



Ocean Data Systems Ltd.
The Art of Industrial Intelligence

Release Notes

Dream Report®

Version 4.0

Industrial Reporting and Analysis

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Summary of New Functionalities (compared to the original version 3.43)

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- **Project Settings:**
 - Advanced connection to a custom database using DSN
 - Advanced timestamp logging settings
 - Internet Information Server (IIS) configuration
 - Option to configure levels for project log messages
 - Option to configure week settings (Localization)
- **User Management Enhancements:**
 - Options to allow users'/ user groups' access to Dream Report
 - Audit Trail and Version Control
- **Report Settings:**
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- **OPC Drivers Set:**
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- **PcVue Communication Drivers:**
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 - Custom Alarm Filters
- **Wonderware Historian Driver:**
 - Support of additional new data retrieval parameters and data retrieval mode options
- **Virtual Report Instances:**
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- **Tag Dictionary:**
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- **Search and Replace:**
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- **Custom Archive Import Tool:**
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- **Setpoint Analysis Configuration Enhancements:**
 - 9 advanced options for setpoint configuration
- **Setpoint Stability Functions:**
 - Option to select setpoints - Consider Items from the Selected Tag
- **Runtime Management Console:**
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 - New option to configure Internet Information Server (IIS)
- **Runtime Command Line:**
 - New command lines parameters for report generation
- **Runtime Manager:**
 - Runtime Configuration options now available in the Dream Report Studio
- **Report Generation:**
 - new advanced command lines for report generation
- **New Web Portal:**
 - Interface enhancements
 - Internet Information Server (IIS) configurator
 - Report Search tool
 - Support for Excel format reports
 - Manual Values Editor
- **Five New Statistical Functions:**
 - Produced Energy
 - Produced Emission
 - Standard Deviation Sample Based
 - Running Time
 - Down Time
- **Single Data Objects:**
 - Enhanced Statistical Functions Selector
- **Single Data, Expression and Compound Objects:**
 - Result representation as Widget
- **New Graphical Object:**
 - Indicator
- **Alarm Table:**
 - Display and visualization options
- **Alarm Group Definition:**
 - Advanced Alarm Filter Definition
- **Dynamic Text Object:**
 - 2 new options to display dynamic data - Instance Name and Version ID
- **Date and Time Object Enhancements:**

- Options to improve report date/time display performance
- **New Report Template Management:**
 - Options for applying/saving report template
 - Protected Templates
- **Language for User Interface:**
 - 2 new languages available – Portuguese and Spanish
- **New Section in Dream Report® Help Documentation:**
 - FAQ

Brief Description of New Functionalities

(for more details, please, refer to the Dream Report® help documentation)

Advanced Project Creation Tool

Project Wizard.

Dream Report® enables users to create, a turn-key simple project in a fast and an easy way, and then continue its development (if needed) in the Dream Report® Studio in a normal working mode. Step by step user will be guided to create a simple project with its main configurations.

Dream Report® Studio Interface

Ribbon Style Studio.

Dream Report Studio now uses the Ribbon GUI interface of Microsoft Office 2007. This ribbon style helps users find, understand, and use commands efficiently and directly—with a minimum number of clicks, with less need to resort to trial-and-error.

Project Settings

Advanced connection to a custom database using DSN.

New option in the Database Configuration section of the Project Settings window enables users to connect to any predefined custom database/remote databases over the network, using the ODBC interface either by selecting an existing DSN, or by creating a new DSN. The new Test connection mechanism allows fast validation of the connection to the selected DSN.

Advanced timestamp logging settings.

In the new version of Dream Report the timestamp of logged item values and/or alarms will be logged using both the local time of the computer, where Dream Report is running, and the UTC/GMT time format.

Internet Information Server (IIS) configuration.

Now, if a user needs to have access to a project in the Dream Report® Web Portal, each time a new project is started, he will have to configure IIS (Internet Information Server) for that project manually in the Web Configuration dialog box of the Project Settings section, by clicking on the *Configure IIS* button. This will allow user to pass successfully UAC (User Access Control) procedure on the computer where Dream Report® is installed.

Option to configure levels for project log messages

The Designer Studio of Dream Report® now enables configuring the level to control which message of the severity of the event, that has occurred, will be actually printed out to the log file. There are 2 options:

- *Normal* - where only the events with a severity of NOTICE or greater will be logged;
- *Debug* - where all information trace events will be logged.

Option to configure week settings (Localization).

