



OCEAN DATA SYSTEMS

The Art of Industrial Intelligence

Dream Report

User Friendly & Programming Free TM
Reporting



**Life Sciences
Pharmaceutical & Biotech**

Applications

Autoclaves
Bioreactors
CIP
Certificate of Analysis (COA)
Packaging
Ethylene Oxide
Freeze Drying
Lyophilization
Sterilizers
HVAC
Batch Reporting
Validation
Thermal Surveys
PAT Analytics
Filling Lines
Quality Assessments
Energy Audits
Utilities Mgmt.
Waste Treatment
LIMS
Stability Testing
Maintenance
Asset Management
Production Management
Product Approvals
Fermenters
Process Capability
24x7x365 Reliability
21CFRPart11
GAMP₅



Life Sciences

Ocean Data Systems Ltd. has created the ideal Report Generation and Data Analysis solution for Life Sciences. The Pharmaceutical and Biotech industries have the most demanding reporting requirements of any industry. We know - our customers have told us, guided us and helped us perfect Dream Report for your most demanding applications.

"Dream Report is designed for the pharmaceutical market by the pharmaceutical market."

We listened to your needs and we've addressed them head on. Dream Report has all the tools required to build a 21CFRPart11 compliance reporting solution.



Security and accountability, guided by the Code of Federal Regulations, Book 21 and Part 11 (21CFRPart11), regulations are extremely important to most applications in this space. Dream Report isn't a combination of business tools augmented with connectivity and automation to get by in these applications. Dream Report is a "Purpose Built" software product by a company that understands industry, your automation technologies, and your need for 24x7x365 reliability.

Dream Report delivers, for every application you rely on, and Ocean Data Systems stands behind every installation, and this product integrates with your plant floor systems.



Good Automation Manufacturing Practice (GAMP₅)^{*} relies on collecting data and, through the power of analytics, turning that data into knowledge. Then, using that knowledge to ensure product quality, process repeatability, batch documentation, and production releases.

Dream Report is the reporting and data analysis solution, perfectly addressing the needs of this demanding vertical.

Typical Applications:

Validation – Whatever system, Sterilizer / Autoclave, Freeze Dryer / Lyophilizer, Freezer, Refrigerator, Heat Tunnel, etc. Dream Report will interface with your data acquisition systems and data sources, what-ever the formats, and will generate the reports and knowledge you need. Dream Report will perform the analysis, select the Min and the Max, document the soak times, the stability, the repeatability and any other metrics that are important for your accountability.

Batch Reporting – A particularly challenging application, Dream Report will understand your systems, uncover batch IDs, evaluate start times, stop times and aggregate the results you need for your production release. Dream Report is Smart, and it is Capable. It will run automatically, but also gives you the power to select a report by Batch I.D. and rerun that report at any time. Do it from your Operator Station, or remotely from a Web Portal.

LIMS Reporting – Laboratory Information Systems need to be integrated with your Electronic Batch Records. Dream Report delivers the Manual Data Entry to make it all possible.

21CFRPart11

Dream Report delivers:

- Domain Based Security that is Role Oriented – The right functionality for the logged in user. Security can be node based or Windows Active Directory based.
- Report Template Version Management. Template modifications are archived and managed. Templates may be rolled back to previous versions, or rolled forward to versions that have achieved approval.
- Report Signing – Reports can be electronically routed and signed. Digital signatures are applied on-line.

The Life Sciences Option delivers Electronic Signatures.

Batch Reporting

A significant challenge for Pharmaceutical companies. Your systems collect data, but the understanding of a batch escapes many reporting solutions. Dream Report understands the complexities of batch management and will monitor variables that represent batch starts and stops, and will correlate those times with other variables that represent the resulting batch data. With its Web based interactive reporting, you simply select a Batch ID and

Dream Report by Ocean Data Systems Ltd. - The Art of Industrial Intelligence

Dream Report does the rest. With automated batch reporting, it just happens. That simple.

Manual Data Entry

Not all data is available programmatically. Lab Samples need to be entered and properly integrated with collected batch data. Not a problem for Dream Report. Manual Data Entry "Selectors" enable operators and lab technicians to quickly select variables and enter their test results, along with timestamps to match their actual collection times. Worried about getting the data right? Data validation will apply bounds to variables, ensuring that a typo doesn't make it into the record. Manual Data Entry can be human audited, validated, and corrections can be submitted. Reports can be set up to only report on validated data.

