



**OCEAN DATA SYSTEMS**

The Art of Industrial Intelligence

# **AVEVA Reports**

## **Industrial Reporting and Analysis**

### **GETTING STARTED GUIDE**

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# AVEVA Reports Getting Started Guide

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## Preface

### Welcome to AVEVA Reports

This *Getting Started* guide should be used as a starting point for installing AVEVA Reports, creating a new project, running the project, and setting up the DR Web Portal.

### About this document

This document contains 4 chapters. We suggest you follow them in order when creating your first AVEVA Reports project.

**Chapter 1 “Creating a Project in AVEVA Reports”** takes you step-by-step through the process of creating a project in the AVEVA Reports Studio, giving you the basic (and required) steps on how to:

- Creating a new reporting project
- Connecting to data sources
- Configuring data logging
- Configuring reports and report settings

**Chapter 2 “AVEVA Reports Runtime”** gives an overview of the AVEVA Reports runtime functionality, which executes the project runtime tasks and report generation.

**Chapter 3 “AVEVA Reports Web Portal”** describes how to configure the AVEVA Reports web portal, and covers the main functionality and features of the web portal.

**Chapter 4 “Project Customization Settings and Tools”** describes special AVEVA Reports tools and modules which you can use to customize your project and optimize performance. This chapter is aimed at those users who want to explore more of the wide range of functions and features which AVEVA Reports offers.

#### ▲ NOTE:

The AVEVA Reports *Getting Started Guide* is not meant as a substitute for the AVEVA Reports *User Manual*, which gets installed with the software (available as a PDF document and from online help/F1.) This guide should be used to get you started with installing AVEVA Reports and creating your first project, and should be used in conjunction with the User Manual, when you need detailed explanations of features mentioned here. Additional learning resources are the AVEVA Reports *Video Tutorials*, *Tech Notes* and *FAQ's* on the AVEVA Reports Knowledge Base website (<https://dreamreport.atlassian.net/wiki/spaces/DreamReport/overview>).



# AVEVA Reports Getting Started Guide

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## Audience

This manual is intended for the first-time AVEVA Reports users.

## About AVEVA Reports

AVEVA Reports is the first programming free, user-friendly, automated reporting and data analysis software designed specifically for industrial automation applications. It is designed to be the simplest solution for extracting data from virtually any data source (real-time data, historical data sources, and historical alarm and event data), providing automated reports to anybody, anywhere and anytime.

## Installing AVEVA Reports

The AVEVA Reports installation software is available either as a download from Ocean Data Systems' website, or on the installation media you may have received. The following is a checklist to get you started with your AVEVA Reports installation, and should be followed in this order:

- 1) **Download** the AVEVA Reports installation:  
<https://dreamreport.net/downloads/>
- 2) Check Minimum **System Requirements**:  
<https://dreamreport.net/wp-content/uploads/System-Specifications.pdf>
- 3) Check **Support Matrix** for supported operating systems and database platforms:  
<https://dreamreport.atlassian.net/wiki/spaces/DreamReport/pages/491646/Compatibility+Matrix>
- 4) Setup **IIS Prerequisites** (required for the AVEVA Reports Web Portal):  
<https://dreamreport.atlassian.net/wiki/spaces/DreamReport/pages/491702/Manual+Configuration+of+IIS+for+use+with+Dream+Report+Web+Portal>
- 5) Make sure a PDF File Viewer is installed – the install for Adobe Reader™ is included in **ODS\AVEVA Reports\Utilities\** and can be installed after installing AVEVA Reports
- 6) **Install** the AVEVA Reports software, making sure to specify:
  - **Installation location** (default is *C:\ODS\AVEVA Reports\*, and may be changed)
  - **Communication Drivers** – select specific drivers that are needed, or all (for a Demo system, consider installing all Communication Drivers.)
- 7) **Complete** the installation and reboot.



### AVEVA Reports Installation - Folder Organization

By default, AVEVA Reports installs itself in: **"C:\ODS\AVEVA Reports"**. It also creates the following folders:

- **Clipart** – Library of Icons, Images and Report Backgrounds
- **Dashboard** – for the Dashboard designer and integration files
- **Database** – Multilanguage files (**Lexicon.mdb** and **LexiconWeb.mdb**)
- **Documentation** – *Release Notes* with the latest information about the AVEVA Reports release, *User Manual*, *Version Upgrade Procedure*, *Getting Started Guide*, and the *Eurotherm® UUH Import Tool* guide.
- **DR\_Web\_Portal** – Web Portal configuration files;
- **DR\_Web\_Portal\_Mobile** – Mobile Web Portal configuration files;
- **Help** – AVEVA Reports Online help file
- **License** – AVEVA Reports license
- **ODBC Profiles** – preconfigured (or user-defined) ODBC profiles for the AVEVA Reports *Advanced ODBC* driver
- **Project** – All projects saved by default as subdirectories in this folder
- **Redist** – installation prerequisite file(s)
- **ScriptObjLib** – object library files for *Graphical Script Objects*
- **System** – All system application and configuration files
- **Templates** – All saved page and report templates;
- **Utilities** – Install programs for utilities that might be required for AVEVA Reports (Adobe Reader, OPC Core component, SQL Server Client drivers, HASP driver, Debug tool, etc.)
- **WebAppTemplate**



## AVEVA Reports Getting Started Guide

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### Licensing AVEVA Reports

AVEVA Reports is licensed in several ways:

- *Registered* and *Activated* using the links under the *Help* menu in AVEVA Reports Studio (you will need the **License ID** included in your order confirmation from Ocean Data Systems) – ODS will then issue a *license.dat* file (tied to the AVEVA Reports machine) that you will copy to \ODS\AVEVA Reports\license\.
- Using an Ocean Data Systems-issued USB license dongle (key)
- Through the licensing mechanism of the AVEVA Reports OEM partner supplying the license

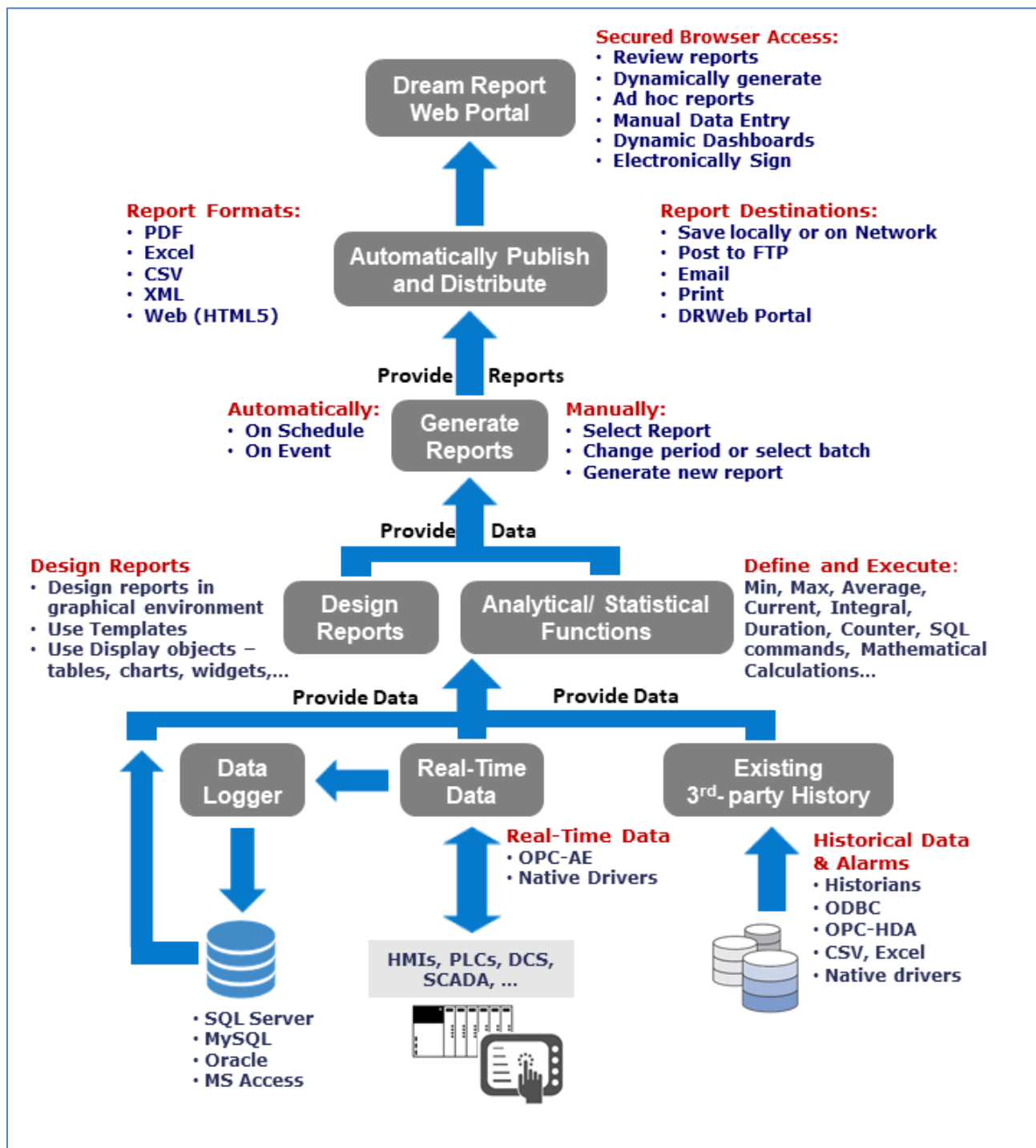
License options are as follows...

