

Easysoft ODBC- PayPal Driver User's Guide

This manual documents version 1.0.n of the Easysoft ODBC-PayPal Driver.

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Table of contents

Getting started	4
Installing the Easysoft ODBC-PayPal Driver	5
Installing on Windows	6
Uninstalling on Windows	8
Connecting to PayPal	9
Connecting from Windows	9
Connection attributes	10
DSN-less connections	12
Logging	13
ODBC Driver Manager logging on Windows	13
Easysoft ODBC-PayPal Driver logging on Windows	14
Finding out what product version you have on Windows	15
Client applications	16
Microsoft Access	17
Linking a table	17
Importing a table	17
Microsoft Excel	18
Data Connection Wizard	18
Microsoft Query	18
PowerPivot	18
Microsoft Power BI	19
Microsoft SQL Server	20
Oracle	22
Connecting PayPal to Oracle on Windows	22
LibreOffice	24
Go	25
Node.js	26
Perl	28
PHP	31
Python	33
R	35
About the Easysoft ODBC-PayPal Driver	37
ODBC API and scalar functions	38
API functions	38
Scalar functions	40
SQL support	43
Index	44

Getting started

This section shows you how to install the Easysoft ODBC-PayPal Driver and configure the ODBC data source that stores the connection details for your PayPal database. You're then ready to work with PayPal data in your application.

- [Installing the Easysoft ODBC-PayPal Driver](#)
- [Connecting to PayPal](#)
- [Logging](#)

Installing the Easysoft ODBC-PayPal Driver

Install the Easysoft ODBC-PayPal Driver on the computer where the application you want to connect to PayPal is running.

Installing on Windows

The Windows installation can be done by anyone with local administrator privileges.

1. [Download the Easysoft ODBC-PayPal Driver installer.](#)
2. Follow the onscreen instructions to progress through the installation wizard.

Updating files that are in use

To avoid rebooting your computer, the Easysoft ODBC-PayPal Driver installer prompts you when files that it needs to update are in use by another application or service. This frees the locked files and allows the installation to complete without a system restart. The installer uses the **Restart Manager** to locate the applications that are using files that need updating. These applications are displayed in the **Files in Use** dialog box. To avoid a system restart, choose **Automatically close applications and attempt to restart them after setup is complete**. The Easysoft ODBC-PayPal Driver installer then uses **Restart Manager** to try to stop and restart each application or service in the list. If possible, **Restart Manager** restores applications to the same state that they were in before it shut them down.

Licensing

By default, the installer starts the Easysoft License Manager, because you can't use the Easysoft ODBC-PayPal Driver until you have a license. If you choose not to run Easysoft License Manager as part of the installation process, run License Manager from the **Easysoft** group in the Windows **Start** menu when you're ready to license the Easysoft ODBC-PayPal Driver. These types of license are available:

- A free time-limited trial license, which gives you free and unrestricted use of the product for a limited period (usually 14 days).
- A full license if you have purchased the product. On purchasing the product you are given an authorization code, which you use to obtain a license.

To license the Easysoft ODBC-PayPal Driver:

1. In License Manager, enter your contact details.

You **must** complete the **Name**, **E-Mail Address**, and **Company** fields.

The e-mail address **must** be the same as the one used to register at the Easysoft web site. Otherwise, you won't be able to obtain a trial license.

2. Choose **Request License**.

You're prompted to choose a license type.

3. Do one of the following:

- For a trial license, choose **Time Limited Trial**, and then choose **Next**.

-Or-

- For a purchased license, choose **Non-expiring License**, and then choose **Next**.

4. Choose your product from the drop-down list when prompted, and then choose **Next**.

5. For a purchased license, enter your authorization code when prompted, and then choose **Next**.

6. Choose how to get your license when prompted.

7. Do one of the following:

- Choose **On-line Request** if your machine is connected to the internet and can make outgoing connections to port 8884.

With this method, License Manager automatically requests and then applies your license.

-Or-

- Choose **View Request**. Then open a web browser and go to https://www.easysoft.com/support/licensing/trial_license.html or https://www.easysoft.com/support/licensing/full_license.html, as appropriate. In the web page, enter your machine number (labelled **Number** in the license request). For purchased licenses, you also need to enter your authorization code (labelled **Ref** in the license request).

We'll automatically email your license to the email address you supplied in License Manager.

-Or-

- Choose **Email Request** to email your license request to our licensing team.

Once we've processed your request, we'll email your license to the email address you supplied in License Manager.

8. Close the License Manager windows and then choose **Finish**.

If you chose either **View Request** or **Email Request**, apply your license by double-clicking the email attachment when you get the license email from us. Alternatively, start License Manager from the **Easysoft** folder in the Windows **Start** menu. Then choose **Enter License** and paste the license in the space provided.

Once you've licensed the Easysoft ODBC-PayPal Driver, the installation is complete.

Repairing the installation

The installer can repair a broken Easysoft ODBC-PayPal Driver installation. For example, you can use the installer to restore missing Easysoft ODBC-PayPal Driver files or registry keys. To do this:

1. In the Windows **Taskbar**, enter Add or remove programs in the Windows **Search** box.
2. Select Easysoft ODBC-PayPal Driver in the list, and then choose **Repair**.

Uninstalling on Windows

This section explains how to remove the Easysoft ODBC-PayPal Driver from your system.

Removing Easysoft ODBC-PayPal Driver data sources

Easysoft ODBC-PayPal Driver data sources are not removed when you uninstall the Easysoft ODBC-PayPal Driver. You don't therefore need to recreate your Easysoft ODBC-PayPal Driver data sources if you reinstall or upgrade. If you don't want to keep your Easysoft ODBC-PayPal Driver data sources, use Microsoft **ODBC Data Source Administrator** to remove them, **before** uninstalling the Easysoft ODBC-PayPal Driver:

1. In the Windows **Taskbar**, enter Run in the Windows **Search** box.
2. In the Windows **Run** dialog box, enter:

```
odbcad32.exe
```

3. Locate your data source in either the **User** or **System** tab.
4. Select the data source from the list, and then choose **Remove**.

If the **Remove** button isn't available, close **ODBC Data Source Administrator**, and then, in the Windows **Run** dialog box, enter:

```
%windir%\syswow64\odbcad32.exe
```

Repeat the previous two steps.

Removing the Easysoft ODBC-PayPal Driver

1. In the Windows **Taskbar**, enter Add or remove programs in the Windows **Search** box.
2. Select Easysoft ODBC-PayPal Driver in the list, and then choose **Uninstall**.

Note Easysoft product licenses are stored in the Windows registry. When you uninstall, your licenses are not removed, so you do not need to relicense the product if you reinstall or upgrade.