Localization

Tools for your team, in the language that they dream in. Your reporting requirements aren't likely limited to one location. You have manufacturing around the globe and your team needs to react to local needs. Additional reports to commission new equipment, modified copies of standard reports to gain insight into process changes. Your team will need to log into Dream Report, and work in their local language. Dream report supports localization, configured at the server, or defined by the user login. Standard support for over a dozen languages, switched on the fly, means Dream Report is the right solution for your diverse development team and user base.



Language Settings

Interactive Reporting

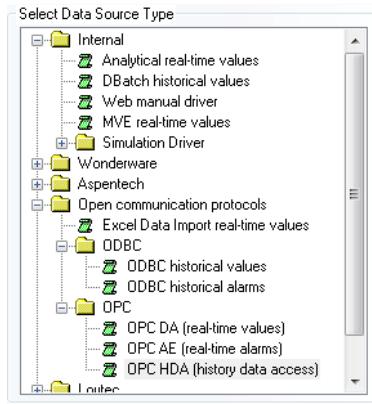
You'll want to select a template, select a batch and generate a report. You'll want to develop and validate one template, lock it and apply it to all common equipment – Sterilizers, Freeze Dryers, Bio Reactors, Fermenters, Packaging Equipment, and more. You'll want the reports to be completely automatic, sensing process conditions to trigger their operation, but you'll also want to go back and recreate that report from last month, or from that golden batch. Dream Report handles all that, and the use of "Pickers" in a report gives you the interface to make date and time selections, batch selections or equipment selections. Dream Report's Web Portal delivers that capability to you in the office or away, on any device, with complete security.

Smart Reporting

Gone are the days of complicated Excel formulas for report generation. While that is always an option and Dream Report can create Excel Workbooks as its report generation, there is a more powerful solution, one that delivers the understanding of what you're trying to accomplish, and simply does it. Dream Report "Widgets" are smart reporting objects that deliver data, analytics and visualization. You simply select the widget, drop it into your report through the WYSIWYG (What You See Is What You Get) editing environment, define its data sources and desired customizations and you are done. No hassles and macros. No errors in calculations and no scripting or software development.

Dream Report Data Interfaces

Dream Report interfaces with all of your existing history data stores and live data sources. Unlike traditional business intelligence solutions, Dream Report understands automation data sources. With an array of data interfaces, ranging from specialized proprietary interfaces, to automation industry standards and IT Standards, Dream Report will collect or query data from Real-time sources, Historian sources and Relational Database sources. Dream Report understands the data that sources provide, data formats, time formats, alarm and message formats, and intelligently works with them all. It can even write the results back to your systems.



Communication Drivers for Every Product

Report Design

Dream Report takes the effort and complexity out of even the most demanding reporting tasks. With connectors that understand their data sources, to beautiful formatting and display objects, Dream Reports will WOW you with their elegance. It's not just about getting data and displaying it. It's about understanding the data, using powerful analytics to turn your data into information and knowledge. Dream Report, through a wide range of Analytic Functions, delivers on that front, reducing your development efforts, improving your quality and making you as productive as possible.

Widgets (Smart Objects) do most of the work for you. Need page numbers, there's a widget for that. File Name? Directory Name? Issue date, start and end times? Data displays, bar graphs, trend charts, pie charts and results tables, they are all there. Dials, gages, tanks and more. Drag them onto the report, configure a few parameters for data source and calculation functions and you are all set. Smart report objects are one area of Dream Report value, the analysis functions that can be attached to them are another.

The combination of purpose built calculation functions with visualization objects create the world's most sophisticated and easy to use solution for reporting and data analysis for industrial applications. Gone are the days of difficult scripting, macro development or the need for specialized IT support.



One of Many Data Display Widgets

Dream Report Delivers a Complete Array of Statistical Functions

Analytic functions that understand their purpose. These have been specially crafted to deliver the results you're expecting, from the data sets your automation systems are providing.

Select Function	Caption
<input type="checkbox"/> Sum	Sum
<input type="checkbox"/> Duration in the interval (hours)	PeriodOfLogged
<input type="checkbox"/> Counter	Cnt
<input type="checkbox"/> Logged Value Counter	CntOfLogged
<input type="checkbox"/> ON Counter	CntOn
<input type="checkbox"/> OFF Counter	CntOff
<input type="checkbox"/> ON/OFF Counter	CntOnOff
<input type="checkbox"/> Running Time	RunningTime
<input type="checkbox"/> Down Time	DownTime
<input type="checkbox"/> System availability	Availability
<input type="checkbox"/> Standard Deviation	StdDeviation
<input type="checkbox"/> Counter of alarms	CntAlarm
<input type="checkbox"/> SQL Query	Sql
<input type="checkbox"/> Mean Kinetic Temperature	MKT
<input type="checkbox"/> Advanced Mean Kinetic Temp	AdvMKT
<input type="checkbox"/> Batch ID	BatchID
<input type="checkbox"/> Batch Start Time	BatchStartTime

