



# **Administration Guide**

# **Operational Analytics**

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# Operational Analytics Administration Guide Change Summary

The following table summarizes significant differences between this document and previous versions.

| Date/Version        | Description   | Reference                              |
|---------------------|---|--|
| September 2021/19   | Version update  | --                                     |
| April 2019/17.3     | Updated the Dashboard Configurator section to include information on the General tab and Bar Chart Color Schemes.   | page 4, page 5, page 6, page 7, page 9 |
|                     | Updated the Dashboard Templates section to describe how dashboard layouts can be saved for multiple users, and reset to blank or default using buttons within the dashboards. In version 17.2, the user edited the template XML files directly. | page 14                                |
|                     | Other minor updates   | --                                     |
| September 2018/17.2 | Initial version   | --                                     |

# Operational Analytics Introduction

This section provides a brief introduction to Operational Analytics.

## **Overview**

Explains how the dashboards can be configured to match your company business processes.



## Overview

This administration guide describes how to configure the Dashboard functionality available in QAD Precision.

The dashboards provide your company with a snapshot view of current compliance activity and shipping analytics. As an administrator, you need to integrate with Logi Analytics to enable this functionality.

You can configure the appearance and refine the data to meet your company's needs. It is also possible to configure the cache and currency exchange settings. This ensures that the dashboards show only the most relevant information.



# Dashboard Configurator

This section describes how to configure Operational Analytics using the Dashboard Configurator.

## **Overview**

Introduces the Dashboard Configurator.

## **Cache**

Describes how to configure the duration between cache updates.

## **General Tab**

Describes how to configure color schemes for both the Transportation Execution and Trade Compliance Dashboards.

## **Trade Compliance Dashboard**

Describes the configuration options in the Trade Compliance Dashboard tab, including chart colours and compliance types.

## **Transportation Execution Dashboard**

Describes the configuration options in the Transportation Execution Dashboard tab.



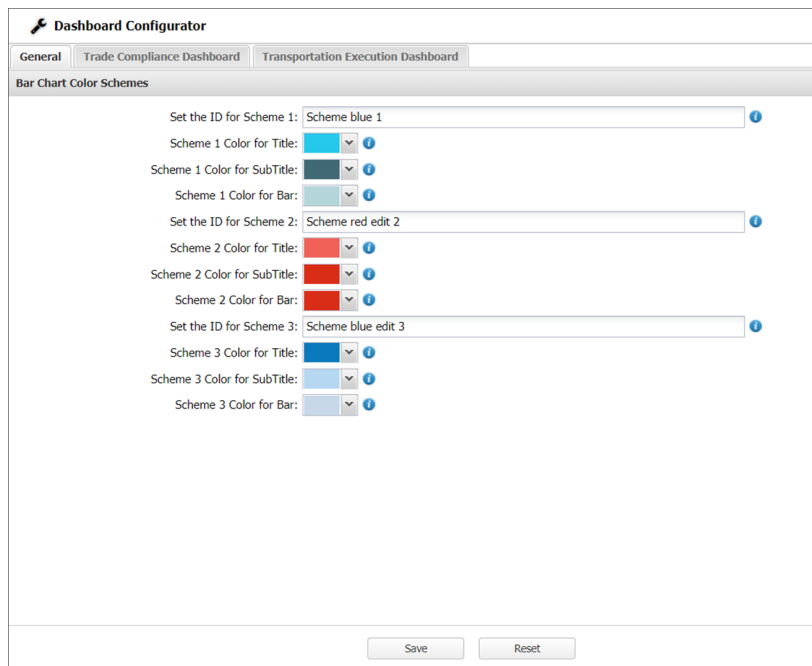
## Overview

You can configure some elements of the dashboards, such as caching, colors, and currencies, in the Dashboard Configurator.

To access the Dashboard Configurator, use the Ctrl+M keys and enter the CFGDB option.

**Fig. 2.1**

Dashboard Configurator, General Tab

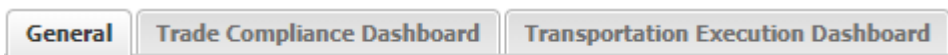


The Dashboard Configurator is divided into three tabs:

- General
- Trade Compliance Dashboard
- Transportation Execution Dashboard

**Fig. 2.2**

Dashboard Configurator Tabs, General Tab Enabled



To save any changes that you make in the Configurator, click the Save button at the bottom of the page. To revert to the settings you had before clicking save, click the Reset button.