- *AVEVA Reports “Base” License* – specify tag count. Gives access to both Development Studio and Runtime. A tag is defined as any external item referenced in a AVEVA Reports project (PLC register, HMI tag, Historian tag, SQL field, etc.) A tag is only counted once towards the license usage, regardless of how many times it is referenced in a project or in multiple reports.
- *Web Portal Clients* – concurrent user access to DRWeb portal to access/generate reports on-demand. (All AVEVA Reports licenses include at least 1 web client, and you can add more).
- *Optional Add-On Modules* –
  - Life Sciences – e-Signatures, Runtime Audit Trail,  $F_0$  calculation function
  - SPC
  - MES
  - DBatch
  - Remote (Multi-User) Development seats



## AVEVA Reports Product Overview

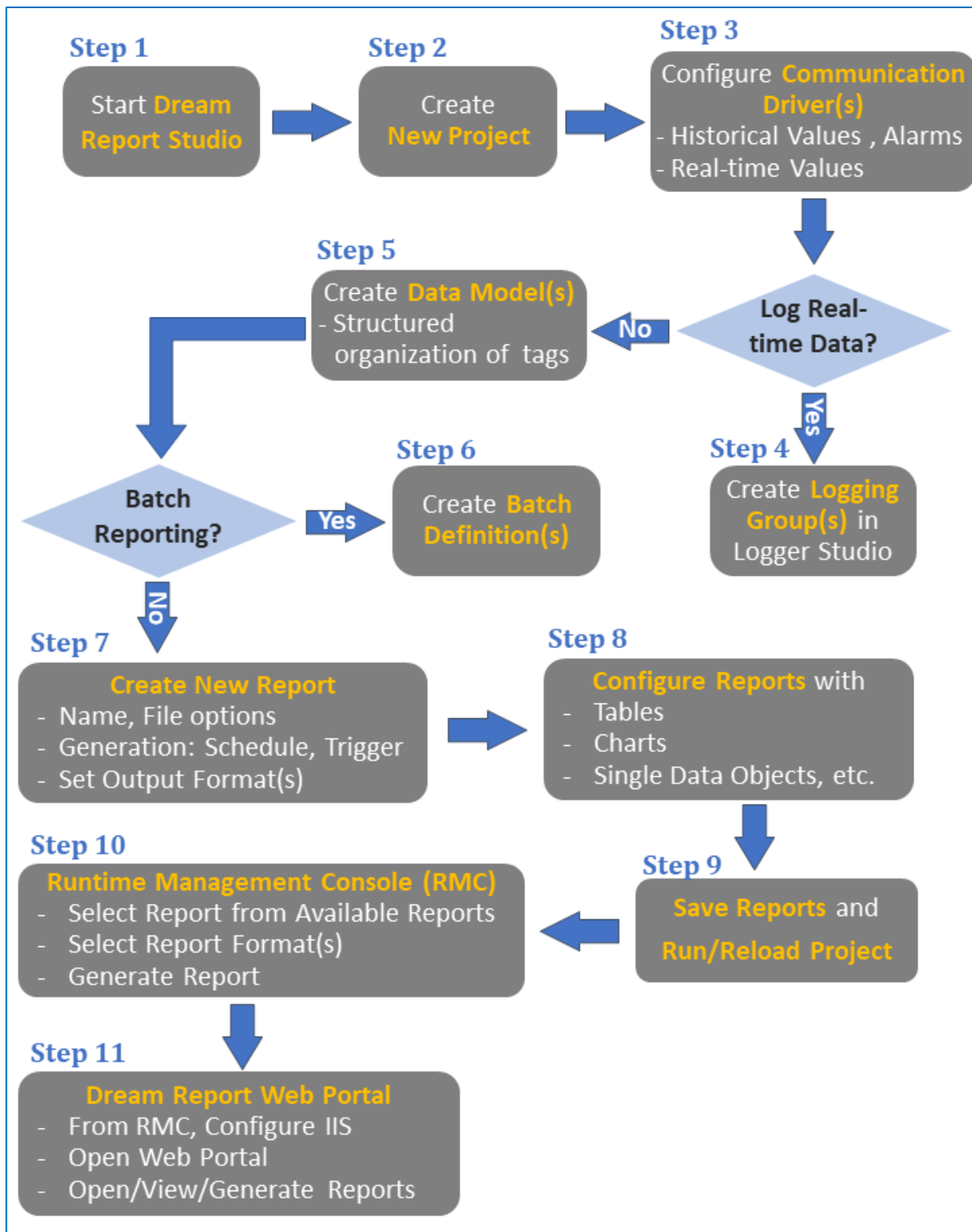
### AVEVA Reports Architecture





### Chapter 1. Creating a AVEVA Reports Project

The following is an overview of the major steps and workflow when creating a project in AVEVA Reports:





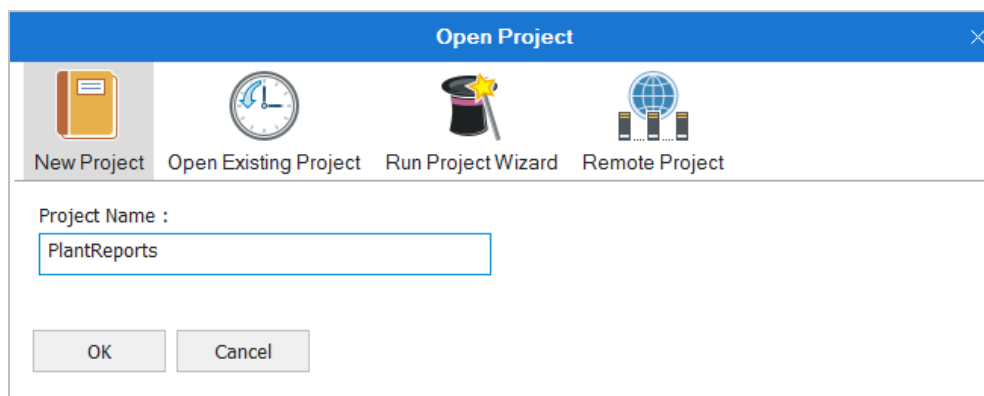
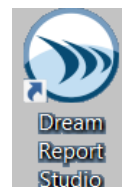


## AVEVA Reports Getting Started Guide

### Step 1. Start AVEVA Reports

After installing and rebooting the AVEVA Reports machine, you are ready to start AVEVA Reports Studio.

Double-click the **AVEVA Reports Studio** icon on the Windows desktop, or from *Start > ODS > AVEVA Reports > AVEVA Reports Studio*. As a new user, either create a **New Project**, or **Open Existing Project**, and explore one of the AVEVA Reports **Demo** projects (included with the install):



#### ▲ Notes on the using *Demo* project:

For first-time AVEVA Reports users, we highly recommend that you open the existing **Demo** project(s), and explore the project and report configurations in AVEVA Reports Studio. To run the *Demo* project, click the “*Run Project*” icon in the left-side toolbar in Studio. After a few seconds, the RUNTIME MANAGEMENT CONSOLE (RMC) will automatically open once the project starts up. You can select specific Reports in the AVAILABLE REPORTS pane and generate them with REPORTS controls. Note – select *Generate Files*, then select *Open Generated Files*.

Use the *Demo* project as a reference when developing your own reports – every feature of AVEVA Reports is covered in the Demo reports.