New advanced visualization enables users to define a day for a start of a week for weekly reports, and to define the mechanism of how weeks enumeration will work according to the Week Number Standard (ISO 8601). The new option settings also define the algorithm of how a week number will be displayed in the report and filenames.

User Management Enhancements

Options to allow users'/ user groups' access to Dream Report®.

New advanced User Management has 2 sections:

- *Users and Groups* definition section - to create users and user groups; and
- *Authorization* section - to select any user/group and assign access rights.

New User Management functionality allows including Windows users and user groups into the Dream Report® authentication configuration, getting the Windows level of user management security.

There is also a new extended list of report access rights: *Generate Reports in Runtime Engine*, *Stop or Shutdown Runtime Engine*, *Generate Reports in the Web Portal*. User Management Authorization section has a new advanced option - *Full Administrator Rights* - which gives a user all access rights as well as a right to access to the user definition window to manage existing users and their properties, and create new users.

Version Control.

Dream Report® has a new functionality - *Version Control* - to track design version of the reports and all changes between versions, log and track all changes in report layout between versions in a secure Version Control database, roll-back to a specific version number, and display version number in the report.

If this option is enabled, any time each version of every report is saved, all the history of all the versions of every report will be automatically logged into the project database. If needed, users can also add comments to the reports. The comments will be logged into the same Version Control database and will be attached to the new report version number.

Report Settings

Filename component - *Report Instance Name*.

New filename component is now available for the report filename mask: *Instance name*. If this option is selected in the "Report instance name" section, the following string will be added to the filename mask: **[s#InstanceName]** and, during report generation, it will be replaced by the report instance name, for which this report file has been generated.

Option to define report time - *Report Instances*.

The time definition section of the Report Settings window has a new *Report Instances* combo box, which contains the list of all available virtual instances for the defined project. It enables users to apply and save different generation schedules for different report instances.

Option to configure report generation on event – *Instance Generation*.

"Generation on event" section of the Report Settings window now enables users to configure report generation, and define different generation rules on event for different report instances in the new *Enable Instance Generation* section available.

Report Generator

Enhancements in Advanced PDF Security.

Reports, generated in PDF format, can now be protected optionally by a set of permissions, which prohibit users from printing and using cut and paste operations.

The permissions determine which kind of access the user password will provide. There are 4 options available: *No Printing*, *No Changing Document*, *No Copying or Extraction* and *No Adding or Changing Form Fields*.

Database Command

Report Preprocessor.

New database command enables users to perform an action (SQL query or stored procedure) before report generation using input parameters, and use the result as an input for report. Report Preprocessor allows replacing items in the following objects: Charts, Automatic Statistical Tables, and Item Tables.

Connectivity Configuration Wizard

Enhancements in Driver Configuration.

New Connectivity Configuration Wizard helps and leads users through the main steps to create and configure connectivity to data sources and create batch definitions (if needed). Data source selection is displayed as a tree, where the first browse level is the list of the data source vendors displayed as folders. Each driver has its own configuration user interface, depending on the specific protocol needs.

OPC Drivers Set

OPC Server hot backup option.

New functionality allows OPC driver to work in a hot-backup mode and automatically switch from one OPC server to another in case of communication error, and also to be able to connect to the secured OPC servers. This functionality is implemented in OPC DA, OPC AE and OPC HDA drivers.

PcVue Communication Drivers

New PcVue Alarms driver.

Dream Report(R) has a new web services driver to extract PcVue historical alarms. It can:

- Use PcVue native alarm filters to create alarm tables and alarm calculations, and filter alarms by any available PcVue alarm property;
- Extract any available PcVue alarm property using new web services driver, and display in Dream Report tables;
- Read from PcVue and provide Dream Report with all alarm filters, defined in PcVue using web services.

New Alarm Management

Custom Alarm Filters.

Dream Report has strong enhancements in alarm drivers connection and alarms extraction. It enables:

- Creating alarm filters for WW alarms database (WWALMDB) using all available 20 alarm filtering criteria
- Creating filters for Eurotherm alarms/messages using all alarm fields, available in UHH/Review

Wonderware Historian Driver

Support of additional new data retrieval common parameters and data retrieval mode options.

Wonderware Historian driver has a new option - *Data Retrieval Common Parameters* – to check the quality of retrieving data by the SQL Server from the Wonderware Historian driver. It has 9 new options of retrieval modes for obtaining and rendering data for specified parameters that are supported in Wonderware's Historian (InSQL) servers.

Virtual Report Instances

Multiple pre-defined report instances creation.