Simply Click for Function Selection

Calculation Functions:

Value, Maximum, Minimum, Average, Sum, Standard Deviation,
Associated Timestamps

Logged Value Counter – How many times a value is encountered

Duration Interval – Time a Value was in a range

Counter or Period Totals – Last variable minus first variable and rollover aware (for tracking energy meters & totalizers)

Advanced Functions:

Mean Kinetic Temperature – A function that will calculate an equivalent temperature for a dynamic set of input data.

F₀ Lethality Rate – An integrating Function that calculates the total exposure in a sterilization process

ON and OFF and Transition Counters – Delivers a count

transitions

Down Time – Totalizes the time a variable was off

System Availability – Percentage of time was met.

Energy Management (Facility) Functions:

Produced Energy The heat energy produced by the consumption of various fuels

various fuels

Batch Functions:

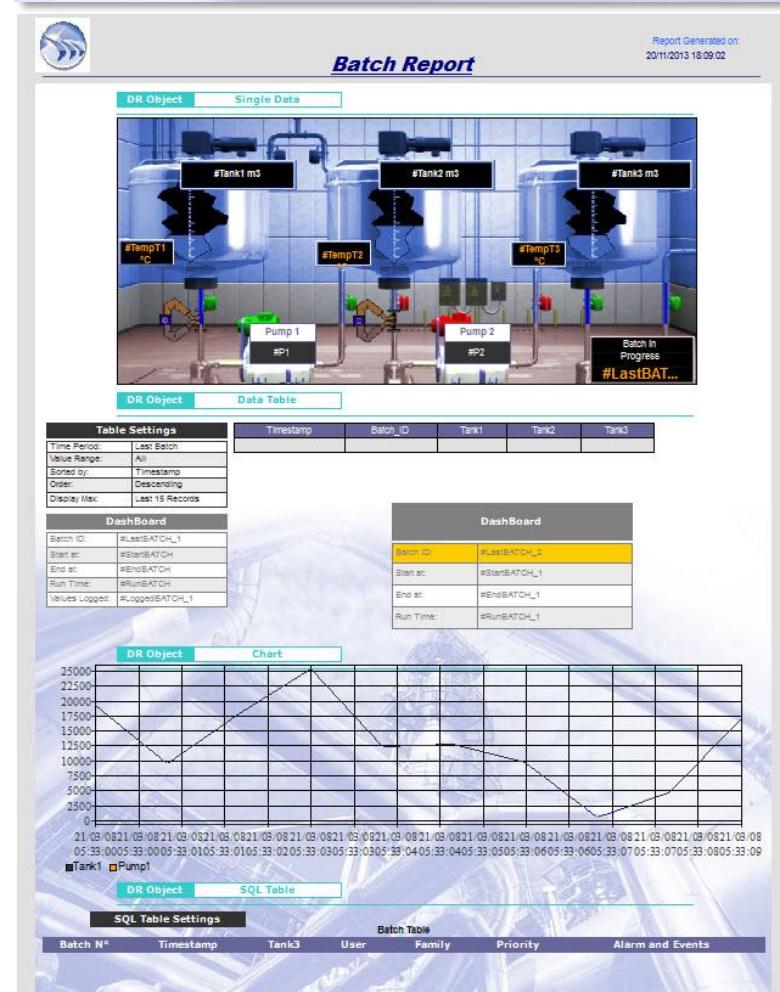
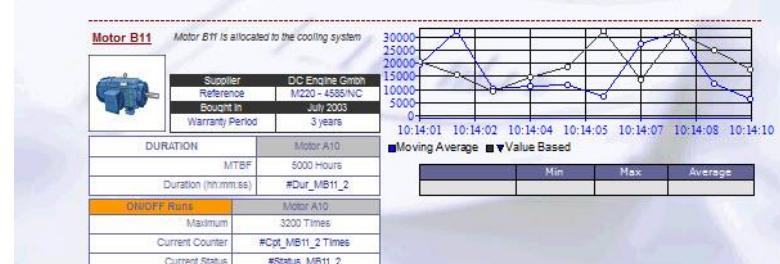
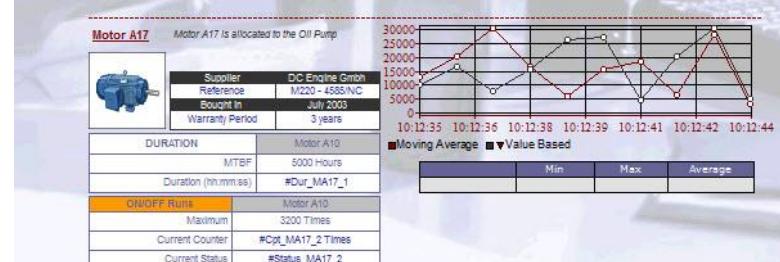
identification of batch period