## AVEVA Reports Getting Started Guide

### Note on Running without a License:

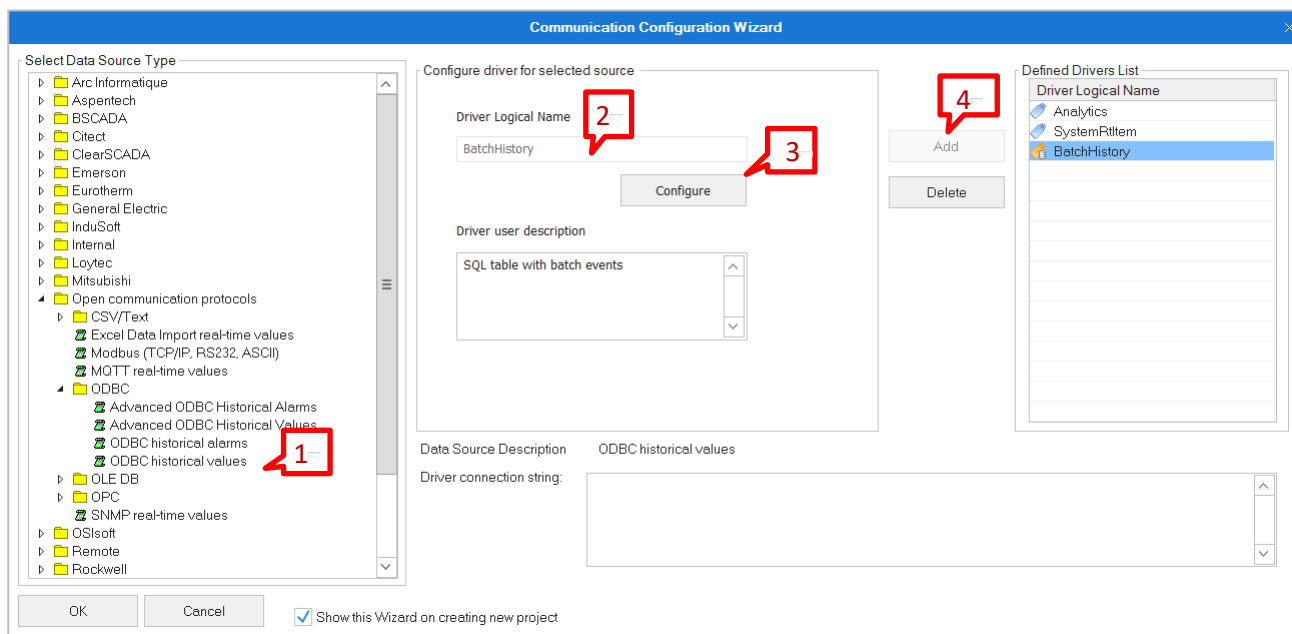
When Studio opens, either register and activate your license (from the *Help* menu), or work in “demo” mode. If unlicensed, AVEVA Reports will run in a 100-tag demonstration mode for 30 minutes at a time. Contact Ocean Data Systems ([sales@dreamreport.com](mailto:sales@dreamreport.com)) or your local AVEVA Reports distributor for a 30-day trial license.

## Step 2. Create a New Project

When AVEVA Reports Studio opens, select “*New Project*”, and give the project a name. Click “*OK*” and a project (reporting application) will be created in a new directory under `\ODS\AVEVA Reports\Project`, along with all necessary subdirectories and files.

## Step 3. Configure Communication Driver(s)

After the new project is created, the AVEVA Reports **Communication Configuration Wizard** will open automatically (it can be opened either from the *Logger Studio* or from the *Report Designer Studio* menu, by clicking the “Driver Configuration” button). This is where you can configure one or more communication drivers to real-time data sources, historical data archives, and/or historical alarm and event archives. To do this, select an appropriate communication driver from the list:





## AVEVA Reports Getting Started Guide

- 1** Select the type of the data source from the “Data Source” tree (the first browse level will be the list of the data source vendors, displayed as folders).
- 2** Give a logical name to the selected driver.
- 3** Configure the selected driver. The “**Configure**” button will open the specific driver configuration window. Each driver has its own configuration user interface, which depends on the specific protocol needs. If a driver doesn't have any configuration interface (i.e., no additional configuration is needed), that button will be disabled.
- 4** Add the selected/configured driver to the list of defined drivers by Clicking “**Add**”

**Repeat steps 1 – 4 for additional drivers, if needed.**

**Note:** When changing the definition of an existing driver, please be aware that the name of the existing driver can NOT be changed.

### Step 4. Data Logging (optional)

AVEVA Reports allows connecting to real-time data sources and log that data from the external source into the AVEVA Reports internal history database. Natively, SQL Server (preferred) or MS Access is supported for the AVEVA Reports database, but other databases like Oracle and MySQL can be used as well through ODBC.

▲ **NOTE:** Data logging is only needed if connecting to Real-time data sources. External (historical) data sources do not require logging groups, as the data has already been logged/archived externally to AVEVA Reports.

By default, an MS Access database (<ProjectName>.mdb) will be created and used. However, Access should *not* be used in a production system due to several limitations. We suggest you change the project database to MS SQL Server (or SQL Server Express), MySQL or Oracle – this change can be made in the **Project settings > Database Definition** section (refer to *Chapter 4. Project Tools and Customization* in this guide.)

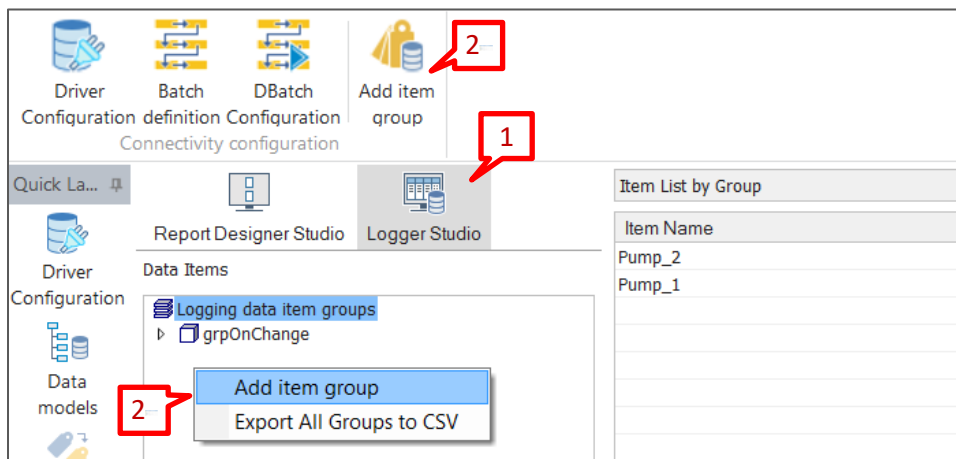
Using **Logging Groups**, you can split different data items into groups and define separate logging conditions for each group of data items.



## AVEVA Reports Getting Started Guide

### To create Logging Group(s):

1. Click on the **Logger Studio** tab in AVEVA Reports Studio
2. Right-click in the left top panel and add an Item group using the right-click context menu, or by clicking the **"Add Item Group"** button above.

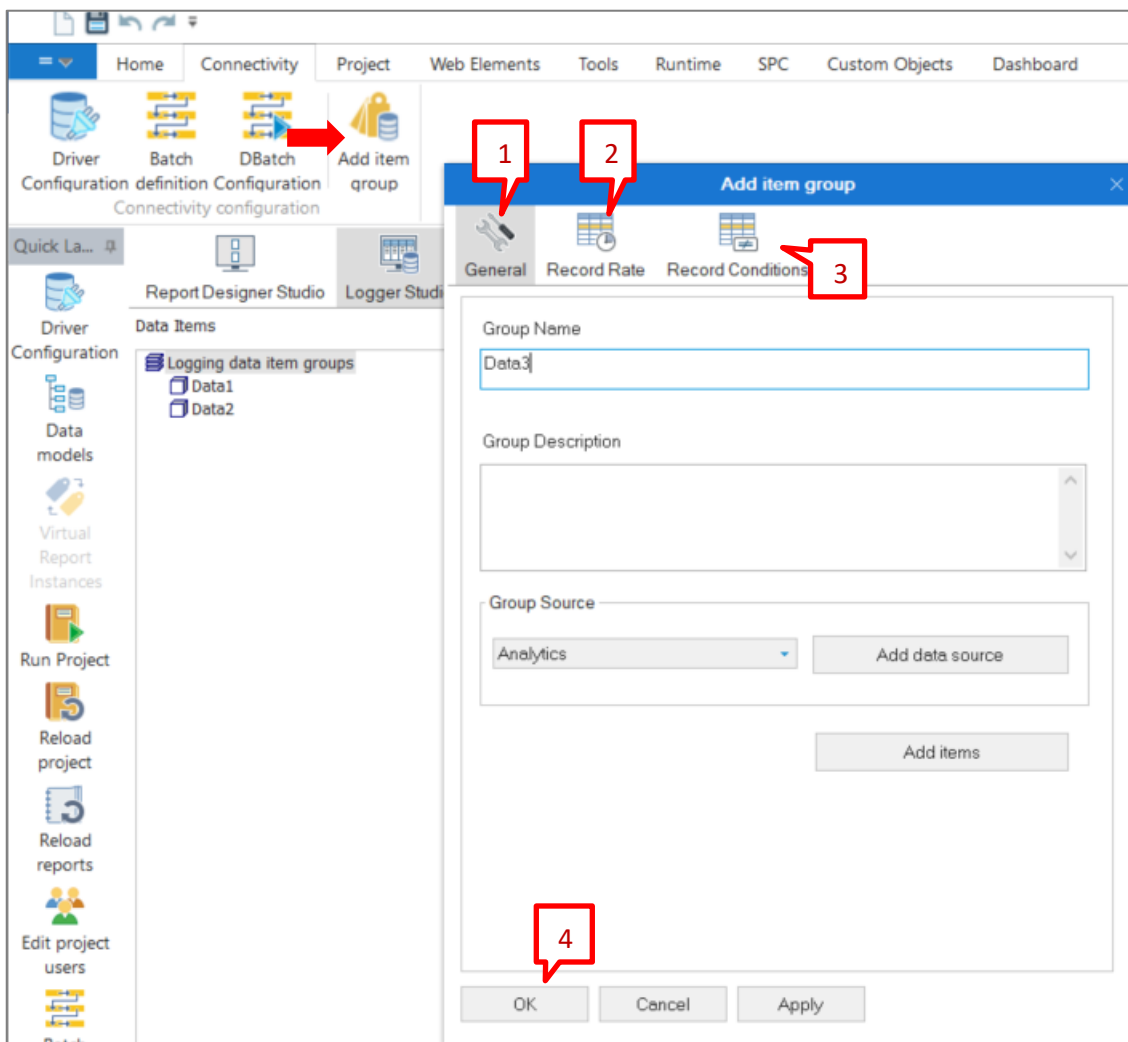


- 1 **Logger Studio** is a user interface to configure all data and alarm communication and logging.
- 2 **Data Items** is the section of the Logger Studio where you can specify data logging conditions.