Dream Report® now provides users with a possibility to create multiple pre-defined virtual instances of the same report with different tag sets, to select manually tags for report at generation time, to set a separate generation schedule and event for each instance. This functionality allows users to reduce the design time for cases, where the same template should be used with different tags.

Tag Dictionary

Functionality to create and save tags for multiple reports.

New version of Dream Report® provides a global list of tags (Tag Dictionary), used in the project, and their descriptions. It has an enhanced Search and Replace mechanism to make the process of finding and replacing data items more precise and convenient in project performance. Changing one tag will modify all related objects, where that tag was used. Tag Dictionary is printable and easy accessible.

Tag Dictionary/Virtual Report Instances

Advanced Search and Replace function.

New advanced Search and Replace mechanism of the Tag Dictionary and Virtual Report Instances functionalities is based on the complete matching of the source types, data sources and item names of the data items, that are searched or replaced.

Search and Replace

Advanced functionality for selected objects.

Dream Report® now provides users with a possibility to search or replace some data not only in the entire report, but also in its part. New Search and Replace functionality facilitates project modification if only a piece of data needs to be modified. Now it is possible to select a group of objects and then perform some operations on top of the selected group – copy/paste, cut, move or delete the group.

Custom Archive Import Tool

Option to retrieve external data – *On Absolute Time*.

Archive import tool of Dream Report® now enables users to set one more time period for retrieving data from the external archive - *On absolute time* - when the archive import tool will connect to the external archive and import all new item values at an exact time specified in the list.

Setpoint Analysis Configuration Enhancements

9 advanced options for setpoint configuration.

New version of Dream Report® allows 9 new options to configure setpoints:

- *Bandwidth* - to define low and high level for the stability. This option enables to resolve the task, when high and low tolerance values are different.
- *Consider Stable Period if Values are Stable for at least* - to define the stability period by setting the time period when the values will remain stable;
- *Process Success Criteria* – to define automatic process validation. It has 7 options:
 1. ***All values are within defined bandwidth during stability period*** option controls the situation when one or multiple values will fall out of stability bandwidth.
 2. 2 options - ***Rate of change is not less than*** and ***Rate of change is not more than expected*** - control how rate of change influences the result.
 3. ***Exclude failure from calculated stability period*** option influences only calculation of duration of stability period and no other influence.
 4. 2 options - ***Ignore rate of change before stability*** and ***Ignore rate of change after stability*** - define if rate of change should be considered for the process validation.

5. **Ignore out of the range item(s)** option enables to discard from the setpoint calculation the items with the values, which are either higher or lower than the ones defined in the setpoint.

Setpoint Stability Functions

Option to select setpoints – *Consider Items from the Selected Tag.*

Dream Report® allows new option when selecting setpoints for the setpoint stability statistical functions. The select setpoints dialog box has one more option to select setpoints from the data items – *Consider Items from Selected Tag.* When a user will select the item/tag in this option, which he may need for the calculations, the function will calculate that item/tag, which has entered and left the stability period. Then the function will do its main calculation only for this item from that setpoint.

Runtime Management Console

New functionality to run Dream Report projects, log data and execute reports Runtime management console is a completely new single common interface, which allows users to control all operations related to the runtime manager and report generation. It is implemented as .NET component, which enables embedding it into the external environment, and has an ability to connect to local or remote project.

New option to configure Internet Information Server (IIS)

Dream Report now allows configuring IIS for the project directly from the Runtime Management Console.

Runtime Command Line

New command lines parameters for report generation.

RTM now handles a substantial number of generation requests, that will send commands for report generation. The command line has arguments that will say which type of request has to be performed.

Runtime Manager

Runtime Configuration options now available in the Dream Report® Studio.

Runtime Engine now has no user interface and is controlled from the Runtime Management Console with the integrated Dynamic Report® Generator. It is also implemented as Windows service and is launched automatically without user login on a PC start. Now users can also reload reports/projects and configure runtime settings directly from the Dream Report® Studio. This functionality also enables users to configure controls, which will be applied for the runtime service and RMC. Using RMC enables access to the project remotely over the company network.

Report Generation

New advanced command lines for report generation.

Dream Report now provides users with a list of new command lines for report generation. New generation requests (command lines) have an argument that says which type of request has to be performed.

New Web Portal

Interface enhancements

Dream Report® has the new significantly re-designed web portal, which supports TCP/IP connectivity. Virtual instances of the reports (if defined) are now displayed on the Welcome and Details pages of the Web Portal as a tree.

The Details page now contains all the information a user may need about the report generated: the selected report name, the name of the report instance (if exists), the timestamp of report generation and the generated report filename.

Internet Information Server (IIS) configurator.