Connecting to PayPal

Applications that support ODBC interface with an ODBC Driver Manager, which is included with the operating system, and also the Easysoft ODBC driver distribution on some platforms. One of the jobs that the ODBC Driver Manager does is to manage ODBC data sources. A data source specifies which ODBC driver to load, which data store to connect to, and how to connect to it.

Before setting up a data source, you must have [successfully installed the Easysoft ODBC-PayPal Driver](#).

Connecting from Windows

Creating an ODBC data source

1. In the Windows **Taskbar Search** box, enter "Run".
2. Do one of the following:
 - If your application is 64-bit, in the **Run** dialog box, enter:

```
odbcad32.exe
```

-Or-

- If your application is 32-bit, in the **Run** dialog box, enter:

```
%windir%\syswow64\odbcad32.exe
```

Note

If you're not sure whether your application is 32-bit or 64-bit, start your application, then in Windows **Task Manager** check whether your application's process name contains (32-bit). For example, the process name for the 32-bit version of Excel is Microsoft Excel (32-bit); the process name for the 64-bit version of Excel is Microsoft Excel. On older versions of Windows, 32-bit applications contain *32 in the process name rather than (32-bit). For applications such as Oracle or SQL Server that run as a service, check the *Background processes* list rather than the **Apps** list in **Task Manager**. If you're running a programming language from within a Windows command-line shell (for example, Command or PowerShell), in your shell, run the .exe file for the programming language. For example, run perl, php, python, or node. In **Task Manager**, expand the process list for **Windows Command Processor** or **Windows PowerShell**, as appropriate, and check whether the process for your programming language contains (32-bit).

3. Do one of the following:
 - To create a data source that only the user you're currently logged in as can access, choose the **User** tab.
If your application is a Windows service (for example, SQL Server or Oracle) creating a user data source won't work, unless the service is running as the same user you're logged in as.
 - To create a data source that all users on this computer can access, choose the **System** tab.
4. Choose **Add**.
5. In the list of ODBC drivers, select Easysoft ODBC-PayPal Driver, and then choose **Finish**.
6. Complete the Easysoft ODBC-PayPal Driver configuration dialog box.
To find out how to do this, refer to the Connection attributes section.
7. To test the connection to PayPal, choose **Test**.
Note that this doesn't test that the Easysoft ODBC-PayPal Driver is licensed. If you haven't yet [licensed](#) the Easysoft ODBC-PayPal Driver, this ODBC data source won't work with your

application, even if the **Test** button succeeds.

Connection attributes

- [Setting on Windows](#)

Setting on Windows

The Easysoft ODBC-PayPal Driver data source configuration dialog box, accessible when you create or edit an Easysoft ODBC-PayPal Driver data source in **ODBC Data Source Administrator** contains these fields:

Name	Value
DSN	The name of the data source. You'll need to specify this in your application. For example, your application may prompt you to choose this from a list of DSNs.
Description	Some applications display this to help users identify a particular data source.
Client Id	If you have created your own PayPal OAuth or Rest client app, enter the app's client id here. Otherwise, leave this field blank.
Client Secret	The client secret for your PayPal OAuth or Rest client app.
Sandbox	Turn on this option if you're connecting to the PayPal sandbox.
Proxy	If you use a proxy server connect to PayPal, use this attribute to specify this server's details. Use this format: <i>http://address:port</i> where <i>address</i> is the host name or IP address of the proxy server and <i>port</i> is the proxy server port. For example: http://squid.example.com:8080
Proxy User	If your proxy server has authentication turned on, use this attribute to supply a user name that can connect to the proxy server. The Easysoft ODBC-PayPal Driver supports the Basic and Digest proxy authentication schemes.
Proxy Password	The password for the proxy user.
Logging	Whether to turn on Easysoft ODBC-PayPal Driver logging. Normally, you'll only do this if so directed by the Easysoft support team.
Log File	The file name and path of the file you want the driver to write log information to. For example: C:\Windows\Temp\Easysoft.log If the file doesn't exist, the Easysoft ODBC-PayPal Driver creates it.

Name	Value
Flush On Update	<p>Whether the Easysoft ODBC-PayPal Driver flushes its cache when it is used to update or delete PayPal data. When this setting is turned on, the effect of your changes will apply in your current session. For example, you turn on this setting and delete a record. If you then do a select in the same session, the record will no longer be present in the result set. If you do the same with Flush On Update turned off, the result set contains the deleted record until the Easysoft ODBC-PayPal Driver cache expires or you reconnect your application (for example, you restart your SQL Server instance).</p>
Cache Timeout	<p>The time in seconds that Easysoft ODBC-PayPal Driver stores records in its cache. If you set the timeout to 0, the Easysoft ODBC-PayPal Driver always caches records. The default value for Cache Timeout is 0.</p> <p>The Easysoft ODBC-PayPal Driver flushes the cache when you close the connection to PayPal. (For example, you quit your application or restart your application's service.)</p> <p>To reduce PayPal API usage and reduce the amount of data retrieved over the network, the Easysoft ODBC-PayPal Driver caches PayPal records. By default, a record remains in the cache until the timeout elapses.</p> <p>Note that any changes to the record that happen at the PayPal end aren't reflected in the cached copy until the cache is refreshed (that is, the timeout expires and the record is fetched again). If a cached record is changed by the Easysoft ODBC-PayPal Driver, the cache is refreshed to reflect this change.</p>
Max Num	<p>The maximum number of records to return for each PayPal API request the Easysoft ODBC-PayPal Driver makes.</p>

DSN-less connections

Some applications allow you to make an ODBC connection without configuring a data source. To do this, you supply a connection string that contains the ODBC driver name and other driver-specific attribute-value pairs.

- Client_Secret
- Client_Id
- Filter_Local
- Flush_On_Update
- Logfile
- Logging
- Max_Num
- Proxy
- Proxy_Pass
- Proxy_User
- Query_Timeout
- Sandbox

Here's an example connection string for the Windows version of the Easysoft ODBC-PayPal Driver:

```
Driver={Easysoft PayPal ODBC Driver};Client_Id=ABC1234;Client_Secret=DEF5678;
```

For a list of the other attributes you can set in the connection string, refer to [this section](#).

Logging

If you report an issue to us, we may ask you to turn on ODBC Driver Manager or Easysoft ODBC-PayPal Driver logging, to help us diagnose the cause of the issue.

To turn on logging, refer to the following sections.

Note

If your application is a service (for example, Oracle or SQL Server), you may need to restart the service before enabling logging takes effect. To do this on Linux or UNIX, use `service`, `systemctl`, or a vendor-supplied script. To do this on Windows, use the Windows **Services** app.