## Cache

By default, the cache for both dashboards is set to refresh automatically every 30 minutes. You can change the default duration between cache refreshes in the Dashboard Configurator.



You can also hide the link that enables users to manually refresh the cache for a specified amount of time.

Select the tab for the relevant dashboard and locate the two cache fields.

**Fig. 2.3**

Cache Configuration

Hide/Disable Refresh Link Time (Mins):  ⓘ

Duration Between Cache Refreshes (Mins):  ⓘ

**Table 2.1**

Cache Configuration Fields and Associated System Values

| Field Name                              | Category   | Key   | Description  |
|---|------------|---|--|
| Hide/Disable Refresh Link Time (Mins)   | DASHBOARDS | Trade Compliance Dashboard = TC REFRESH HIDE<br><br>Transportation Execution Dashboard = TES REFRESH HIDE             | The Refresh Cache link on the dashboard is hidden for this number of minutes after a user clicks it. The default duration is one minute if this system value is not defined. |
| Duration Between Cache Refreshed (Mins) | DASHBOARDS | Trade Compliance Dashboard = TC CACHE REFRESH TIME<br><br>Transportation Execution Dashboard = TES CACHE REFRESH TIME | The cache refreshes automatically at intervals. Define the duration of these intervals using this field. The default is 30 minutes.  |

## General Tab

The Bar Chart Color Scheme section allows you to create and configure chart color schemes. Users can apply these color schemes to charts in both the Transportation Execution Dashboard and the Trade Compliance Dashboard.

**Fig. 2.4**

Bar Chart Color Scheme

Set the ID for Scheme 3:  ⓘ  Create Value

Scheme 3 Color for Title:  ⓘ  Create Value

Scheme 3 Color for SubTitle:  ⓘ  Create Value

Scheme 3 Color for Bar:  ⓘ  Create Value

Select the Create Value check box beside the Set the ID field to create a system value. Then enter an ID for the color scheme.

Select the Create Value check box beside the corresponding title, subtitle, and bar color fields. Then click the down arrow to open the color picker for each field.

Click Save.

In the dashboards, when users open the Edit pop-up window for a chart, they can apply a bar chart color scheme using the Scheme drop-down list.

**Table 2.2**

Bar Chart Color Scheme Description and Associated System Values

| Field Name             | Category   | Key  | Description   |
|------------------------|------------|--|---|
| Bar Chart Color Scheme | DASHBOARDS | BAR_SCHEME1:ID<br>BAR_SCHEME1:TITLE<br>BAR_SCHEME1:SUBTITLE<br>BAR_SCHEME1:BAR<br>BAR_SCHEME2:ID<br>BAR_SCHEME2:TITLE<br>BAR_SCHEME2:SUBTITLE<br>BAR_SCHEME2:BAR<br>BAR_SCHEME3:ID<br>BAR_SCHEME3:TITLE<br>BAR_SCHEME3:SUBTITLE<br>BAR_SCHEME3:BAR | Configure the title, subtitle, and bar color for charts. This system value is only defined at a global level. |

**Fig. 2.5**

Edit Pop-up Window, Scheme Drop-down List

The screenshot shows an 'Edit' pop-up window with a close button (X) in the top right corner. The window contains five dropdown menus: Client (set to ALL), Type (set to ALL), Duration (set to Today), Chart Type (set to Bar), and Scheme (set to Scheme green edit3). A 'Done' button is located at the bottom right of the window.

By default, the maximum number of configurable color schemes in the Dashboard Configurator is three. To create additional color schemes, access the System Values page, option Y3. In the Category field, type DASHBOARDS. The key is BAR\*.