## AVEVA Reports Getting Started Guide

When the “**Add Item Group**” window opens, configure the logging group as follows:



- 1** Define general properties of a group: logical (unique) name, short description (if needed), data source (to include items into the group), data items from that data source, to be logged as part of this group.
- 2** Select the logging mode (“*Record Rate*”) and the logging schedule for the group. All items in this group will be logged at the same rate and with the same conditions.
- 3** If you need to log data on a pre-defined condition, use this section (“*Record Conditions*”) to define this condition. Then, items from the entire group will be logged only if this pre-defined condition is true.  
**Note:** If the group logging schedule is defined, that data will be logged only when the logging period is active and the condition is **TRUE**. If a group has no schedule defined, then, data will be logged when the condition is **TRUE**.
- 4** Click *OK* and the data item group will be configured for logging.



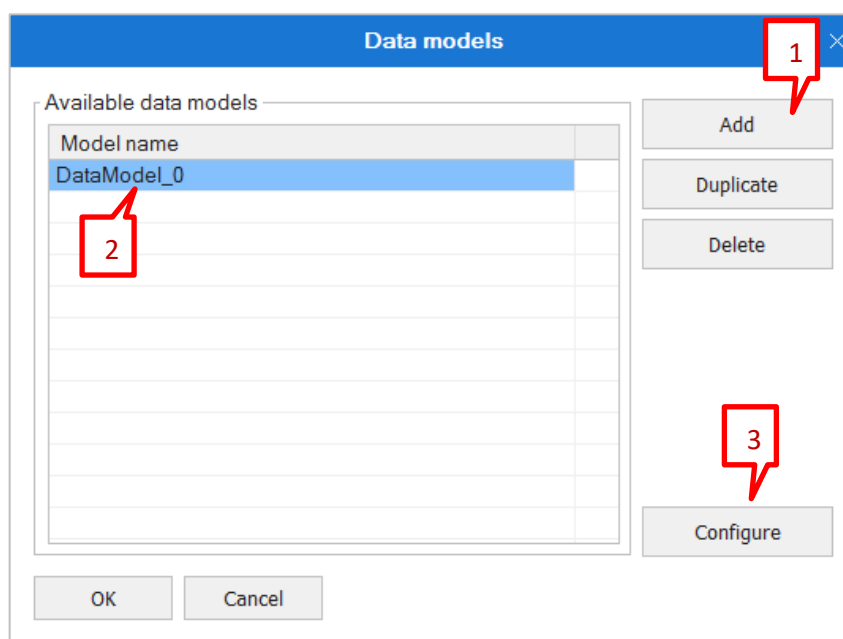
## AVEVA Reports Getting Started Guide

You can verify communications with the real-time data source by selecting an Item Group in the left panel, and then click “*Start Monitoring*” or the “*Force Read*” button on the right-side Item List.

### Step 5. Create Data Model(s)

**Data Models** allow the user to organize and structure tags (data items) from one or more data sources in a logical or hierarchical (folder-based) structure, as well as rename tags with meaningful “aliases”, if needed. Tags can be organized in a meaningful hierarchical (folder-based) structure. While Data Models are not required, we highly recommend you use them as a way to simplify tag browsing. If using AVEVA Reports *Dashboards*, Data Models are required.

Launch the Data Model configuration window from the **Data Models** icon on the left-side *Quick Launch* toolbar:

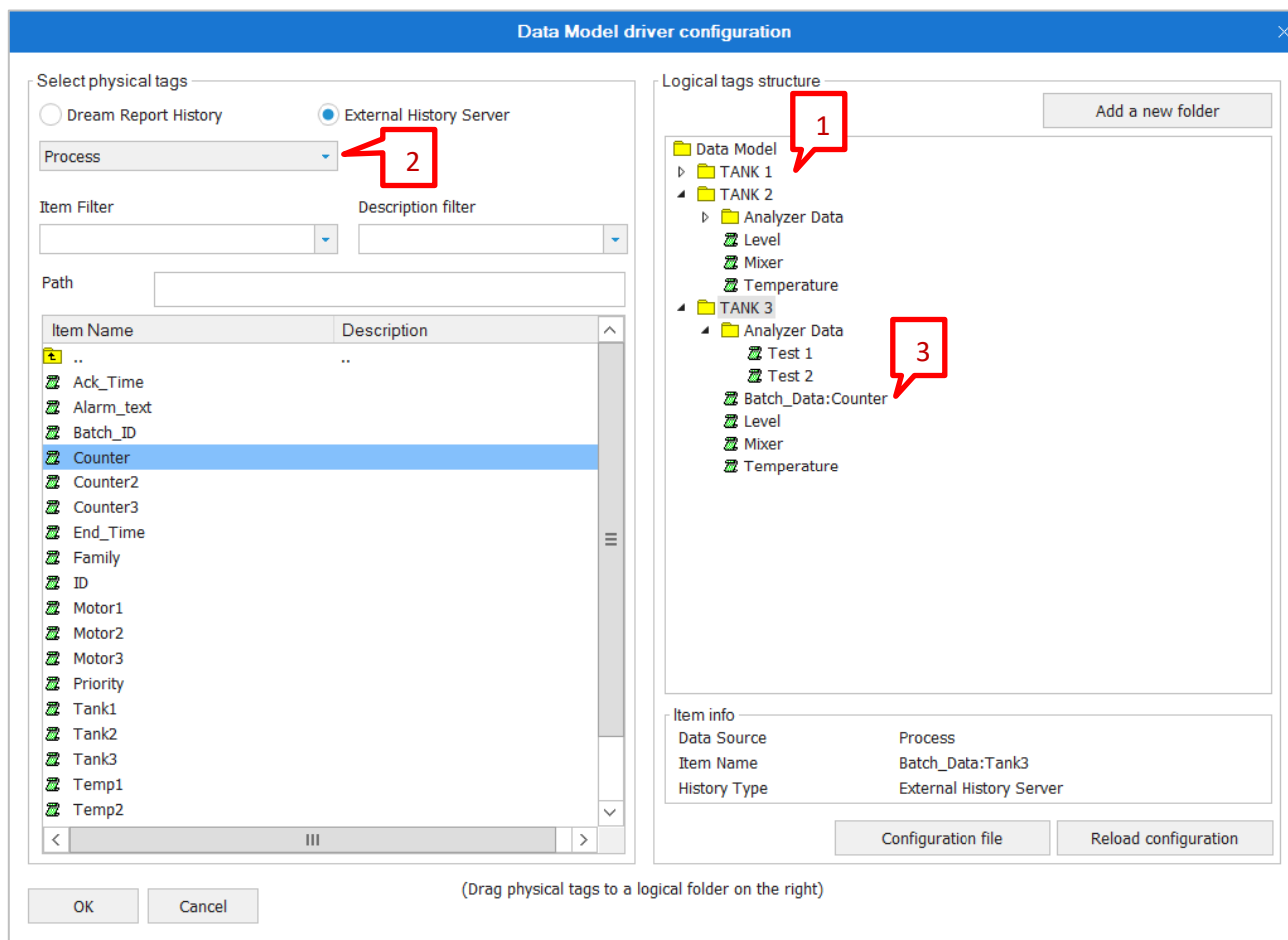


- |   |  |
|---|--|
| 1 | Click the “ <b>Add</b> ” button to add a new Data Model (you can create multiple Data Models, if needed) |
| 2 | Double-click on the Data Model name to <b>rename</b> it to a meaningful name (no spaces)                 |
| 3 | Click the “ <b>Configure</b> ” button to open the <b>Data Model Driver Configuration</b> window          |



## AVEVA Reports Getting Started Guide

When the *Data Models Driver Configuration* window opens, configure the Data Model as follows:



- 1** Right-click to “*Insert a new Folder*”, to create one or more folders (if needed). Folders can be nested under other folders. Double-click on a folder name to rename it.
- 2** Select data source(s), and then drag-and-drop data items (tags) to the appropriate folder(s) on the right side. A tag may exist in multiple folders.
- 3** Optionally, double-click on an item name (on the right side) to rename the item.



