



OCEAN DATA SYSTEMS
The Art of Industrial Intelligence

Dream Report

User Friendly & Programming Free™
Reporting



VTScada
Software for Monitoring & Control

Dream Report for Trihedral's VTScada

Dream Report
Product Overview

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Report Generation and Corporate Dashboards

Turning your raw data into meaningful compliance reports, performance reports, and corporate dashboards has never been easier. Dream Report is a purpose built solution delivering extreme ease of use with features that understand and address the needs of industry. Report generation is now for everyone, not just your IT professional.

“Dream Report is designed for the automation industry by the automation industry. Unlike general purpose business tools, Dream Report is a perfect fit for industrial applications.”

A report generator and dashboard solution for automation needs to deliver all the expected tools of a business intelligence (BI) solution combined with the understanding of automation data sources, and the ability to deliver automation industry specific statistics. In addition, the solution has to be robust and all encompassing, delivering data aggregation from various data sources, automated triggering of reports on any combination of manual, time or event, the generation of information in many forms and the delivery of that information through email, file transfers and a web portal.

Dream Report delivers on all fronts and elegantly addresses the needs of every market, from discrete and hybrid applications to continuous (process) applications.

Typical Applications:

Compliance Reporting – You may have reports that are required by various agencies such as EPA, FDA, EPBD, or have reporting requirements that must meet standards such as 21 CFR Part 11. Dream Report has been designed for these tasks and addresses them elegantly and directly, requiring no complicated configuration or integration.

Performance Reporting – Typically overlooked due to the complexity in setting up a reporting solution, Dream Report’s ease of use and flexibility opens up a whole new world of information generation and delivery. Adding a new report can be a 10 minute effort, without any programming or scripting. Now you can have all the reports you want, and not just the reports that you need for compliance purposes.

Corporate Dashboards and Interactive Operation – Every information management solution should offer a web portal for

information views, manual data management and interactive analysis. Dream Report delivers in this area as well, with a solution that is automatically configured with the press of a button and completely managed for you as you develop your application.

A Solution Designed for Automation Data Sources

Unlike traditional business intelligence solutions, Dream Report understands automation data. Dream Report understands the structures 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 automation systems.

Dream Report integrates with every automation solution through a library of over 65 interfaces including those for proprietary interfaces, industry standards and business (IT) standards. Connectivity typically includes access to Real-time, Alarm and Historic Data.

Dream Report’s architecture supports both local connections and remote connections (connectivity to data sources through secure web services). The latter being delivered with a keen eye toward both high security and maximized system performance. This unique functionality positions Dream Report as an enterprise reporting solution and able to operate in the cloud, delivering reports as a service (RaaS). Again, no custom integration, programming or scripting required.

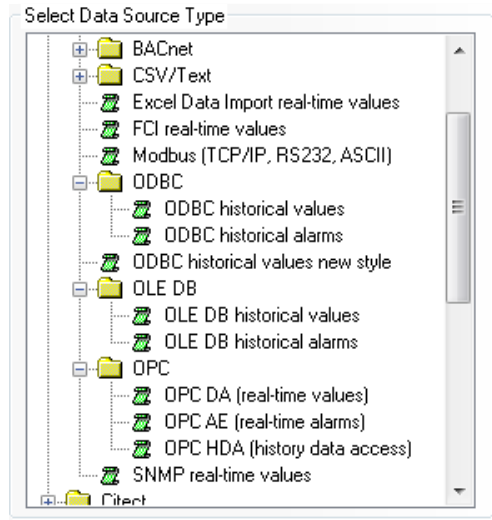
Proprietary Interfaces - Specifically built for a particular product or solution. Examples abound in Dream Report, and you can refer to our driver list for current connectivity.

Industry Standards – These include MODBUS and Open Protocols including OPC DA, OPC AE, and OPC HDA. These standards provide connectivity to any control system from Programmable Logic Controllers (PLCs) to HMI/SCADA and Distributed Control Systems (DCS). If you have a specific connectivity need, contact Ocean Data Systems and we’ll help you select an interface.