Fig. 2.6

Color Schemes, System Values Page

| Category    | Key            | Value              | User | Client | Group | Env | In Use | Templ... | Environment | Last Mo... | Last Mo... |
|-------------|----------------|--------------------|------|--------|-------|-----|--------|----------|-------------|------------|------------|
| DASHBOAR... | BAR_SCHEME1:B  | #67da7c            |      |        |       |     | true   |          | *STANDARD   | PMU        | 08-23-2... |
| DASHBOAR... | BAR_SCHEME1:ID | Scheme green edit3 |      |        |       |     | true   |          | *STANDARD   | DQO        | 08-09-2... |
| DASHBOAR... | BAR_SCHEME1:S  | #269716            |      |        |       |     | true   |          | *STANDARD   | DQO        | 08-09-2... |
| DASHBOAR... | BAR_SCHEME1:TI | #205706            |      |        |       |     | true   |          | *STANDARD   | DOC        | 08-14-2... |
| DASHBOAR... | BAR_SCHEME2:B  | #de584e            |      |        |       |     | true   |          | *STANDARD   | PMU        | 08-23-2... |
| DASHBOAR... | BAR_SCHEME2:ID | Scheme red edit 2  |      |        |       |     | true   |          | *STANDARD   | DQO        | 08-02-2... |
| DASHBOAR... | BAR_SCHEME2:S  | #9f1e0e            |      |        |       |     | true   |          | *STANDARD   | DQO        | 08-07-2... |
| DASHBOAR... | BAR_SCHEME2:TI | #da0c23            |      |        |       |     | true   |          | *STANDARD   | PMU        | 08-22-2... |
| DASHBOAR... | BAR_SCHEME3:B  | #39bfcf            |      |        |       |     | true   |          | *STANDARD   | LIO        | 09-07-2... |
| DASHBOAR... | BAR_SCHEME3:ID | lio                |      |        |       |     | true   |          | *STANDARD   | AD8        | 03-27-2... |
| DASHBOAR... | BAR_SCHEME3:S  | #46cbd8            |      |        |       |     | true   |          | *STANDARD   | LIO        | 09-07-2... |
| DASHBOAR... | BAR_SCHEME3:TI | #3bb8c4            |      |        |       |     | true   |          | *STANDARD   | LIO        | 09-07-2... |
| DASHBOAR... | BAR_SCHEME4:B  | #5E5B5A            |      |        |       |     | true   |          | *STANDARD   | DQO        | 07-26-2... |
| DASHBOAR... | BAR_SCHEME4:ID | dqo                |      |        |       |     | true   |          | *STANDARD   | DQO        | 05-02-2... |
| DASHBOAR... | BAR_SCHEME4:S  | #5E5B5A            |      |        |       |     | true   |          | *STANDARD   | DQO        | 07-26-2... |
| DASHBOAR... | BAR_SCHEME4:TI | #A2A0A0            |      |        |       |     | true   |          | *STANDARD   | DQO        | 07-26-2... |
| DASHBOAR... | BAR_SCHEME5:B  | #20ba47            |      |        |       |     | true   |          | *STANDARD   | R9A        | 06-25-2... |
| DASHBOAR... | BAR_SCHEME5:ID | lio5               |      |        |       |     | true   |          | *STANDARD   | LIO        | 04-27-2... |
| DASHBOAR... | BAR_SCHEME5:S  | #20ba47            |      |        |       |     | true   |          | *STANDARD   | R9A        | 06-25-2... |

**Note** You must enter hex values for the bar color fields on the Y3 page.

## Trade Compliance Dashboard

The Trade Compliance Dashboard tab contains configuration options that are unique to this dashboard.