ODBC Driver Manager logging on Windows

1. In the Windows **Taskbar Search** box, enter "Run".
2. Do one of the following:
 - If your application is 64-bit, in the **Run** dialog box, enter:

```
odbcad32.exe
```

-Or-

- If your application is 32-bit, in the **Run** dialog box, enter:

```
%windir%\syswow64\odbcad32.exe
```

Note

If you're not sure whether your application is 32-bit or 64-bit, start your application, then in Windows **Task Manager** check whether your application's process name contains (32-bit). For example, the process name for the 32-bit version of Excel is Microsoft Excel (32-bit); the process name for the 64-bit version of Excel is Microsoft Excel. On older versions of Windows, 32-bit applications contain *32 in the process name rather than (32-bit). For applications such as Oracle or SQL Server that run as a service, check the *Background processes* list rather than the **Apps** list in **Task Manager**. If you're running a programming language from within a Windows command-line shell (for example, Command or PowerShell), in your shell, run the .exe file for the programming language. For example, run `perl`, `php`, `python`, or `node`. In **Task Manager**, expand the process list for **Windows Command Processor** or **Windows PowerShell**, as appropriate, and check whether the process for your programming language contains (32-bit).

3. Choose the **Tracing** tab.
4. Select **Machine-Wide tracing for all identities**.
5. Enter a log file name and path in the space provided. For example:

```
C:\Windows\Temp\SQL.log
```

6. Choose **Start Tracing Now**.

Note With SQL Server, you may get two Driver Manager log files, we need both. The first log file is in the folder that you specify in **ODBC Data Source Administrator**. The second file's location is defined by SQL Server. Two possible locations are the top-level folder (for example, C:\SQL.log) or the SQL Server temporary folder (for example, C:\Users\MSSQL\$SQLEXPRESS\AppData\Local\Temp\SQL.log). If the Driver Manager log file isn't in these folders, search for it on the drive where SQL Server is installed.

Easysoft ODBC-PayPal Driver logging on Windows

1. In the Windows **Taskbar Search** box, enter "Run".
2. Do one of the following:
 - If your application is 64-bit, in the **Run** dialog box, enter:

```
odbcad32.exe
```

-Or-

- If your application is 32-bit, in the **Run** dialog box, enter:

```
%windir%\syswow64\odbcad32.exe
```

Note If you're not sure whether your application is 32-bit or 64-bit, start your application, then in Windows **Task Manager** check whether your application's process name contains (32-bit). For example, the process name for the 32-bit version of Excel is Microsoft Excel (32-bit); the process name for the 64-bit version of Excel is Microsoft Excel. On older versions of Windows, 32-bit applications contain *32 in the process name rather than (32-bit). For applications such as Oracle or SQL Server that run as a service, check the *Background processes* list rather than the **Apps** list in **Task Manager**. If you're running a programming language from within a Windows command-line shell (for example, Command or PowerShell), in your shell, run the .exe file for the programming language. For example, run perl, php, python, or node. In **Task Manager**, expand the process list for **Windows Command Processor** or **Windows PowerShell**, as appropriate, and check whether the process for your programming language contains (32-bit).

3. Do one of the following:
 - If you configured a system data source, choose the **System DSN** tab.
 - Or-
 - If you configured a system data source, choose the **System DSN** tab.
4. Choose your Easysoft ODBC-PayPal Driver data source from the list, and then choose **Configure**.
5. In the Easysoft ODBC-PayPal Driver data source configuration dialog box, turn on **Driver Logging**.
6. Enter a log file name and path in the space provided. For example:

```
C:\Windows\Temp\Easysoft.log
```

Finding out what product version you have on Windows

If you have an issue with the Easysoft ODBC-PayPal Driver, we may ask you to tell us what your product version is. To find this out:

1. In the Windows **Taskbar**, enter “Add or remove programs” in the Windows **Search** box.
2. Select Easysoft ODBC-PayPal Driver in the list.

The product version displays below.

Client applications

How to work with PayPal data in some example applications and programming languages:

- [Microsoft Access](#)
- [Microsoft Excel](#)
- [Microsoft Power BI](#)
- [SQL Server](#)
- [Oracle](#)
- [LibreOffice](#)
- [Go](#)
- [Node.js](#)
- [Perl](#)
- [PHP](#)
- [Python](#)
- [R](#)

Microsoft Access

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Access.
2. [Configure an ODBC data source](#).
3. Choose one of the following ways to work with your PayPal data in Access.

Linking a table

1. Open your Microsoft Access database.
2. Choose **External Data**.
3. In the **New Data Source** list, choose **From Other Sources > ODBC Database**.
4. In the **Get External Data** screen, choose **Link to the data source by creating a linked table**, and choose **OK**.
5. In the **Select Data Source** dialog box, choose the **Machine Data Source** tab.
6. Choose your Easysoft ODBC-PayPal Driver ODBC data source from the **Machine Data Source** list, and then choose **OK**.
7. In the **Link Tables** dialog box, choose the tables that you want to link to, and then choose **OK**.

Importing a table

1. Open your Microsoft Access database.
2. Choose **External Data**.
3. In the **New Data Source** list, choose **From Other Sources > ODBC Database**.
4. In the **Get External Data** screen, choose **Import the source data into a new table in the current database**, and choose **OK**.
5. In the **Select Data Source** dialog box, choose the **Machine Data Source** tab.
6. Choose your Easysoft ODBC-PayPal Driver ODBC data source from the **Machine Data Source** list, and then choose **OK**.
7. In the **Import Objects** dialog box, choose the tables you want to import, and then choose **OK**.

Microsoft Excel

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Excel.
2. [Configure an ODBC data source](#).
3. Choose one of the following ways to work with your PayPal data in Excel.

Data Connection Wizard

1. Choose **Data > Get Data > From Other Sources > From ODBC**.
2. Choose your Easysoft ODBC-PayPal Driver data source from the list, and then choose **OK**.
3. Enter the user name and password for your data store if applicable, otherwise, enter any text string to get past this stage. Choose **Next**.
4. Choose the table that contains the data you want to retrieve, and then choose **Load**.

Microsoft Query

1. Choose **Data > Get Data > From Other Sources > From Microsoft Query**.
2. In the **Choose Data Source** dialog box, choose your PayPal data source from the list, and then choose **OK**.
3. In the **Query Wizard**, choose the columns that contain the data you want to retrieve, and then click **Next**.
4. If you want to return a subset of the data, use the **Filter Data** screen to filter the results of your query (this is the equivalent of a SQL WHERE clause), and then choose **Next**.
5. If you want to change the sort order of your data, use the **Sort Order** screen to sort the results of your query (this is the equivalent of a SQL ORDER BY clause), and then choose **Next**. Choose **Finish** to return your PayPal data to Excel.