In the new version of Dream Report®, if a user needs to have access to a project in the Dream Report® Web Portal, each time a new project is started, user will have to configure IIS (Internet Information Server) for that project manually, either in the Web Configuration dialog box of the Project Settings section, or in the Runtime Management Console dialog window, by clicking on the *Configure IIS* button.

Report search tool.

New version of Dream Report® provides users with the report search tool (*Find report file* option) to easily find the report files needed, using the specified search criteria (either by time period or by key words in a filename/report file).

Support for Excel format reports.

New Excel report format icon has been added to the “Last Report” column of the Dream Report® Web Portal Welcome and Details pages. If a report has Excel format defined, Excel icon will now be displayed next to the PDF icon. By default reports will be opened in PDF format, but if the report has only Excel format and no PDF format defined, – reports will be opened in Excel format.

Manual Values Editor.

Now, if the Dream Report® project has the manual driver defined, then, on the top of the page there will be a new button displayed “Manual values entry”. By clicking on that button, a new page with the input manual values will be opened. It will have exactly the same design as a regular MVE window.

5 New Statistical Functions

Dream Report® has new statistical functions to enhance important calculations of the production processes:

Produced Energy, Produced Emission, Standard Deviation Sample Based, Running Time and Down Time.

- *Produced Energy* - to calculate the amount of produced energy (CCal or MCal or MJ or GJ);
- *Produced Emission* – to calculate the amount of produced emission (CO₂ or CO);
- *Standard Deviation Sample Based* – to calculate the standard deviation (sigma) not based on all values over the period, but by specific number of samples.
- *Running time* – to calculate the time period when the value, which was recorded into the database, was found as 1.
- *Down time* – to calculate the time period when the value, which was recorded into the database, was found as 0.

Single Data Objects

Enhanced Statistical Functions selector.

New version of Dream Report® provides users with a quick and more user-friendly access to all the statistical functions in the Single Data Objects. In the Select Statistical Function dialog box the statistical functions are now grouped according to their common performance characteristics, and are displayed as a tree, which can be easily expanded or collapsed according to the users' needs.

Single Data, Expression and Compound Objects

Result representation as Widget.

New graphical representation option enables displaying calculated results in more readable and understandable ways. *Display as Widget* is a new result representation option inside single calculated objects and it displays result graphically as a Gauge, or as a Linear Indicator. It has the flexible tunable scale, limits and colour segments.

New Graphical Object

Indicator.

Indicator is a new graphical object that displays calculated data in the new standard representation way according to the latest energy reporting standards. An indicator object calculates the value according to the defined function or calculation, grades the result according to the preset grade of value ranges, and displays the result with the grade mark.

It has 1 form of setting the indicator up for custom needs with custom

calculations (*Custom Indicator*), and 3 pre-set certificate forms:

- *Energy certificate* - indicates energy (thermo + electric) consumption to change a temperature of m2 to 1C degree
- *Eco certificate* - indicates amount of pollution (CO2), emitted for heating of m2 for 1C degree
- *Water certificate* - indicates water consumption of the building per m2.

Alarm Table

Display and visualization options.

Alarm Table provides users with 3 new options to display the alarm's summary data in the alarm table:

- *Display every alarm once* – ability to display an alarm in the list by one (first) occurrence line only if it has occurred multiple times over the period;
- *Fit rows to text* - ability to display several alarms of the same type in one line, and display how many times that alarm has occurred during the period (collapse mode). The list of available alarm table columns will have a new calculated column – Number of occurrences
- *Display as event list* – ability to display alarms as event list (Timestamp, Priority, Description, etc.)

An advanced option to enhance the visualization of the results of alarm occurrences in the project is now available in the Alarm Table Appearance dialog window. It enables users to change alarm line text/background, depending on: alarm state, number of alarm occurrences, alarm priority.

Alarm Group Definition

Advanced Alarm Filter Definition.

The new *Define Alarm Filter* button of the **Add Alarm Group General** dialog box enables users an advanced configuration of alarm filters for an alarm group (editing the properties of the existing alarm filters ,selecting existing filters for specific objects as needed) directly in the Alarm Filter Manager dialog window.

Dynamic Text Object

2 new options to display dynamic data – *Instance Name* and *Version ID*.

Dream Report® has 2 new options for the types of the dynamic data to display:

- *Instance Name* – to display the name of the instance of the generated report;
- *Version ID* – to display the ID of the report version a user will need.

Date and Time Object Enhancements

Options to improve report date/time display performance.