Table 2.3

Trade Compliance Dashboard Configuration Fields and Associated System Values

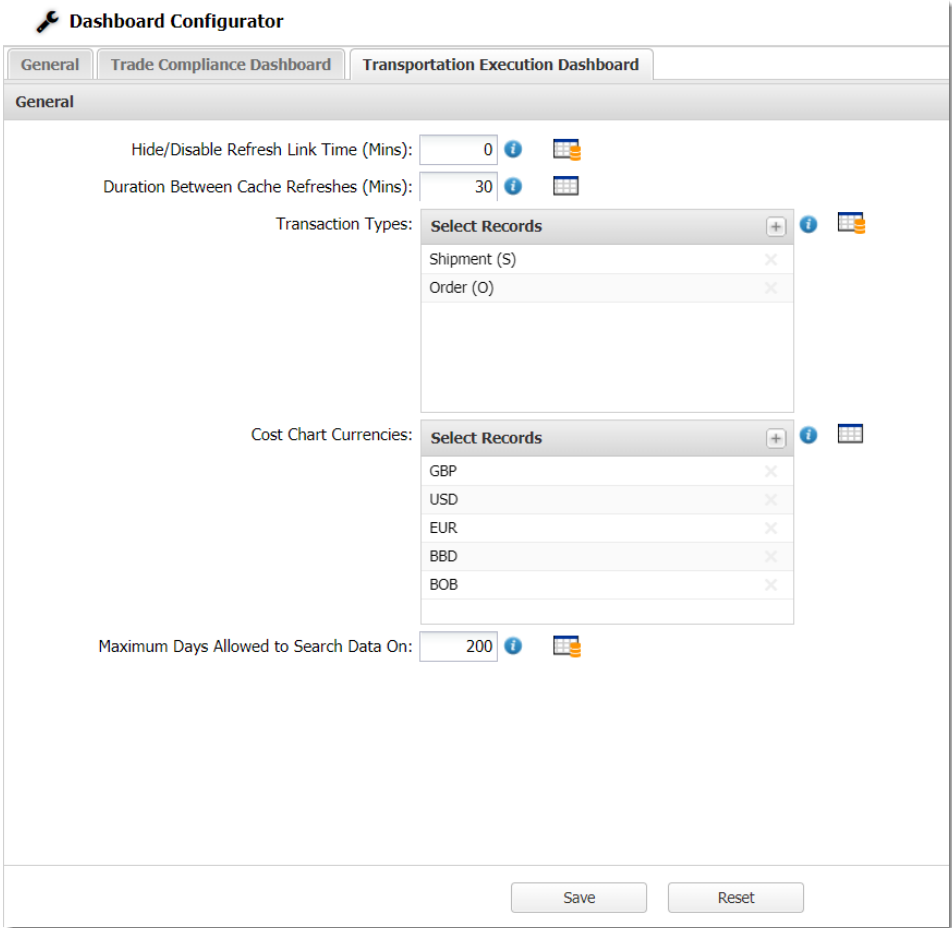
| Field Name             | Category   | Key  | Description   |
|------------------------|------------|--|---|
| Trade Compliance Types | DASHBOARDS | TRADE COMPLIANCE TYPES   | Determine the compliance types that appear on the Trade Compliance Dashboard using this field.            |
| Tile Colors            | DASHBOARDS | TRANSACTION TILE COLOR<br>TRANSACTION TILE TEXT COLOR<br>TRANSACTION TILE COUNTER COLOR<br>REQUEST TILE COLOR<br>REQUEST TILE TEXT COLOR<br>REQUEST TILE COUNTER COLOR<br>DATASCRUB TILE COLOR | Set the background and text colors for the Today's Total Summary panel on the Trade Compliance Dashboard. |

|  |  |  |  |
|--|--|--|--|
|  |  | DATASCRUB TILE TEXT COLOR<br>DATASCRUB TILE COUNTER COLOR<br>ADHOC TILE COLOR<br>ADHOC TILE TEXT COLOR<br>ADHOC TILE COUNTER COLOR |  |
|--|--|--|--|

## Transportation Execution Dashboard

The Transportation Execution Dashboard tab contains configuration options that are unique to this dashboard.

**Fig. 2.7**  
Dashboard Configurator, Transportation Execution Dashboard Tab



**Table 2.4**

Transportation Execution Dashboard Configuration Fields and Associated System Values

| Field Name                             | Category   | Key  | Description  |
|--|------------|--|--|
| Transaction Types                      | DASHBOARDS | TRANSACTION TYPES                                  | Specify a comma separated list of transaction types for the Transportation Execution Dashboard charts. The default value is 'S'.<br><br>Data lookup: Transaction Types (Z9)<br><br>Table name: XTZ9TP0   |
| Cost Chart Currencies                  | DASHBOARDS | COST CURRENCIES                                    | Configure the currencies displayed in the following charts: <ul style="list-style-type: none"> <li>Shipping Costs by Carrier for a Date Range</li> <li>Today's Shipping Cost by Carrier</li> <li>Shipping Volume by Carrier Service for a date range</li> <li>Today's Shipping Costs by Carrier Service</li> </ul> <p>If this system value is blank, then the dashboard uses the default currency set for a user.</p> <p>Data lookup: Currencies (CU)</p> <p>Table name: XMCURR0</p> |
| Maximum Days Allowed to Search Data On | DASHBOARDS | MAX NUMBER OF DAYS ALLOWED                         | Set the number of days of data that can be searched on the charts that have Date Range fields as filter criteria.  |
| Bar Chart Color Scheme                 | DASHBOARDS | BAR_SCHEME1:ID<br>BAR_SCHEME2:ID<br>BAR_SCHEME3:ID | Configure the title, subtitle, and bar color for charts. This system value is only defined at a global level.  |

**Note** The carriers displayed in the charts are transaction (L3) clients.

## Chapter 3

# Dashboard Templates

This section describes how to configure the dashboard templates.

