has been closed
```
- **Password:** Type the password you registered through the Partners section of the Progress DataDirect Web site. This password prevents unauthorized applications from using the branded drivers.

4. Review the pre-installation summary and make changes if needed. Click **Install** to generate a branded installation of the driver to the directory you have specified.

See [Branding Results](#) on page 7 (JDBC Drivers) for a summary of the results produced by this branding process.

## Branding Results

Depending on the type of driver, branding produces the following results.

### ODBC Drivers

- Installs a version of the driver files using the file prefix you specified, and updates the installed `odbc.ini` and `odbcinst.ini` files, as well as the license file. The branded files appear in the directory specified during branding.
- Locks the branded drivers with the password you specified. Your application must supply this password to unlock the branded drivers. See "Unlocking the Drivers" for instructions on unlocking the branded drivers.
- Changes the message prefix for driver-generated error messages so that messages will display the message prefix you specified.

- Optionally, adds a branding suffix which consists of two numeric characters.

### JDBC Drivers

- Installs a version of the product jar files using the file prefix you specified. The branded files appear in the directory specified during branding.
- Changes the package names for the branded driver using the package prefix you specified.
- Changes the URL subprotocol using the subprotocol prefix you specified.
- Changes the message prefix for driver-generated error messages so that messages display the message prefix you specified.
- Locks the branded drivers with the password you specified. Your application must supply this password to unlock the branded drivers. See "Unlocking the Drivers" for instructions on unlocking the branded drivers.

## Installing the Drivers

This section describes the general tasks for creating an installation program. OEM partners are provided with platform-specific instructions.

To load the driver files, create an installation program that:

1. Copies the branded files to the client machine. OEM partners are provided with a list of specific files that must be distributed, that may be distributed, and that must not be distributed.

Before your installation program copies a file to a client machine, ensure that it:

- a. Checks whether the file already exists and, if so, compares the dates of both files.
  - b. Asks users if they want to overwrite an existing file with a newer version.
2. (ODBC only) Includes the necessary entries to the system information files and environment variables. The entries you must make are platform-dependent. Progress DataDirect for ODBC drivers conform to the ODBC standard, and the appropriate configuration entries must be made based on this standard.
  3. (Optional) Provides a way for the user to set driver configuration parameters for each installed driver.

## Unlocking the Drivers

Progress DataDirect drivers can be unlocked only by applications that supply the case-sensitive password that was locked into the driver when it was branded. The method used to unlock drivers differs based on application API, as summarized here.

### ODBC Applications

Branded drivers work with ODBC-enabled applications that pass the password to the driver after establishing a connection. ODBC-enabled applications may be developed using tools such as:

- ODBC Software Developer's Kit (SDK)
- Microsoft Visual Basic or other development tools that hide the ODBC interface (Windows platforms only)
- C++ ODBC Wrappers
- OLE DB Software Developer's Kit (SDK) and ADO



Ideally, the driver is unlocked by making additional ODBC API calls; however, if you do not have access to the source code or use a development tool that hides the ODBC interface (Visual Basic, OLEDB), this may not be possible. In these scenarios, there are some alternative methods available to communicate the password to the driver. When appropriate, OEM partners are provided with detailed explanations and code examples to assist in this process.

### **JDBC Applications**

To unlock a branded driver, the application must pass the password specified during the branding process. If your application is unable to unlock the driver using Java methods, other options are available in certain scenarios.

## **For More Information**

For more information about Progress products or becoming an OEM Partner, contact Progress DataDirect at the following address:

<https://www.progress.com/company/contact>

For current OEM Partners, refer to the JDBC and ODBC Progress DataDirect drivers distribution guides for detailed instructions on installing, branding, unlocking, and distributing your branded drivers.