Setpoint Analysis Functions: These Functions are critical for the process of thermal validation and heat

Setpoint Analysis - Start time of stable period, end time of stable period, duration of stable period, setpoint stability result, count of stable periods, rate of change before entering stability zone, rate of change after exiting stability zone. Use all items or identify and use - fastest entry item, slowest entry item, fastest exit item, slowest exit item.

[About Academic Exceptions](#)

Alarm Analysis Functions:
Alarm Counters – Calculates the number of alarms, by filter, for a specified time period.



SQL Functions:

Direct SQL Query, with Dynamic Tokens – Use Dream Report Variables as items in a SQL Query

The Dream Report MES Option delivers the Visual SQL Editor, unlimited SQL Data Queries and 5 Web Portal Users.

Pulse Analysis Functions:

Excursion Analysis - Positive pulses, negative pulses, peak maximum and peak minimum functions will count variable excursions beyond a limit, over a period

Compound Data Functions:

Group Data Functions - These functions calculate minimums, maximums, average, sum, and standard deviation of a set of other Dream Report data items

Expression Data Function:

Expression Data Function - Accepts a manually entered expression involving one or more statistical objects, mathematical operators and constants. It is time aware and offers a full range of basic and advanced mathematical functions

String Functions:

String Operations - Include concatenation, extraction, string lookups and conversions to and from numeric values

Manual Data:

Manual Data - Objects in a report are invisible for final output but come alive when used in the Dream Report Web Portal. Manual Data enables the selection or entry of variables, dates and times, with range validation and user security

Report Storage and Distribution

Store reports in a directory. Automatically build the directory structure. Automatically name your reports. Names can include any combination of date, time, batch I.D., fixed text, and data variables

Distribute them via Email. Built-in SMTP functionality lets you distribute reports to an email list.

Print Reports. Use the default printer or specify a specific printer. If a printer is unavailable, designate an automatic backup.

Send Reports to a Web Portal. No effort involved – Dream Report sets up IIS and configures a Web Portal and automatically displays your reports (if you choose to do so), in a browser based and Mobile friendly environment.

Through the benefits of HTML-5, your reports will work in any browser and on any Mobile device, iOS, Android, Windows or other. PC or MAC, it's up to you. Need a Web Dashboard of Key Performance Indicators (KPIs), configure a report for automatic update and you have it.

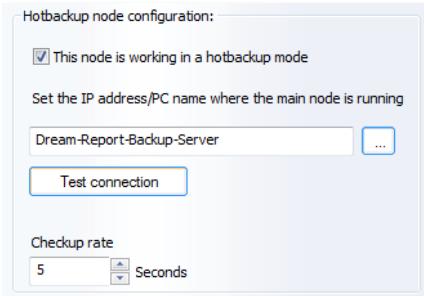


Web Portal for Interactive Report Generation

Reliability

Of crucial importance in this market. When batches of product can exceed the price of your average home, you must be sure the reporting is available

at batch completion. There is no room for error. For optimum reliability, redundancy is the solution. If reports are generated, and one printer is unavailable, then Dream Report will automatically fail over to a backup printer. If one reporting node becomes unavailable, possibly a server hardware failure, a second Dream Report system will automatically recognize the failure of its counterpart and take over reporting.



Hot Backup Server Selection

So, What Are You Waiting For?

You may think automated report generation is just for compliance reporting, generating the necessary documentation for batch approval, FDA or EPA submissions. That is certainly important.

Dream Report can deliver the power of automated business intelligence to your entire organization. If you don't have an automated report generation and data analysis solution as a part of every automation system, then you aren't as efficient as you could be.

Today, when you're tasked with continuous improvement, the old adage of "Out of sight, out of mind," continues to be the primary obstacle. Having business intelligence delivered to you, in a regular and automated fashion, will keep you informed of the usual, so that you can react to the unusual.

To learn more about Dream Report, visit our Website at www.DreamReport.net and download a fully functional, time limited version of the product.