## AVEVA Reports Getting Started Guide

When configuring a reporting object, Tags in a data model can be accessed like any other data source:

Item Name	Description
..	..
TANK 1	
TANK 2	
TANK 3	

### Step 6. Batch Definition (optional)

If your report is for a batch process, where the exact time period and duration are not known in advance, but are tied to a “unit of production” – e.g., a specific Batch ID, Roll #, Work Order, Test ID, etc. - you can use the batch mechanism of AVEVA Reports to determine the start and end times.

A Batch can be defined in AVEVA Reports in 2 ways:

Defined batches

Name: Reactor1\_Batch

Description:

1

2

☒ Defined by data item ☐ Defined in external database

Data Item For Batch ID

☐ Dream Report History ☒ External History Server

Data Source: Process

Data Item: Batch\_Data:Batch\_ID





## AVEVA Reports Getting Started Guide

1. **By data item** - if the batch ID is taken from a tag value (either from a real-time driver and logged to the AVEVA Reports database, or from a tag from an external history data source).
2. **In an External Database** - if the batch ID, start time and end time are explicitly logged in an external database (e.g., a dedicated Batching system), AVEVA Reports can reference those fields in a table/view.

During report generation AVEVA Reports will query the data source defined in the Batch Definition, recognize the start and end times of the batch and will then apply those times to the reporting object. To use a Batch definition in a reporting object, select “**Batch based**” for the time period:

Define time period

Batch based

Batch

Reactor1\_BatchID

Mode

Last

count

1

batches

1

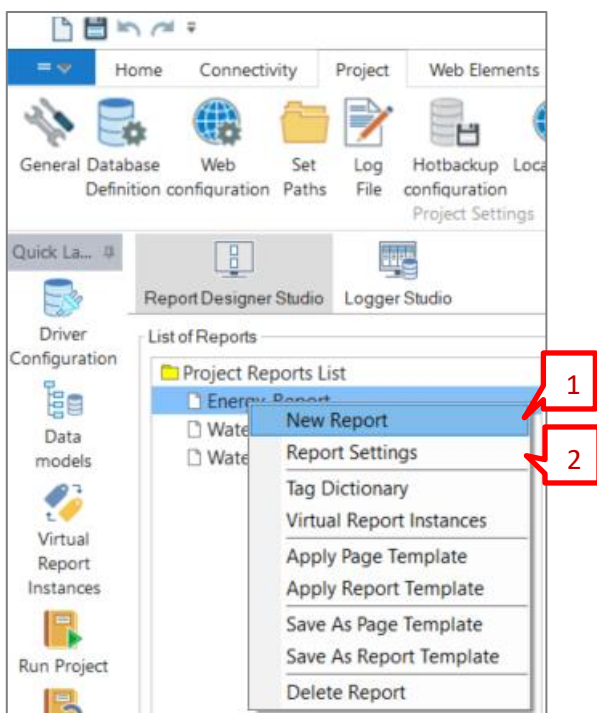
Duration

### Step 7. Create a Report

Once you have created a new project and have configured connectivity to the data sources, you can start creating reports in the AVEVA Reports Designer Studio. Reports visually represent the logged and aggregated data, can be generated on a schedule, generated on an event, or manually generated, and can be automatically distributed in different ways and formats (PDF, Excel, CSV, Web, Printer, and Email). Reports can be single-or multi-page with a variety of data objects (charts, tables, single calculations, etc.) and can contain dynamic text objects like the report name, page numbers, generation timestamp, etc. You can add, delete or rename a report by right-clicking on the report tree in the AVEVA Reports Designer Studio:



## AVEVA Reports Getting Started Guide



In this step you can configure output properties of your report. To configure report settings, right-click on the report tree in the Report Designer Studio and select *Report Settings* from the context menu (2) – or, simply double-click on the report name in the list.

The “*Report Settings*” dialog window will be opened. The left tree will contain a list of reports, that will be defined in the project. Panels on the right will display settings for the selected report in the tree. If the report selection is changed, the panel will be updated with data from the selected report.

1	<b>Report Name</b> – define a unique name for your report. You can also configure storage and maintenance of report files in the <i>General</i> section.
2	<b>Report Name Format</b> – define how <u>file names</u> for an output file will be generated (the report file naming rule will be applied both PDF, Excel, CSV and XML report files).
3	<b>Report Time Definition</b> – define an automatic report generation schedule: <b>generation on schedule</b> or <b>periodic generation</b> .
4	<b>Generate Report on Event</b> – configure an event-based report generation (based on a value from a <u>real-time</u> data source) and define different generation rules on event for different report instances.
5	<b>Report File Format</b> – configure report output file format settings, and the report distribution settings (print, email, etc.)



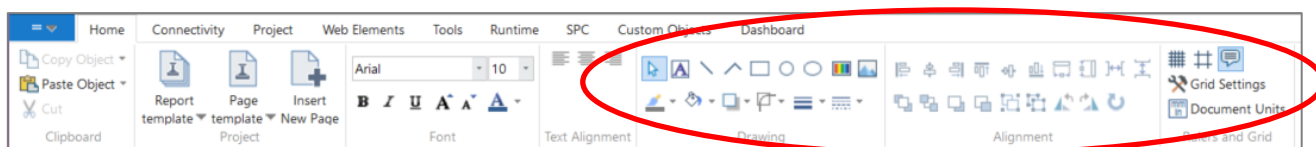
## AVEVA Reports Getting Started Guide

**TIP:** The configuration of all reports in the project can be changed in one window without closing and reopening it again. Clicking on another report in the tree in the left part of the dialog window will automatically update the dialog window with the settings of the selected report.

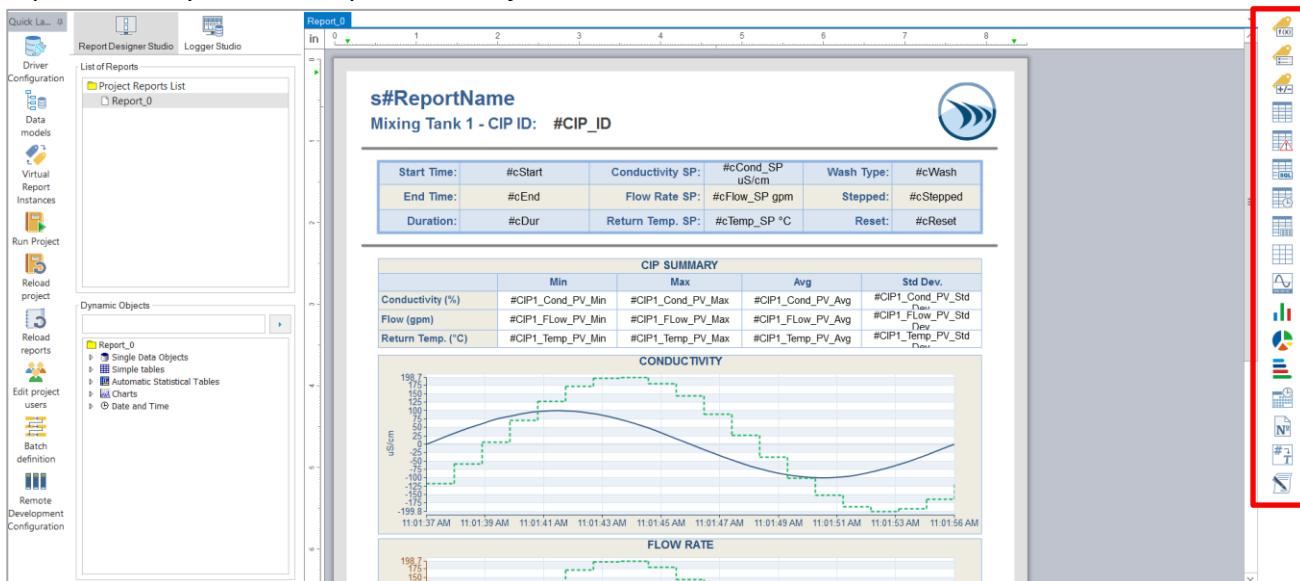
### Step 8. Designing and Configuring a Report

Once you have configured the main settings for a report, you can start designing it in the AVEVA Reports **Designer Studio**.

1. From the **“Home”** tab, you can add static objects, static text, images (dynamic or static), background images and colors, align objects, and apply general display options such as fonts, line colors, etc.