Business Standards – Includes the unique ability to automatically read and import Comma Separated Variable (CSV) and Microsoft Excel files. Dream Report will also connect to local or remote Relational Database (RDB) sources through either Open Database Connectivity (ODBC) or OLE-DB. Dream Report understands both Historic Data Logs and Alarm Message Logs.

Once data drivers are in place, Dream Report abstracts all connectivity to Tags, your data names, to represent that stream of

information, enabling you to make selections for your report objects.



Driver Selection and Configuration

VTScada Connectivity

Dream Report offers a broad range of connectivity to Trihedral's VTScada. There are many ways to connect to VTScada, leveraging the use of industry standards like OPC or business standards such as ODBC.

Dream Report offers connectivity to poll VTScada in real-time, acquiring data for use in report triggers and real-time web dashboard displays.

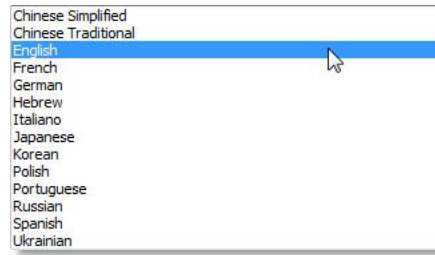
Dream Report also offers alarm message and historian data connectivity from the VTScada database through purpose built interfaces, making your initial setup and data source configuration as quick and simple as possible.

Manual Data Entry

Not all data is available programmatically. For example, Operator Logs need to be entered and properly integrated with collected data. Manual Data Entry "Selectors" enable operators and authorized users to quickly select variables and enter corresponding results, along with timestamps to match their actual collection times. Worried about getting the data entry right? Automatic Data Validation will apply bounds to manually entered 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 report only on validated data. Data entry can also be Mobile – entered from Smart Phones. Laboratory Information Management Systems (LIMS) are easy to integrate with Dream Report, through Manual Data Entry or the use of our Business Standard Interfaces.

Localization

Tools for your team, in the language that they dream in. Your reporting requirements aren't likely to be limited to one location. You may have facilities around the globe and your team will want to work in local languages. 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.



Select the Languages for Development, Runtime and Portal

Interactive Reporting

You'll want to select a template, select a facility, area, or piece of equipment and generate a report. 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, last year or for a particular piece of equipment. Dream Report handles all that, and the use of "Pickers" in a report give you the interface to make date, time, batch 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 output format, there is a more powerful solution, one that delivers the understanding of what you're trying to accomplish, and it does it simply and automatically. 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 or macros. No errors in calculations and no scripting or programming.

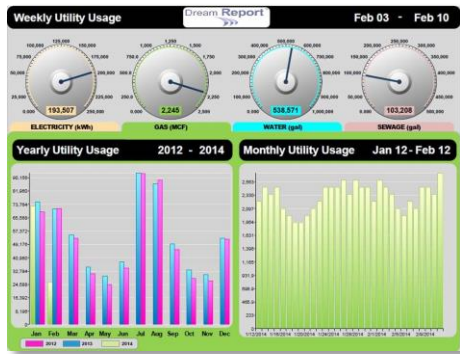
Report Design

Dream Report takes the effort and complexity out of even the most demanding reporting tasks. With connectors that understand their sources of data, to beautiful formatting and display objects, Dream Report will WOW you with its 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 effort, improving your quality and increasing your productivity.

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 sources and calculation functions and you are all set. Smart Report Objects are one aspect of Dream Report's value and the analysis functions that can be attached to them are another.

The combination of purpose built calculation functions with widget 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 and complex system integration.