PowerPivot

1. On the **PowerPivot** tab, choose **Manage**.
2. In the **PowerPivot** window, choose **Get External Data > From Other Sources**.
3. In the **Connect to a Data Source** list, choose **Others (OLEDB/ODBC)**
4. In the **Specify a Connection** screen, enter a name for your connection in the space provided. Then choose **Build**.
5. In the **Data Link Properties** box, choose your Easysoft ODBC-PayPal Driver data source from the list, and then choose **OK**.
6. Choose **Next**.
7. Choose how to import your PayPal data and then choose **Finish**.
8. Choose **Close** to return the data to Excel.

Microsoft Power BI

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Power BI Desktop.
2. [Configure an ODBC data source](#).
3. In Power BI Desktop, choose **Get data from another source**.
4. In the **Get Data** dialog box, choose **ODBC**, and then choose **Connect**.
5. In the **From ODBC** dialog box, choose your PayPal data source, and then choose **OK**.
6. Enter your database user name and password when prompted.

If you make a mistake when entering the user name and password, cancel the connection process. Then in Power BI Desktop **Options and Settings**, edit the data source. Specify the correct user name or password in the data source credentials dialog box. Otherwise, Power BI Desktop will continue to use the cached incorrect credentials.

Note If you do not normally need to enter a user name and password, enter some dummy strings in the spaces provided.

7. In the **Navigator** dialog box, choose the tables you want to analyse in Power BI Desktop, and then choose **Load**.

Your PayPal data is now available to use in Power BI visualisations.

Microsoft SQL Server

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as SQL Server.
2. [Configure an ODBC data source](#).
3. In Microsoft SQL Server Management Studio, connect to the SQL Server instance you want to create the linked server against.

You need to log on with an account that is a member of the SQL Server sysadmin fixed server role to create a linked server.

4. Right-click **Server Objects**. From the pop-up menu choose **New > Linked Server**.
5. In the **Linked server** box, enter "PayPal".
6. From the **Provider** list, choose **Microsoft OLE DB Provider for ODBC drivers**.
7. In the **Data source** box, enter the name of your PayPal data source, and then choose **OK**.

SQL Server verifies the linked server by testing the connection.

- If you get the error "Specified driver could not be loaded due to system error 126: The specified module could not be found," choose **Yes** when prompted whether to keep the linked server. You need to restart your SQL Server instance before you can use the linked server. If SQL Server was already running when you installed the Easysoft ODBC-PayPal Driver, it will not have the latest version of the System Path environment variable. The Easysoft ODBC-PayPal Driver Setup program adds entries for the driver to the System Path. Restarting the instance makes these changes available to SQL Server, allowing it to load the Easysoft ODBC-PayPal Driver.
 - If you made a mistake when specifying the Easysoft ODBC-PayPal Driver, you get the error "Data source name not found and no default driver specified." If you get this error, choose **No** when prompted whether to keep the linked server and edit the value in the **Data source** box.
8. You can query your Easysoft ODBC-PayPal Driver data either by using a:
 - Four part table name in a distributed query.

A four part table name has the format:

```
server_name.[database_name].[schema_name].table_name
```

For data stores where there is no database or schema, Easysoft ODBC drivers return a "dummy" value for both identifiers, because some ODBC applications expect there to be a database and a schema. To find out the identifier names, run:

```
EXEC sp_tables_ex @table_server = 'PayPal'
```

If present, include these identifiers in your SQL statements. If not present, omit them. For example:

```
SELECT * FROM [PayPal]..DBO.MyTable
```

The capitalisation of the table name must be the same as it is in the result set returned by `sp_tables_ex`.

- Pass-through query in an OPENQUERY function. For example:

```
SELECT * FROM OPENQUERY([PayPal], 'SELECT * FROM MyTable')
```

```
-- If you get an "RPC not enabled for this server" message, right-click your
-- linked server and choose Properties.
```

```
-- In Server Options, set both RPC and RPC Out to `True`.
```

```
EXEC ('INSERT INTO MyTable (MyCol1, MyCol2, MyCol3, MyCol4, MyCol5)
VALUES ('MyValue1' , 'MyValue2' , 'MyValue3' , 'MyValue4' ,
'MyValue5')')
AT PayPal

UPDATE OPENQUERY ([PayPal], 'SELECT MyCol1 FROM MyTable WHERE MyCol1 =
'MyValue1''') SET MyCol1='MyNewValue'
DELETE OPENQUERY (PayPal, 'SELECT MyCol1 FROM MyTable WHERE MyCol1 =
'MyValue1''')
```

SQL Server sends pass-through queries as uninterpreted query strings to the PayPal. This means that SQL Server does not apply any kind of logic to the query or try to estimate what that query will do.

Oracle

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Oracle.
2. [Configure an ODBC data source.](#)
3. Follow the instructions for your Oracle platform.

Connecting PayPal to Oracle on Windows

1. Create a DG4ODBC init file on your Oracle machine. To do this, change to the %ORACLE_HOME%\hs\admin directory. Create a copy of the file initdg4odbc.ora. Name the new file initPaypal.ora.

Note In these instructions, replace %ORACLE_HOME% with the location of your Oracle HOME directory. For example, C:\app\product\21c\homes\OraDB21Home1.

2. Ensure these parameters and values are present in your init file:

```
HS_FDS_CONNECT_INFO = "PayPal"
```

Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.

3. Comment out the line that enables DG4ODBC tracing. For example:

```
#HS_FDS_TRACE_LEVEL = <trace_level>
```

4. Add an entry to %ORACLE_HOME%\network\admin\listener.ora that creates a SID_NAME for DG4ODBC. For example:

```
SID_LIST_LISTENER =
(SID_LIST =
(SID_DESC=
(SID_NAME=Paypal)
(ORACLE_HOME=%ORACLE_HOME%)
(PROGRAM=dg4odbc)
)
)
```

5. Add a DG4ODBC entry to %ORACLE_HOME%\network\admin\tnsnames.ora that specifies the SID_NAME created in the previous step. For example:

```
Paypal =
(DESCRIPTION =
(AADDRESS = (PROTOCOL = TCP)(HOST = oracle_host)(PORT = 1521))
(CONNECT_DATA =
(SID = Paypal)
)
(HS = OK)
)
```

Replace oracle_host with the host name of your Oracle machine.