2. In the AVEVA Reports Designer Studio Elements toolbar you can select the dynamic objects to display your data. Click on an object to select it, then using your mouse, draw a rectangle on the report where you want to place the object:










## AVEVA Reports Getting Started Guide

AVEVA Reports offers various types of dynamic objects to display process analysis:

	<b>Single Data Object:</b> enables you to extract and calculate Current value, Last, Min, Max, Average, Sum, Duration, Integral, On Time, Availability, Deviation, etc. The result will be a single value on the report.
	<b>Compound Object:</b> enables you to apply predefined statistics (Min, Max, Sum, Average and Standard Deviation) to 2 or more single data objects on a report. The result will be a single value on the report.
	<b>Expression Object:</b> enables you to do free-form mathematical calculations, logical expressions, and custom scripts on your data. The result will be a single value on the report.
	<b>Item Table:</b> enables you to display an array of values from one or more data items within a specified value range, which were logged during the specified time period. This is a quick way to display raw data in tabular format, with minimal formatting.
	<b>Alarm Table:</b> enables you to use historical alarm data sources, apply alarm filters, and display them in a pre-formatted table specific to alarm data.
	<b>SQL Table:</b> enables you to define custom SQL queries and visualize the result as a table with predefined parameters. The result is a highly-customizable table.
	<b>Automatic Statistical Table:</b> enables you quickly summarize large amounts of data in a grid. Select tag(s) from one or more data sources, set a common time or batch period, and select the statistics to be calculated and displayed.
	<b>Step Table:</b> enables you to create a table over a time period, with a predefined time for each row (step) in the table, and perform calculations over each step period.
	<b>Free Table:</b> enables you to build customized table (grid) mixing text, dates and statistics in each "cell" of the grid.
	<b>Pie Graph:</b> enables to compare and display alarms or statistics (current, last, Min, Max, Average, ...) in a pie chart.
	<b>Bar Graph:</b> enables you to display alarms or statistics by period in a bar graph
	<b>Chart:</b> enables you to create a multi-line chart, displaying raw historical or aggregated data as a line trend or scatter plot.



## AVEVA Reports Getting Started Guide

	<b>Indicator:</b> enables you to display calculated data in a predefined format. Primarily used for Energy efficiency/usage ranking, but can be applied in other ways (e.g., a breakdown of line efficiencies).
	<b>Date and Time Object:</b> enables you to display a dynamic date and/or time in the desired format with a pre-defined offset (if needed). Can be used to show the report generation time, or the start or end of a report period.
	<b>Page Number Object:</b> enables you to display the number of the current page or the total number of pages in a report
	<b>Dynamic Text Object:</b> enables you to display text (from a predefined list) in a report, where the value is determined during report generation. For example, the report name, report version, etc.
	<b>Electronic Signature Object:</b> enables you to add an e-Signature object to a report. Only available/visible if the <i>Life Sciences</i> option is licensed.

### Common Configuration Options:

Most reporting objects require the following common configuration steps:

- Enter an *Object Name* (must be unique to that report)
- Select a *Data Item* from a Data Model or other Data Source
- Specify a *Time Period* or *Batch Definition* for that object
- Apply a *Statistical Function* or other data aggregation/correction
- Display options under the object's *Appearance* tab
- Apply data *Filtering*, from the Advanced SQL Condition tab

### Defining Time Periods in Reporting Objects:

You can define time period for the selected objects calculations. You can:

- Define the start and the end of time period (either relative times, or absolute periods);
- Select fix intervals (e.g., last 8 hours, current 1 month, etc.);
- Use a batch definition (for batch process reporting)
- Reference other objects on a report that contain start and end times (e.g., timestamp pickers)

Objects on a report typically all have the same time period, but in some cases, may have different time periods for different objects – e.g., two charts, one showing last month's data, and the second chart showing the current month's data.



## AVEVA Reports Getting Started Guide

Time periods are specified in the “**Define Time Period**” section of an object:


Define time period

Fixed Period	
Absolute or relative period definition	
Fixed Period	
Batch based	
Calculated time period	

<input type="checkbox"/> Duration	Day	Time
1 hour(s)	1	07:00:00

### Step 9. Saving and Generating a Report

Once you have designed and configured your reports, it’s now time to save the reports, and start running the project so that the reports will be generated (on schedule, triggered, or on-demand).

Click the “**Save Project**” icon  in the top-right of Studio. At this point you can run the project by clicking the “**Run Project**” button on the Quick Launch toolbar.



If the project is already running, and you add or edit a report, simply click the “**Reload Reports**” button to apply those changes to the running project.



You are now ready to test your reports in AVEVA Reports **Runtime**.



## Chapter 2. AVEVA Reports Runtime

After your project and report(s) have been configured, you need to run your project in order to log data into the AVEVA Reports historical database (if configured), and generate reports. A AVEVA Reports project can run by means of the Runtime Manager (Runtime control service) module. This module can run either as a service (launched on the PC start) or as an application (launched on a user Windows login).

### Step 10. Runtime Management and Report Generation

To control all operations related to the Runtime Manager (runtime service) and report generation, the **Runtime Management Console (RMC)** is used. With the Runtime Management Console, you can manage the project in Runtime - i.e., reloading the project/reports, generating reports on demand, shutting down the project, providing access to different project options (project folders, Web portal, IIS configuration), AVEVA Reports license info, help documentation, while the project is running.

This chapter describes the mechanism of running AVEVA Reports project(s), logging data and executing report(s).

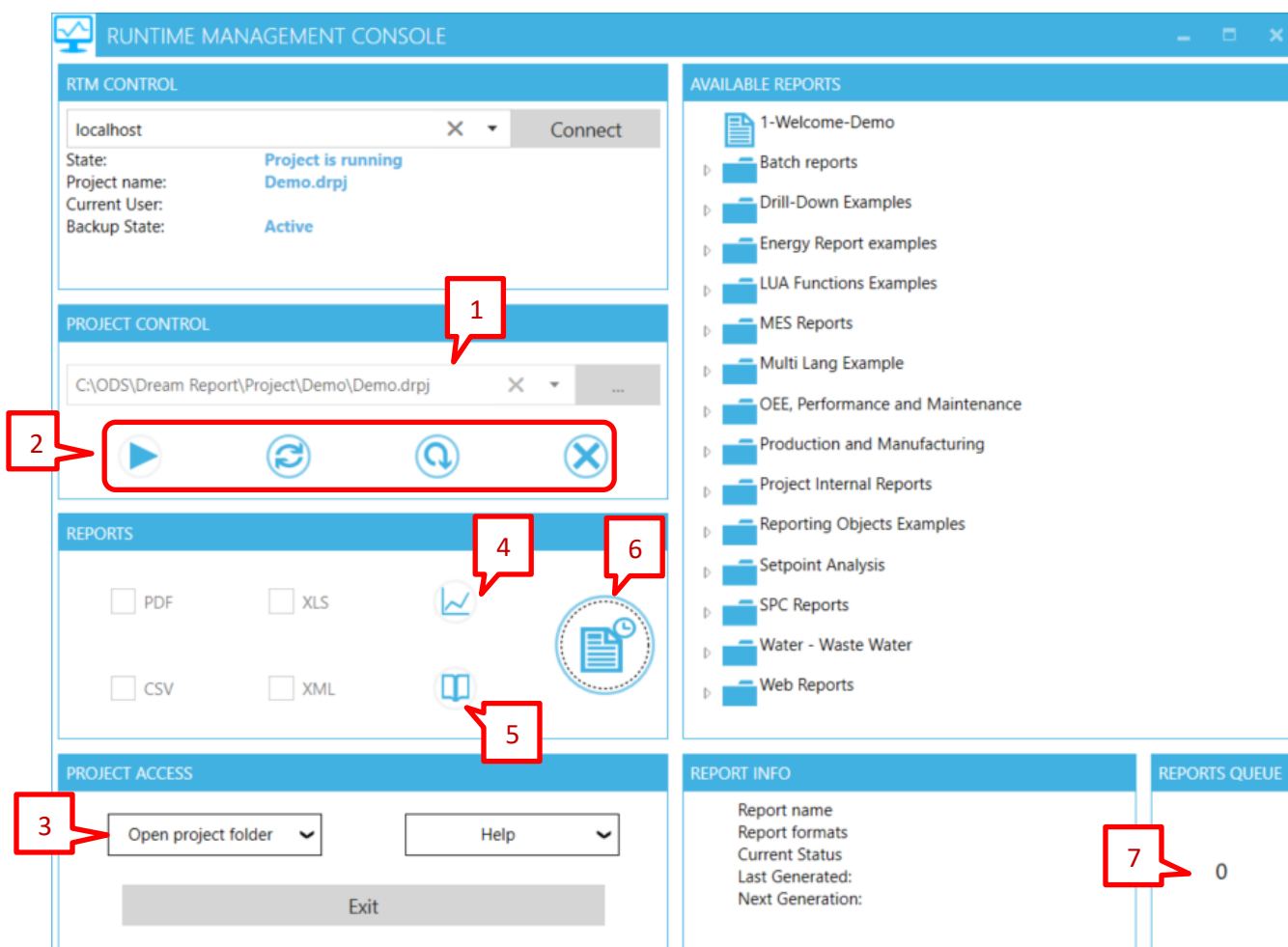
#### **AVEVA Reports Runtime Manager enables:**

- Data logging
- Standard/dynamic report generation
- Multiple runtime options and runtime management tasks





## AVEVA Reports Getting Started Guide



- 1 Select a project, to which the Runtime Management Console will be connected.
- 2 Reload the project or the reports, or shut down the project.  
**NOTE:** You can also reload project/reports directly from the AVEVA Reports Studio by clicking on the *Reload Project* or *Reload Reports* command buttons.
- 3 Access different functionalities and runtime management tasks directly from the RMC
- 4 Generate the selected report. There are 4 options for the report generation format: PDF, Excel, CSV and XML – select the format(s) needed for on-demand generation
- 5 Open the generated report in one of the 4 formats (PDF, Excel, CSV or XML)
- 6 Open the Dynamic Report Generator (DRG) window for dynamic report generation.
- 7 Click to view the current status of the project's report generation queue (i.e. list of reports currently being generated or ques to be generated.)