Example Web Portal Dashboard Display with Widgets

Dream Report Delivers a Complete Array of Statistical Functions

Dream Report Analytic functions understand their purpose. They 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 – Calculates 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

ON and OFF and Transition Counters – Delivers a count of variable transitions

Running Time – Totalizes the time a variable was on

Down Time – Totalizes the time a variable was off

System Availability – Percentage of time for a specified period during which a condition was met

Energy Management (Facility) Functions

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

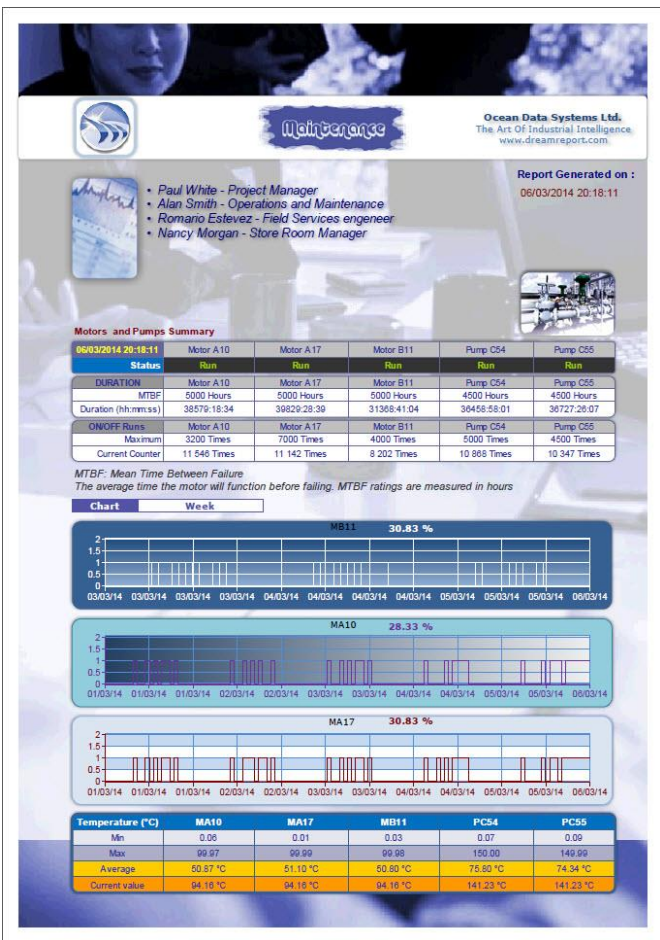
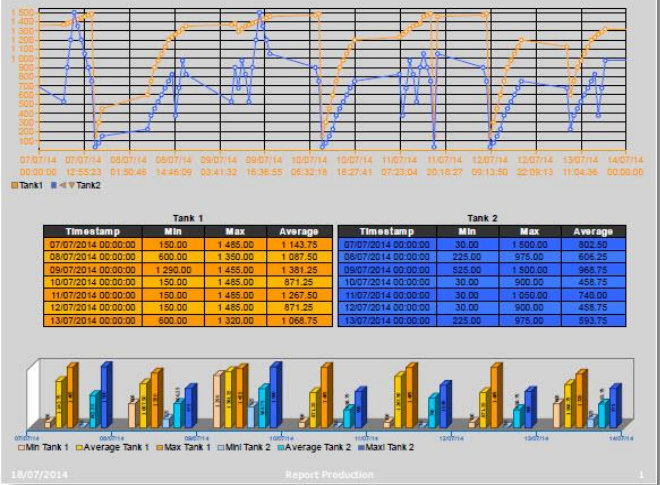
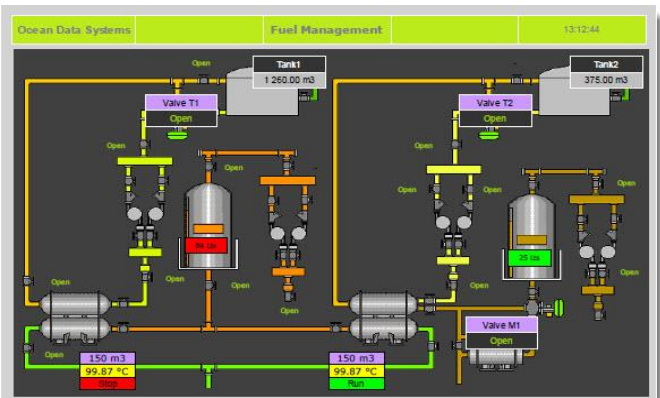
Produced Emissions – The emissions' byproducts from the consumption of various fuels

Alarm Analysis Functions

Alarm Counters – Calculates the number of alarms, by filter, for a specified period

SQL Functions

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



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

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

Expression Data Functions

Mathematical Expressions - Accepts a manually entered expression involving one or more statistical objects, mathematical operators and constants.