6. Start (or restart) the Oracle Listener:

```
cd %ORACLE_HOME%\bin
lsnrctl stop
```

```
lsnrctl start
```

7. Connect to your Oracle database in SQL*Plus.
8. In SQL*Plus, create a database link for PayPal. For example:

```
CREATE PUBLIC DATABASE LINK PaypalLink
  CONNECT TO "dbuser" IDENTIFIED BY "dbpassword"
  USING 'Paypal';
```

Replace dbuser and dbpassword with your backend user name and password, if applicable.

9. Try querying and updating your PayPal data. For example:

```
SELECT "MyCol1" FROM "MyTable"@PaypalLink;

DECLARE
  num_rows integer;
BEGIN
num_rows:=DBMS_HS_PASSTHROUGH.EXECUTE_IMMEDIATE@PaypalLink
('INSERT INTO MyTable (MyCol1, MyCol2, MyCol3, MyCol4, MyCol5) VALUES
('MyValue1', 'MyValue2', 'MyValue3', 'MyValue4', 'MyValue5'));
END;
/

DECLARE
  num_rows integer;
BEGIN
num_rows:=DBMS_HS_PASSTHROUGH.EXECUTE_IMMEDIATE@PaypalLink
('UPDATE "MyTable" SET "MyCol1" = 'MyNewValue' WHERE "MyCol1" = 'MyValue1');
END;
/

DECLARE
  num_rows integer;
BEGIN
num_rows:=DBMS_HS_PASSTHROUGH.EXECUTE_IMMEDIATE@PaypalLink
('DELETE from "MyTable" WHERE MyCol1 = 'MyValue1');
END;
/
```

Notes

- If you have problems connecting to PayPal from Oracle, enable DG4ODBC tracing and check the trace files written to the %ORACLE_HOME%\hs\trace directory. To enable DG4ODBC tracing, add the line HS_FDS_TRACE_LEVEL = DEBUG to initPayPal.ora and then start or restart the Oracle listener. If the trace directory does not exist, create it.
- If you enable ODBC Driver Manager tracing, but do not get a log file in the location you specify, try looking in the top-level folder (for example, C:\SQL.log). Alternatively, in **ODBC Data Source Administrator**, change the trace file location to the Windows TEMP directory.

LibreOffice

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as LibreOffice.
2. [Configure an ODBC data source](#).
3. Choose **File > New > Database**.
4. Choose **Connect to an existing database**.
5. Choose **ODBC** in the list, and then choose **Next**.
6. Choose **Browse**, double-click your data source, and then choose **Next**.
7. If your database requires a database user name, enter it in the **User name** box. If this user needs to supply a password choose the **Password required** check box.
8. Choose **Finish**.
9. Save the database when prompted.

The database opens in a new Base window. From here you can access your data.

10. In the left pane of the database window, choose the **Tables** icon to display a hierarchy of tables. Enter the database password if prompted, and then choose **OK**.
11. To retrieve the data in a table, in the **Tables** pane, double-click a table.
12. Choose the **Queries** icon to create a query.

Use any of the methods listed in the **Tasks** pane to create a query.

Go

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Go.
2. [Configure an ODBC data source.](#)
3. Install the `odbc` package for Go:

```
go mod init test
go get github.com/alexbrainman/odbc
```

4. Create and then use Go to run this script, which retrieves some PayPal data:

```
package main

import (
    _ "github.com/alexbrainman/odbc"
    "database/sql"
    "log"
)

func main() {
    // Replace the DSN value with the name of your ODBC data source.
    db, err := sql.Open("odbc",
        "DSN=PayPal")
    if err != nil {
        log.Fatal(err)
    }

    var (
        name string
    )

    rows, err := db.Query("SELECT MyCol1 FROM MyTable")
    if err != nil {
        log.Fatal(err)
    }
    defer rows.Close()
    for rows.Next() {
        err := rows.Scan(&name)
        if err != nil {
            log.Fatal(err)
        }
        log.Println(name)
    }
    err = rows.Err()
    if err != nil {
        log.Fatal(err)
    }

    defer db.Close()
}
```

Node.js

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Node.js.
2. [Configure an ODBC data source.](#)
3. Install the odbc module for Node.js:

```
npm install odbc
```

4. Create and then use Node.js to run this script, which retrieves some PayPal data:

```
const odbc = require('odbc');
// Replace PayPal with the name of your Easysoft ODBC-PayPal Driver
// data source.
const connection = odbc.connect('DSN=PayPal', (error, connection) => {
  connection.query('SELECT MyCol1 FROM MyTable', (error, result) => {
    if (error) { console.error(error) }
    console.log(result);
  });
});
```

5. This script retrieves the tables and views in your Easysoft ODBC-PayPal Driver data source:

```
const odbc = require('odbc');
const connection = odbc.connect('DSN=PayPal', (error, connection) => {
  connection.tables(null, null, null, null, (error, result) => {
    if (error) { return; }
    const util = require('util');
    console.log(util.inspect(result, {maxLength: null, depth:null}))
  });
});
```

6. This script retrieves the names of the columns in these tables and views:

```
const odbc = require('odbc');
const connection = odbc.connect('DSN=PayPal', (error, connection) => {
  connection.columns(null, null, null, null, (error, result) => {
    if (error) { return; }
    const util = require('util');
    console.log(util.inspect(result, {maxLength: null, depth:null}))
  });
});
```

7. These scripts insert, update, and then delete some PayPal data:

```
const odbc = require("odbc");
const connection = odbc.connect("DSN=PayPal", (error, connection) => {
  connection.query("INSERT INTO
  MyTable (
    MyCol1,
    MyCol2,
    MyCol3,
    MyCol4,
    MyCol5
```

```
)
VALUES
(
  'MyValue1',
  'MyValue2',
  'MyValue3',
  'MyValue4',
  'MyValue5'
)", (error, result) => {
  if (error) { console.error(error) }
  console.log(result);
});
});

const odbc = require("odbc");
const connection = odbc.connect("DSN=PayPal", (error, connection) => {
  connection.query("UPDATE MyTable SET MyCol1 = 'MyNewValue' WHERE MyCol1 =
'MyValue1'", (error, result) => {
    if (error) { console.error(error) }
    console.log(result);
  });
});

const odbc = require("odbc");
const connection = odbc.connect("DSN=PayPal", (error, connection) => {
  connection.query("DELETE FROM MyTable WHERE MyCol1 = 'MyValue1'", (error,
result) => {
    if (error) { console.error(error) }
    console.log(result);
  });
});
```

Perl

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Perl.
2. [Configure an ODBC data source](#).
3. Check whether your Perl distribution supports ODBC:

```
perl -e 'use DBD::ODBC;'
```

4. Do one of the following:
 - If you get no output, your Perl distribution supports ODBC. Skip to the next step.
 - If you get:

```
Can't locate DBD/ODBC.pm
```

you need to [install DBD::ODBC](#) before you can use the Easysoft ODBC-PayPal Driver to connect to PayPal.