You can **generate reports on demand** by using the **Dynamic Report Generator**, where you can dynamically specify the define time period for the report before generating the report (this is a useful report testing tool):



## AVEVA Reports Getting Started Guide

DYNAMIC REPORT GENERATOR

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AVAILABLE REPORTS

1-Welcome-Demo

▶

Batch reports

▶

Drill-Down Examples

▶

Energy Report examples

▶

LUA Functions Examples

▶

▶

▶

▶

▶

▶

▶

▶

▶

REPORT INFO

Report name

Report formats

Current Status

Last Generated:

Next Generation:

Undefined

0

DYNAMIC GENERATION

Custom Time Period

Absolute or relative period definition

Relative Time

START OF REPORT PERIOD

0 : 0 : 0

hh:mm:ss back

1

+

—

day(s) back

END OF REPORT PERIOD

0 : 0 : 0

hh:mm:ss back

0

+

—

day(s) back

REPORT TARGETS

☐ PDF

☐ XLS

☐ Printer

☐ CSV

☐ XML

☐ Email



### Chapter 3. AVEVA Reports Web Portal

AVEVA Reports's web portal ("DRWeb") enables users to browse reports from the currently running project, visualize any existing report from the project, generate any report on demand, enter manual values (data) into the AVEVA Reports database or use them for calculations or filtering for regular reporting, generate *ad hoc* reports, and to view AVEVA Reports Dashboards.

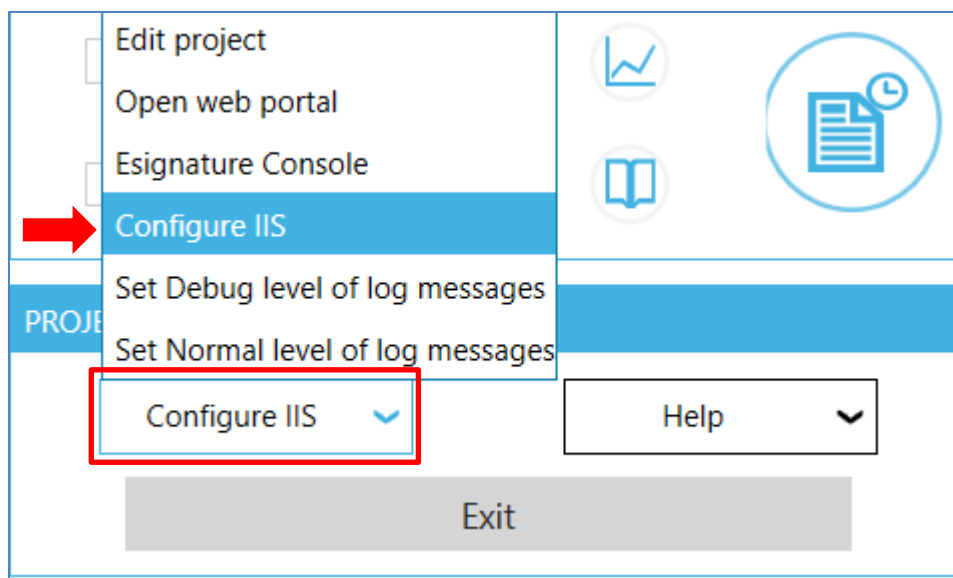
Reports can be visualized in AVEVA Reports Web Portal in the following formats:

- PDF format (a history of those reports will be displayed)
- Excel format (history of those reports will be displayed)
- XML format (history of those reports will be displayed)
- Web (HTML5) format (contains web pages with reports, no history of these reports is displayed).

#### Step 11. Configure the AVEVA Reports Web Portal

##### Configuring the Web Portal

Before loading the Web Portal, you need to define basic portal settings and configure the portal in Internet Information Server (IIS). To configure the web portal with all default settings, click "**Configure IIS**" in the *PROJECT ACCESS* section of the Runtime Management Console:

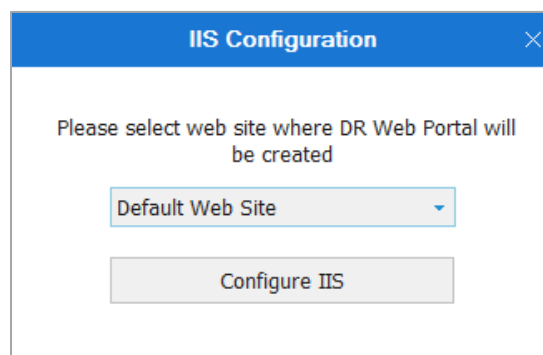




## AVEVA Reports Getting Started Guide

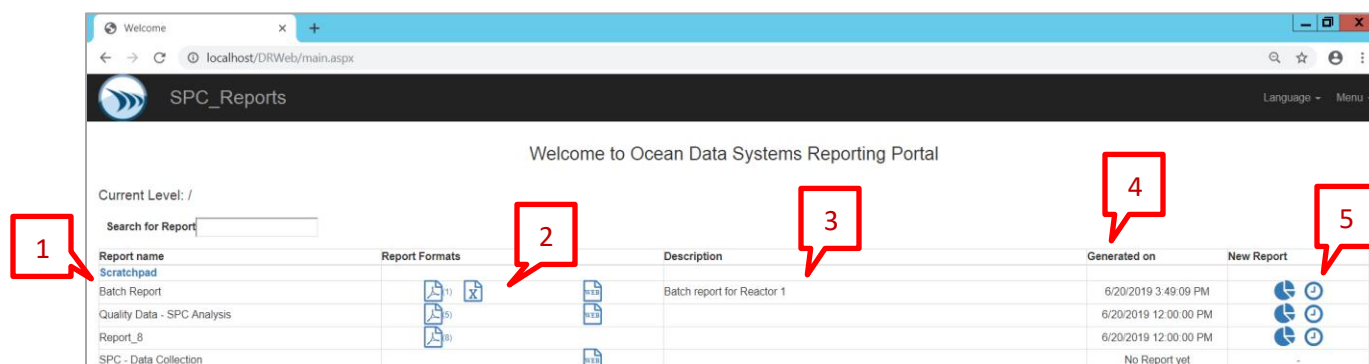
Click “**Configure IIS**”, and then “**OK**” when the following pop-up opens. The web portal will be configured within a few seconds, and be ready to use.

The web portal can be customized from the **Web Configuration** section in *Project Settings* in AVEVA Reports Studio.



### Opening the Web Portal

The web portal can be opened by either clicking “**Open Web Portal**” in the *PROJECT ACCESS* section of the Runtime Management Console, or by opening a web browser to the following URL: <http://localhost/drweb>. To load the web portal on a remote computer you need to open the web page <http://<IP address or DR Computer Name>/drweb>. This will automatically open the welcome page of the AVEVA Reports web portal.



- 1 Report Names and Report Folders** – all reports and report folders will be displayed (or a subset, if User Management/security is being used). Click on a report name to open/generate that report.
- 2 Report Formats** – click on the appropriate format icon to open the most recently generated report in the selected format, or generate the report Web report on demand.
- 3 Description** – if a report description was entered in the report settings in Studio, it will be shown here.
- 4 Generated on** – for PDF/Excel/XML files, the last time of generation will be shown. For web reports, since they are generated “on demand”, no date/time will be shown.
- 4 New Report** – clicking the “*New Report*” icon (Pie chart) will force a new report to be generated. Clicking the “*New Dynamic Report*” icon (Clock) will first open date range or batch picker, from which the user can specify a custom date range or batch, and then generate the report with those times.