### **Overview**

Explains how dashboard templates are stored.

### **Customize Dashboard Templates**

Describes how to establish a predefined set of charts and filters for all users.



## Overview

Users can add, remove, and rearrange the order of the chart panels on both dashboards. This data, along with filters, is stored in XML files, which in turn are used to persist the layout of the dashboards.




## Customize Dashboard Templates

It is possible to establish a default dashboard template for all users to match your company business processes. Users who land on the dashboards for the first time then have a predefined set of charts and filters, instead of empty dashboards.

Both dashboards have a set of icons at the top right of the page that enable you to customize your own or multiple users' dashboard templates.

**Table 4.1**

Dashboard Template Icons

| Icon  | Description   |
|---|---|
|   | Save this dashboard as the default for other users. This button can be enabled on the Configure Permissions page, option ACCESS, using the Custom Action 2 checkbox as shown in Figure 4.1. |
|  | Reset this dashboard to default. Click this to reset the dashboard back to its default charts, layout, and filter settings.   |
|  | Reset this dashboard to blank. Click this to remove all panels from the dashboard and leave it blank.   |

**Fig. 4.1**

Enable The Save This Dashboard as Default Icon in Option ACCESS

**Permissions :**

|                                       |  |   |
|---------------------------------------|--|---|
| <input type="checkbox"/> Allow Access | <input type="checkbox"/> In Use        | <input type="checkbox"/> Custom Action 1            |
| <input type="checkbox"/> Add          | <input type="checkbox"/> Confirm       | <input checked="" type="checkbox"/> Custom Action 2 |
| <input type="checkbox"/> Change       | <input type="checkbox"/> Close         | <input type="checkbox"/> Custom Action 3            |
| <input type="checkbox"/> Delete       | <input type="checkbox"/> Print Records | <input type="checkbox"/> Custom Action 4            |
|                                       |  | <input type="checkbox"/> Custom Action 5            |

# Currency Exchange Rates

This section helps you to configure the currency exchange rates for the Transport Execution Dashboard.

## **Overview**

Describes how to access the Currency Exchange Rates screen.

## **Cron Job**

Describes how to specify when DASH exchange rates are generated.


## **Manually**

Describes how to manually generate DASH data in the Web UI.




## Overview

The Dashboard Configurator allows you to choose the currencies that are available in the Transport Execution Dashboard charts.

The exchange rates for these currencies can be found in the Currency Exchange Rates screen. Access the CU option, click a currency and then click the sub-options  icon that appears. Choose Currency Exchange Rates.

**Fig. 3.1**

Access Currency Exchange Rates

|   |                        |
|---|------------------------|
| ERN   | Nakfa                  |
| ETB   | Ethiopian Birr         |
|  EUR | Euro                   |
| <ul style="list-style-type: none"> <li>• Currency exchange rates</li> </ul>           |                        |
| FKP   | Falkland Islands Pound |
| GBP   | Pound Sterling         |

To generate a DASH exchange rate for the dashboard, the logic first looks for the HIST exchange rate type. If it does not exist, it will then look for another type of exchange rate type, such as MEAN or SPOT. These types are used only when there is no HIST type defined in a system value. These alternative types can be specified in the system value below:

**Table 3.1**

Specify Hist Type System Value

| Category | Key              |
|----------|------------------|
| CURRENCY | TRANSACTION RATE |

If there are multiple currencies in the To Currency column of the Currency Exchange Rates table, a DASH rate is created for each currency.

**Fig. 3.2**

Multiple currencies in the To Currency column

| To curr |
|---------|
| EUR     |
| USD     |
| CAD     |
| CHF     |

There are two methods of generating DASH entries:

- Cron Job
- Manually

## Cron Job

The cron job calls a Java service to generate DASH exchange rates daily, or in specified intervals through the `precision.properties` file. The following displays the default value for this cron job, which happens at 3 AM every day; however, you can set this to a custom value:

```
precision.analytics.exchangerate.generation=0 0 3 * * *
```

## Manually

Users can click Dashboard Exchange Rates at the bottom of the Currencies screen to generate DASH data.