5. Create and then use Perl to run this script, which retrieves some PayPal data:

```
use strict;
use DBI;
# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sql = "SELECT MyCol1 FROM MyTable";

my $sth = $dbh->prepare($sql)
    or die "Can't prepare statement: $DBI::errstr";

$sth->execute();

my($Col);

# Fetch and display the result set values.
while(($Col) = $sth->fetchrow()){
    print("$Col\n");
}

$dbh->disconnect if ($dbh);
```

6. This script retrieves the tables and views in your Easysoft ODBC-PayPal Driver data source:

```
use strict;
use DBI;
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sth = $dbh->table_info()
    or die "Can't prepare statement: $DBI::errstr";

my @row;

while (@row = $sth->fetchrow_array) {
    print join(", ", @row), "\n";
}
```

```
}
$dbh->disconnect if ($dbh);
```

7. This script retrieves the names of the columns in these tables and views:

```
use strict;
use DBI;
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sth = $dbh->column_info('', '', '', '')
    or die "Can't prepare statement: $DBI::errstr";

my @row;
while (@row = $sth->fetchrow_array) {
    print join(", ", @row), "\n";
}

$dbh->disconnect if ($dbh);
```

8. These scripts insert, update, and then delete some PayPal data:

```
use strict;
use DBI;
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sth = $dbh->prepare(q/INSERT INTO MyTable (MyCol1, MyCol2, MyCol3, MyCol4,
MyCol5) VALUES (?, ?, ?, ?, ?)/)
    or die "Can't prepare statement: $DBI::errstr";

$sth->execute('MyValue1', 'MyValue2', 'MyValue3', 'MyValue4', 'MyValue5');

$dbh->disconnect if ($dbh);

use strict;
use DBI;
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sth = $dbh->prepare('UPDATE MyTable SET MyCol1 = \'MyNewValue\' WHERE MyCol1
= ?')
    or die "Can't prepare statement: $DBI::errstr";

$sth->execute('MyValue1');

$dbh->disconnect if ($dbh);

use strict;
use DBI;
my $dbh = DBI-> connect('dbi:ODBC:PayPal');

my $sth = $dbh->prepare('DELETE FROM MyTable WHERE MyCol1 = ?')
    or die "Can't prepare statement: $DBI::errstr";
```

```
$sth->execute('MyValue1');  
  
$dbh->disconnect if ($dbh);
```

Further information

- [Perl DBI DBD::ODBC tutorial: Drivers, data sources, and connection](#)

PHP

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as PHP.
2. [Configure an ODBC data source](#).
3. Check whether your PHP distribution supports ODBC. In `php.ini`, make sure there is no comment character (`;`) before the `extension_dir` and `extension=odbc` settings (`;extension_dir=directory` becomes `extension_dir=directory` and `;extension=odbc` becomes `extension=odbc`).
4. Create and then use PHP to run this script, which retrieves some PayPal data:

```
<?php
// Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data
source.
// If your database requires a user name and password, supply them in the
odbc_connect_call.
$con = odbc_connect("PayPal", "", "");
$stmt = odbc_exec($con, "SELECT * FROM MyTable");
// You may need to change the capitalisation of MyCol1 to all upper case or all
lower case.
while ($row = odbc_fetch_array($stmt)) {
    echo "MyCol1 = ", $row["MyCol1"], "\n";
}
odbc_close($con);
?>
```

5. This script retrieves the tables and views in your Easysoft ODBC-PayPal Driver data source:

```
<?php
$con = odbc_connect("PayPal", "", "");
$tables = odbc_tables($con);
while (($row = odbc_fetch_array($tables))) {
    print_r($row);
}
odbc_close($con);
?>
```

6. This script retrieves the names of the columns in these tables and views:

```
<?php
$con = odbc_connect("PayPal", "", "");
$columns = odbc_columns($con);
while (($row = odbc_fetch_array($columns))) {
    print_r($row);
}
odbc_close($con);
?>
```

7. These scripts insert, update, and then delete some PayPal data:

```
<?php
$conx = odbc_connect("PayPal", "", "");
$stmt = odbc_prepare($conx, "INSERT INTO MyTable (MyCol1, MyCol2, MyCol3,
MyCol4, MyCol5) VALUES (?, ?, ?, ?, ?)");
```

```
$success = odbc_execute($stmt, array('MyValue1', 'MyValue2', 'MyValue3',
'MyValue4', 'MyValue5'));
odbc_close($cnx);
?>

<?php
$cnx = odbc_connect("PayPal", "", "");
$stmt = odbc_prepare($cnx, "UPDATE MyTable SET MyCol1 = 'MyNewValue' WHERE
MyCol1 = ?");
$success = odbc_execute($stmt, array('MyValue1'));
odbc_close($cnx);
?>

<?php
$cnx = odbc_connect("PayPal", "", "");
$stmt = odbc_prepare($cnx, "DELETE FROM MyTable WHERE MyCol1 = ?");
$success = odbc_execute($stmt, array('MyValue1'));
odbc_close($cnx);
?>
```

Further information

- [Easysoft PHP tutorials and code samples](#)

Python

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as Python.
2. [Configure an ODBC data source](#).
3. Check whether your Python distribution supports ODBC.

```
pip list
```

If you don't have pip installed:

```
curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py
python get-pip.py
```

4. Do one of the following:
 - If the output contains pyodbc, your Python distribution supports ODBC. Skip to the next step.
 - If the output does not contain pyodbc, use pip to install this module:

```
pip install pyodbc
```

5. Create and then use Python to run this script, which retrieves some PayPal data:

```
import pyodbc

# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
sql = "SELECT MyCol1 FROM MyTable"
cursor.execute(sql)
rows = cursor.fetchall()
# You may need to change the capitalisation of MyCol1 to all upper case or all
lower case.
for row in rows:
    print(row.MyCol1)
exit()
```

6. This script retrieves the tables and views in your Easysoft ODBC-PayPal Driver data source:

```
import pyodbc

# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
cursor.tables()
rows = cursor.fetchall()
for row in rows:
    print(row.table_name)
exit()
```

7. This script retrieves the names of the columns in these tables and views:

```
import pyodbc

# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
```

```
cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
cursor.columns()
rows = cursor.fetchall()
for row in rows:
    print(row.table_name, row.column_name)
exit()
```