There is a set of new options for displaying dynamic date and/or time in the desired format:

1. *Object name* – to define the name for the selected object.
2. New option for dynamic generation – *Report generation time* – to specify the duration of the time for report generation that will be displayed.
3. New time format - *OS Time Format* – to automatically apply the computer operational system time settings to the Date/ Time object settings.
4. Three new options to define time period for display – *Batch based, Fixed period, Calculated time period.*

New Report Template Management

Options for applying/ saving report template.

Dream Report® provides users with a very easy and intuitive way to create, save and apply report templates:

- **When applying report template to an existing report** – new *Configure Tags List* option enables users to select a tag for every logical description, and it will be automatically added to every object/table/chart, where this tag has to be used.
- **When saving a report as report template** – new *Tags Dictionary* option enables users to define the list of tags, which will be saved inside the report template file. When saving the report template, the tag dictionary will save ONLY tag descriptions and their reference associations with statistical objects in the template. Data sources and tag names will not be saved in the template.

Protected Templates.

Templates can now be saved in the protected mode. When applying such a Protected Template to a report, user will need to have a special license option to use protected templates.

Language for User Interface

2 new languages available – Portuguese and Spanish

2 new languages are now available in the language selection list – *Portuguese and Spanish.*

New Section in Dream Report® Help Documentation

FAQ

Dream Report® has a new section - *Dream Report® FAQ* - to give generic answers to the most frequently asked questions about the product, providing

detailed information on all the functionalities of new Dream Report®. There is also an email address, where users can send their questions and get qualified answers and advice.

Corrected Problems/SCRs (compared to the original version 3.43)

994	Current batch end time, based on the Review database, shows the report generation time	Eurotherm
948	Linear calculation of the engineering unit conversion gives the wrong result	Wonderware
875	Expression object crashes on modification in the specific project	ODS
850	It is not possible to get the list of items from the database when the value range is specified	ODS
813	Advanced Visualization does not work for the "Duration in Interval" stat. function. Sim Project attached	Vassiliko
747	The batch-based chart shows N/A	Arc Informatique
630	Subtraction between objects, that have negative values, doesn't work	Eurotherm
616	When doing the browse from Indusoft, it is not possible to see the list of tags, but only the list of folders. Though the OPC clients can browse all in a proper way.	Hollis Tech
600	The possibility to automatically discard from the stability analysis process while the report is generating the TCs, which are out of the range	Eurotherm
561	Possibility to choose the week number rule (ISO or not)	Arc Informatique
520	Expression object in the second line of the footer of the step table causes DRT crash	Eurotherm

Note: This list of SCRs is not final and may be updated for the final Dream Report™ version 4 release.

Known Problems

This part will be updated for the final release, if required.

System Requirements

CPU: Duo Core 1,6 GHz+

RAM: 2 Gb+

HDD: 250Mb (for installation) minimum

Video adapter: No special requirements

Network adapter: No special requirements

Monitor resolution: 1024x768

Operating Systems Supported

- Windows 2000 workstation (without Web Portal functionality)
- Windows 2000 Server (without Web Portal functionality)
- Windows XP Professional Edition (Web Portal requires Service Pack 3)
- Windows XP Professional Edition (Web Portal requires Service Pack 3)
- Windows 2003 Server (incl. R2)(Web Portal requires Service I
- Windows Vista (Web Portal requires Service Pack 1)
- Windows 2008 Server (incl.R2), any SP
- Windows 7 (32-bit) and (64-bit) with and without SP1

Databases Supported

- MS SQL Server 2005 Express, 2008 Express, MSDE
- MS Access 2000, 2003, 2007
- MS SQL Server 2000, 2005, 2008
- MySQL 4, 5 (ODBC driver 3.51, 5.1)
- PostgreSQL

Additional Software Requirements

- To visualize PDF files you need to install Adobe Acrobat Reader ver. 7.0 and higher (the latest version 10.x is recommended)
- To generate and visualize reports in Excel format, MS Excel has to be installed
- To use Web Portal you have to install a web server (Internet Information Server or other) before Dream Report® installation.

Demo Version Limitations

If you have installed the Demo version, it will have the following limitations:

- Dream Report will run continuously for 30 minutes maximum.
- Demo license is limited to 25 data items, which can be used in the project.
- Web portal is enabled.
- A red line will be added on top of each report page, which says that report has been generated with the demo version of Dream Report®.

Note:

Please, refer to the **Dream Report® online help** to get information about any specific functionality. Online help can be opened in **Help** menu of *Dream Report* studio or using **Start** menu.

To buy Dream Report®, please contact:

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