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When a report opens in the web portal, a list of previously-generated reports will be shown, organized by month and year. Clicking on any report in the report history will open that report file immediately (i.e., it not be generated again). Since Web-formatted reports are always generated on-demand, no history for the web reports will be shown:

**Batch Report**  
Based on Discrete Tag Batch Trigger  
Generated on: 06/05/2019 14:52:28

**Batch Information:**

Batch ID	Batch_725
Start Time	05/20/2019 16:00:00
End Time	05/24/2019 13:59:59
Duration	93:59:59

Batch Started By: Jim  
Batch Ended By: Jim

**Process Values Statistics:**

	Max	Time of Max	Min	Time of Min	Avg
Tank 1 (L)	1095.00	05/21/2019 16:00:00	878.00	05/21/2019 14:00:00	1033.13
Tank 2 (L)	1094.00	05/22/2019 18:00:00	686.00	05/21/2019 17:00:00	986.30
Tank 3 (L)	1243.00	05/21/2019 07:00:00	733.00	05/23/2019 07:00:00	1083.87
Temp 1 (°C)	99.00	05/21/2019 16:00:00	10.00	05/21/2019 17:00:00	69.57
Temp 2 (°C)	100.00	05/21/2019 11:00:00	2.00	05/21/2019 17:00:00	41.07
Temp 3 (°C)	100.00	05/21/2019 07:00:00	5.00	05/23/2019 07:00:00	52.41

**Process Values Chart:**

Tank Temperatures

Tank Levels @ Batch End

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### Note:

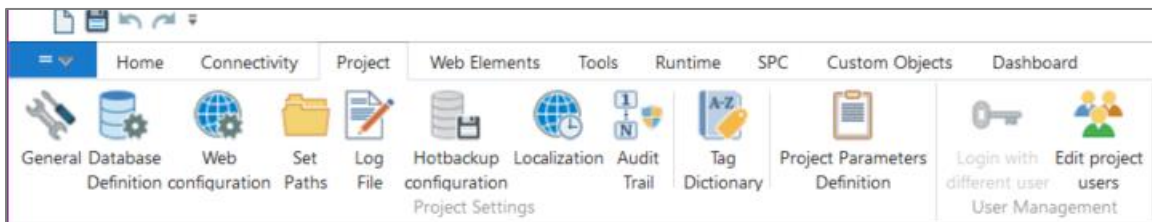
To have access to a project in the AVEVA Reports Web Portal, each time a new project is started, you will have to configure IIS (Internet Information Services) for that project manually. For this you should click on the Configure IIS button either in the Web Configuration dialog box of the Project Settings section in the AVEVA Reports Studio, or in the Runtime Management Console dialog window.



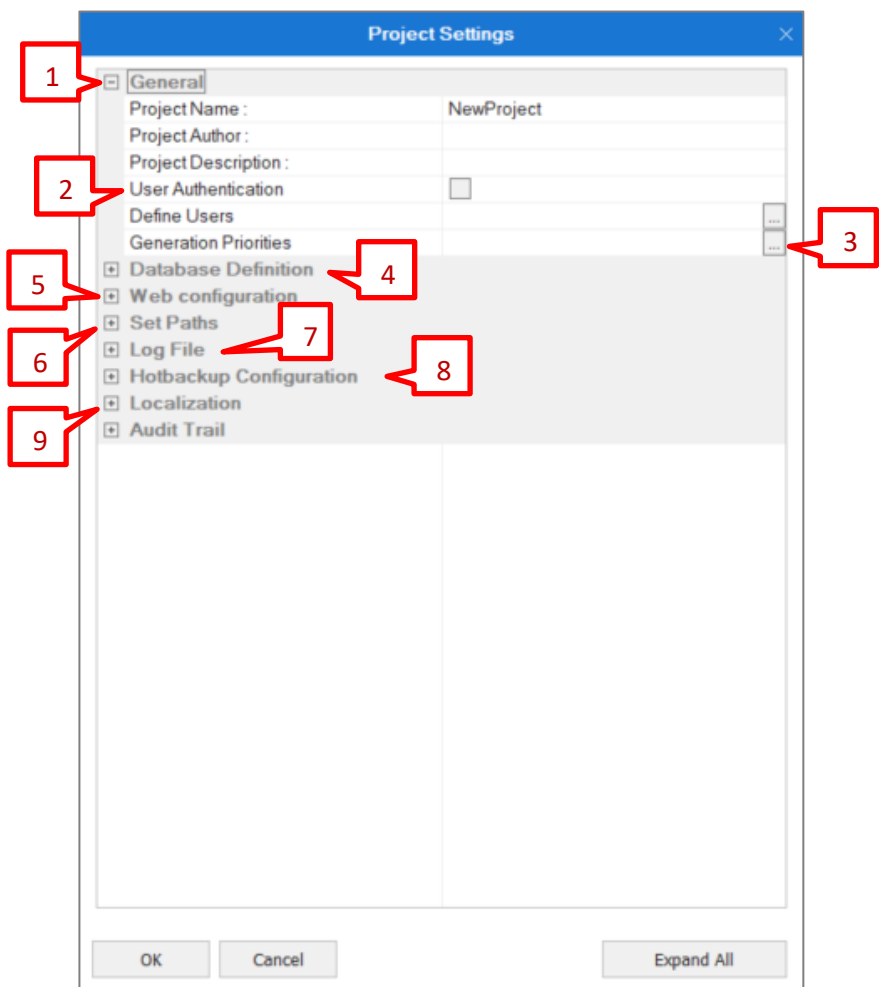
## Chapter 4. Project Tools and Customization

### Project Customization Settings

As shown earlier in this guide, creating a new AVEVA Reports project is a simple process, and you can get started right away with all the default settings. Should you wish to change various **Project Settings**, go to the **"Project"** tab in AVEVA Reports Studio - click the **General** icon (or any specific setting):



The **Project Settings** window will open:





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1	<b>Project Name</b> – define general project-related information, like project name, author and description.
2	<b>User management</b> – to secure a project, define user/user group authorization and authentication for access to different project modules, and then check “User Authentication”.
3	<b>Generation Priorities</b> – specify how AVEVA Reports manages priorities when generating reports in different modes and when generating different reports in the same mode.
4	<b>Database Definition</b> – configure the AVEVA Reports historical database, for data logging within the project. (Data can be logged natively to either MS SQL Server or MS Access, or to any open database using the ODBC interface).
5	<b>Web Configuration</b> – customize the AVEVA Reports Web Portal
6	<b>Project Paths</b> – configure destination folders, where various project files will be stored
7	<b>Log File</b> – define a log file to log online errors and information. Very useful in debugging or auditing a project.
8	<b>Hotbackup Configuration</b> - define the local reporting runtime node as a redundant station, coupled with the main station.
9	<b>Localization</b> – set the default language of the interface (i.e. all dialog boxes and menus), configure date/time/week, and display other localized settings for the report objects.

### Project Tools

This section describes several of the modules and functionality which you can use in AVEVA Reports to customize functionality and accomplish various tasks that may be needed for your reporting application.

**Virtual Report Instances** - use Virtual Report Instances to create multiple pre-defined instances of the same report template, where each instance will use the same template but with different pre-defined tags. Useful when you need to create identical reports (e.g., batch reports for various reactors) that differ only in their data items, and report generation triggers.

**Custom Archive Import Tool** - use the Custom Archive Import Tool to access any available external archive (using any defined Historical Data driver) and periodically import its data (values) into the AVEVA Reports internal database, which makes the data available for reporting from the standard AVEVA Reports database.

**Setpoint Analysis** - use Setpoint Analysis for smart analysis of thermal and other processes, where the process is based on a setpoint stability analysis.



## AVEVA Reports Getting Started Guide

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**Tag Dictionary** - use the Tag Dictionary to manage all tags used in a reporting project. You can search, change, replace tag items in an easy and manageable way.

**DSN Manager** - use the DSN Manager to configure and manage all database DSNs (data source names), used in the project – typically used with direct SQL queries and the Advanced ODBC drivers.

**Aggregated Data Filter** - this feature allows you to create smart data retrieval definitions, such as sample-based data retrieval (e.g., the 1<sup>st</sup> value every 15 minutes) and data aggregation, which can then be applied to historically-logged data in many reporting objects.

**Multi-Tag Aggregation** - Multi-Tag Aggregation allows AVEVA Reports statistical objects to perform operations not only with one tag, but to perform operations with arrays of values from different tags – i.e., you can create Multi-tag Expressions (MTE). Once an MTE has been created, it can be used in any chart, table or item field, just as if it were a raw data item/tag.

**Analytic Data Server (ADS)** - the Analytical Data Server is a AVEVA Reports service that exposes data from the internal System real-time values driver to external/third-party applications, via an OPC-DA server.

**Pivot Groups** - this function allows you to repeat one or several objects (a group) for pre-defined steps (time sub-periods or other conditions) on a report. This functionality is similar to a Step Table, However, while a Step Table can repeat lines ("steps") with predefined calculations for each time-sub-period in a single table, Pivot Groups will repeat complete a group of objects for each predefined step. For example, you might have a line chart and summary table of process parameters, that you want repeated in a report for each month of the year.

## Customer Feedback

AVEVA Reports welcomes your feedback. For comments and suggestions related to this and other manuals, contact: [contact@dreamreport.net](mailto:contact@dreamreport.net).