**Fig. 3.3**

Currency Toolbar, DASH Generation



**Note** If multiple users try to run the Java service at the same time, the service only runs once. Any other requests are discarded until the first request is complete.

# Implementing Logi Analytics

This section describes how the dashboards integrate with Logi Analytics.

## **Overview**

Introduces Logi Analytics.

## **License**

Describes how to set up the license location required to implement Logi Analytics.

## **Deployment Location**

Describes how to add a new property containing the deployment location.

## **Database Connection**

Provides the properties for OpenEdge, Oracle, and SQL Server database connections.



## Overview

The dashboards integrate with Logi Analytics to deliver data on compliance and shipping activity.

## License

To implement Logi Analytics, you will first need to establish the license location.

By default, the license needs to be copied into `C:\PRECISION\WebUI\data\keystores`. If you need to use a different location, update the `precision-analytics-x.x.x.war` file with the license location.

1. Go to `{webui_home}\wildfly\standalone\deployments` folder where `webui_home` is usually `C:\PRECISION\WebUI`.
2. Open the `precision-analytics-1.0.0.war` file with 7-zip or similar program.
3. Navigate to the `_Definitions` folder.
4. Open the `_Settings.lgx` file.
5. Update the `LicenseFileLocation` element with the license path.
6. Save the file to the machine outside the war file.
7. Drag the saved file to the war file opened with 7-zip and drop it there. This replaces the original file.
8. Close 7-zip.
9. Restart the server.

## Deployment Location

A new property needs to be added to `precision.properties`. The value of this property has to be the location where the analytics project is deployed.

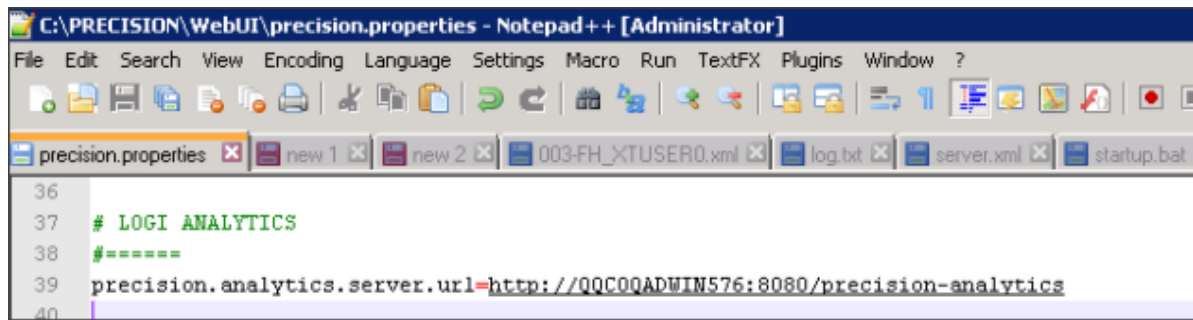
**Note** This property may already exist, but as a commented out property.

```
precision.analytics.server.url=http://server:8080/precision-analytics
```



Fig. 5.1

Logi Property in precision.properties file



## Database Connection

The database connection used for Logi is defined in the `logi.properties` file; the location of this file is `C:\PRECISION\WebUI\logi.properties`.

You can define an OpenEdge, Oracle, or SQL Server connection in this file, with slightly different properties defined in each case.

### OpenEdge

```

database.type=OpenEdge
database.name=[name]
database.port=[port]
database.server=[server]
database.user=[user]
database.password=[password]
database.driver=com.ddtek.jdbc.openedge.OpenEdgeDriver
database.defaultSchema=PUB
database.schema=PUB

```

### Oracle

```

database.type=Oracle
database.port=[port]
database.server=[server]
database.user=[user]B
database.password=[password]

```

The database name can be the service name:

```
database.name=[database_service_name]
```

Or just the database name. If the database name is set, you also need to set the database driver:

```

database.name=[database_name]
database.driver=oracle.jdbc.driver.OracleDriver

```



## SQL Server

```
database.type=SqlServer  
database.name=[name]  
database.port=[port]  
database.server=[server]  
database.user=[user]  
database.password=[password]
```