8. These scripts insert, update, and then delete some PayPal data:

```
import pyodbc

cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
sql = "INSERT INTO MyTable (MyCol1, MyCol2, MyCol3, MyCol4, MyCol5) VALUES (?, ?, ?, ?, ?)"
cursor.execute(sql, 'MyValue1', 'MyValue2', 'MyValue3', 'MyValue4', 'MyValue5')
cursor.commit()
exit()
```

```
import pyodbc

cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
sql = "UPDATE MyTable SET MyCol1 = 'MyNewValue' WHERE MyCol1 = ?"
cursor.execute(sql, 'MyValue1')
cursor.commit()
exit()
```

```
import pyodbc

cnxn = pyodbc.connect("DSN=PayPal")
cursor = cnxn.cursor()
sql = "DELETE FROM MyTable WHERE MyCol1 = ?"
cursor.execute(sql, 'MyValue1')
cursor.commit()
exit()
```

Further information

- [Easysoft Python tutorials and code samples](#)

R

1. [Install the Easysoft ODBC-PayPal Driver](#) on same computer as R.
2. [Configure an ODBC data source](#).
3. In R Console, check whether your R distribution supports ODBC.

```
library("RODBC")
```

4. Do one of the following:
 - If you get no output, you have the ODBC library for R. Skip to the next step.
 - If you get an "there is no package" error, install the ODBC library for R:

```
install.packages("RODBC")
```

5. Create and then use R to run this script, which retrieves some PayPal data:

```
library("RODBC")
# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
ch <- odbcConnect("PayPal")
sqlQuery(ch, paste("SELECT MyCol1 FROM MyTable"))
odbcClose(ch)
quit()
```

6. This script retrieves the tables and views in your Easysoft ODBC-PayPal Driver data source:

```
library("RODBC")
# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
ch <- odbcConnect("PayPal")
sqlTables(ch)
odbcClose(ch)
quit()
```

7. This script retrieves the names of the columns in the specified table or view:

```
library("RODBC")
# Replace PayPal with the name of your Easysoft ODBC-PayPal Driver data source.
ch <- odbcConnect("PayPal")
# You may need to change the capitalisation of MyTable to all upper case or all
lower case.
sqlColumns(ch, sqtable="MyTable")
odbcClose(ch)
quit()
```

8. These scripts insert, update, and then delete some PayPal data:

```
library("RODBC")
ch <- odbcConnect("PayPal")
sqlQuery(ch, paste("INSERT INTO MyTable (MyCol1, MyCol2, MyCol3, MyCol4, MyCol5)
VALUES ('MyValue1', 'MyValue2', 'MyValue3', 'MyValue4', 'MyValue5')"))
odbcClose(ch)
quit()

library("RODBC")
```

```
ch <- odbcConnect("PayPal")
sqlQuery(ch, paste("UPDATE MyTable SET MyCol1 = 'MyNewValue' WHERE MyCol1 =
'MyValue1'"))
odbcClose(ch)
quit()

library("RODBC")
ch <- odbcConnect("PayPal")
sqlQuery(ch, paste("DELETE FROM MyTable WHERE MyCol1 = 'MyValue1'"))
odbcClose(ch)
quit()
```

About the Easysoft ODBC-PayPal Driver

The Easysoft ODBC-PayPal Driver provides real-time access to PayPal data from any application that supports ODBC.

- [ODBC API and scalar functions](#)
- [SQL support](#)

ODBC API and scalar functions

API functions

Use this table to find out what ODBC API functions the Easysoft ODBC-PayPal Driver supports:

Function	Status
SQLAllocConnect	Supported
SQLAllocEnv	Supported
SQLAllocHandle	Supported
SQLAllocStmt	Supported
SQLBindCol	Supported
SQLBindParameter	Supported
SQLBrowseConnect	Not supported
SQLBulkOperations	Supported
SQLCancel	Supported
SQLCloseCursor	Supported
SQLColAttribute	Supported
SQLColAttributes	Supported
SQLColumnPrivileges	Not supported
SQLColumns	Supported
SQLConnect	Supported
SQLCopyDesc	Supported
SQLDisconnect	Supported
SQLDriverConnect	Supported
SQLDrivers	Supported
SQLEndTran	Supported
SQLError	Supported
SQLExecDirect	Supported
SQLExecute	Supported
SQLExtendedFetch	Supported
SQLFetch	Supported
SQLFetchScroll	Supported
SQLForeignKeys	Supported
SQLFreeConnect	Supported
SQLFreeEnv	Supported
SQLFreeHandle	Supported
SQLFreeStmt	Supported

Function	Status
SQLGetConnectAtt	Supported
SQLGetConnectOption	Supported
SQLGetCursorName	Supported
SQLGetData	Supported
SQLGetDescField	Supported
SQLGetDescRec	Supported
SQLGetDiagField	Supported
SQLGetDiagRec	Supported
SQLGetEnvAttr	Supported
SQLGetFunctions	Supported
SQLGetInfo	Supported
SQLGetStmtAttr	Supported
SQLGetStmtOption	Supported
SQLGetTypeInfo	Supported
SQLMoreResults	Supported
SQLNativeSql	Supported
SQLNumParams	Supported
SQLNumResultCols	Supported
SQLParamData	Supported
SQLParamOptions	Supported
SQLPrepare	Supported
SQLPrimaryKeys	Supported
SQLProcedureColumns	Supported
SQLProcedures	Supported
SQLPutData	Supported
SQLRowCount	Supported
SQLSetConnectAttr	Supported
SQLSetConnectOption	Supported
SQLSetCursorName	Supported
SQLSetDescField	Supported
SQLSetDescRec	Supported
SQLSetEnvAttr	Supported
SQLSetParam	Supported
SQLSetPos	Not supported
SQLSetScrollOptions	Not supported

Function	Status
SQLSetStmtOption	Supported
SQLSetStmtAttr	Supported
SQLStatistics	Supported
SQLTablePrivileges	Not supported
SQLTables	Supported
SQLTransact	Supported

Scalar functions

The Easysoft ODBC-PayPal Driver supports a number of scalar functions:

- [String functions](#)
- [Numeric functions](#)
- [Time, date, and interval functions](#)
- [System functions](#)
- [Conversion functions](#)

Use either the SQL-92 or ODBC syntax with scalar functions. For example:

```
SELECT
  Invoice_Id,
  Customer_Name,
  EXTRACT(YEAR FROM Due_Date) as "Year"
FROM
  Invoice

SELECT
  Invoice_Id,
  Customer_Name,
  {fn EXTRACT(YEAR FROM Due_Date)} as "Year"
FROM
  Invoice
```

String functions

The Easysoft ODBC-PayPal Driver supports these [string](#) functions:

- `ASCII(string_exp)`
- `BIT_LENGTH(string_exp)`
- `CHAR(code)`
- `CHAR_LENGTH(string_exp)`
- `CHARACTER_LENGTH(string_exp)`
- `CONCAT(string_exp1, string_exp2)`
- `DIFFERENCE(string_exp1, string_exp2)`
- `INSERT(string_exp1, start, length, string_exp2)`
- `LCASE(string_exp)`
- `LEFT(string_exp, count)`
- `LENGTH(string_exp)`
- `LOCATE(string_exp1, string_exp2[start])`
- `LTRIM(string_exp)`

- OCTET_LENGTH(*string_exp*)
- POSITION(*char_exp* IN *char_exp*)
- REPEAT(*string_exp*, *count*)
- REPLACE(*string_exp1*, *string_exp2*, *string_exp3*)
- RIGHT(*string_exp*, *count*)
- RTRIM(*string_exp*)
- SOUNDEX(*string_exp*)
- SPACE(*count*)
- SUBSTRING(*string_exp*, *start*, *length*)
- TRIM(*string_exp*)
- UCASE(*string_exp*)

Numeric functions

The Easysoft ODBC-PayPal Driver supports these [numeric](#) functions:

- ABS(*numeric_exp*)
- ACOS(*float_exp*)
- ASIN(*float_exp*)
- ATAN(*float_exp*)
- ATAN2(*float_exp1*, *float_exp2*)
- CEILING(*numeric_exp*)
- COS(*float_exp*)
- COT(*float_exp*)
- DEGREES(*numeric_exp*)
- EXP(*float_exp*)
- FLOOR(*numeric_exp*)
- LOG(*float_exp*)
- LOG10(*float_exp*)
- MOD(*integer_exp1*, *integer_exp2*)
- PI()
- POWER(*numeric_exp*, *integer_exp*)
- RADIANS(*numeric_exp*)
- RAND([*integer_exp*])
- ROUND(*numeric_exp*, *integer_exp*)
- SIGN(*numeric_exp*)
- SIN(*float_exp*)
- SQRT(*float_exp*)
- TAN(*float_exp*)
- TRUNCATE(*numeric_exp*, *integer_exp*)

Time, date, and interval functions

The Easysoft ODBC-PayPal Driver supports these [time, date, and interval](#) functions:

- CURRENT_DATE()
- CURRENT_TIME([*time-precision*])
- CURRENT_TIMESTAMP([*timestamp-precision*])
- CURDATE()
- CURTIME()
- DAYNAME(*date_exp*)
- DAYOFMONTH(*date_exp*)
- DAYOFWEEK(*date_exp*)
- DAYOFYEAR(*date_exp*)

- `EXTRACT(extract-field FROM extract-source)`
- `HOUR(time_exp)`
- `MINUTE(time_exp)`
- `MONTH(date_exp)`
- `MONTHNAME(date_exp)`
- ``NOW()`
- `QUARTER(date_exp)`
- `SECOND(time_exp)`
- `TIMESTAMPADD(interval, integer_exp, timestamp_exp)`
- `TIMESTAMPDIFF(interval, timestamp_exp1, timestamp_exp2)`
- `WEEK(date_exp)`
- `YEAR(date_exp)`

System functions

The Easysoft ODBC-PayPal Driver supports these [system](#) functions:

- `DATABASE()`
- `IFNULL(exp, value)`
- `USER()`

Conversion functions

The Easysoft ODBC-PayPal Driver supports both the [SQL-92 CAST](#) function and the [ODBC CONVERT](#) function for conversion between compatible data types.

SQL support

The Easysoft ODBC-PayPal Driver supports these SQL statements, clauses, and operators:

- SELECT
- SELECT DISTINCT
- WHERE
- ORDER BY
- AND
- OR
- NOT
- INSERT INTO
- NULL
- UPDATE
- DELETE
- FIRST
- MIN
- MAX
- COUNT
- SUM
- AVG
- LIKE
- WILDCARDS
- IN
- BETWEEN
- ALIASES
- JOINS
- UNION
- GROUP BY
- HAVING
- EXISTS
- CASE

Index

A

Access

- importing PayPal data, [17](#)
- linking PayPal data, [17](#)

B

Base

- working with PayPal data, [24](#)

C

Cache Timeout attribute, [11](#)

caching, [11](#)

Client Id attribute, [10](#)

Client Secret attribute, [10](#)

connecting to PayPal, [9](#)

connection string attributes, [12](#)

D

data source attributes, [10](#)

data sources

- removing
 - on Windows, [8](#)

Description attribute, [10](#)

DG4ODBC

- working with PayPal data, [22](#)

DSN attribute, [10](#)

DSN-less connections, [12](#)

E

Easysoft ODBC-PayPal Driver

- adding ODBC data sources
 - on Windows, [9](#)
- caching, [11](#)
- connecting to PayPal, [9](#)
- data source attributes, [10](#)
- DSN-less connections, [12](#)
- installing
 - on Windows, [6](#)
- logging, [13](#)
- ODBC API support, [38](#)
- scalar function support, [40](#)
- SQL support, [43](#)
- uninstalling
 - on Windows, [8](#)

Excel

- importing PayPal data with Data Connection Wizard, [18](#)
- importing PayPal data with PowerPivot, [18](#)
- importing PayPal data with Query, [18](#)

F

Flush On Update attribute, [11](#)

G

Go

- working with PayPal data, [25](#)

I

installing the Easysoft ODBC-PayPal Driver, [5](#)

L

LibreOffice

- working with PayPal data, [24](#)

linked server

- working with PayPal data, [20](#)

Log File attribute, [10](#)

log files, [13](#)

Logging attribute, [10](#)

M

Max Num attribute, [11](#)

N

Node.js

- working with PayPal data, [26](#)

O

ODBC API function support, [38](#)

ODBC connection string attributes, [12](#)

ODBC data sources

- adding
 - on Windows, [9](#)
- removing
 - on Windows, [8](#)

Oracle

- working with PayPal data, [22](#)

P

Perl

- working with PayPal data, [28](#)

PHP

- working with PayPal data, [31](#)

Power BI

- importing PayPal data, [19](#)

PowerPivot

- importing PayPal data, [18](#)

Proxy attribute, [10](#)

Proxy Password attribute, [10](#)

Proxy User attribute, [10](#)

Python

- working with PayPal data, [33](#)

R

R

- working with PayPal data, [35](#)

S

Sandbox attribute, [10](#)

scalar function support, [40](#)

SQL Server

 working with PayPal data, [20](#)

SQL support, [43](#)

T

trace files, [13](#)

U

uninstalling

 on Windows, [8](#)