String Functions

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

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, fixed text, and data variables

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

Print Reports - Use a specific printer. Designate an automatic backup for when a printer is unavailable.

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

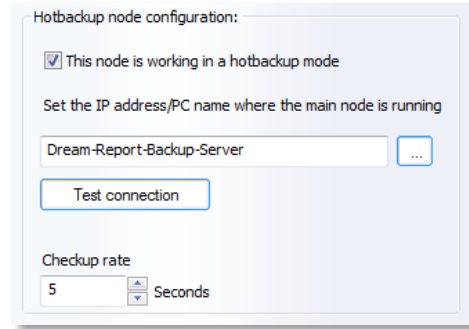
Through the benefits of HTML-5, your reports will work in any browser and on any Mobile device, iOS, Android, Windows or other. PC or MAC - it's up to you. Need a Web Dashboard of Key Performance Indicators (KPIs)? Configure a report for automatic update and you have it.



Web Portal for Interactive Report Generation

Reliability

Of crucial importance in this market. When facilities house critical operations, you must be sure the reporting is available and your systems are reliable. 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 transfer to a backup printer. If one reporting node becomes unavailable, possibly due to a server hardware failure, a second Dream Report system will automatically recognize the failure of its counterpart and take over reporting. Dream Report delivers many answers for your most demanding solutions.



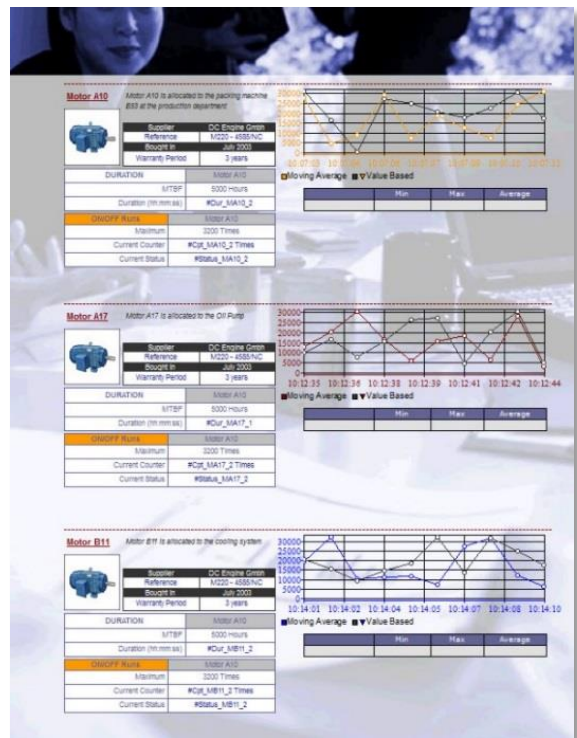
Dream Report Hot Backup Server Selection

So, What Are You Waiting For?

You may think automated report generation is just for compliance reporting, generating the necessary documentation for your line of business. That is certainly important, however, 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 could be losing out on efficiencies.

Today, when you're tasked with continuous improvement, the old adage "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.



Pricing and Configuration:

Dream Report is a software solution that is typically licensed and delivered on a per node basis. If you need reports generated from a computer, that computer requires a Dream Report license.

Dream Report is a scalable solution. Scalability is offered over three dimensions – the amount of data that is accessed from data stores (Tags), the number of concurrent web portal users, and the addition of market or application specific options. Dream Report will deliver unlimited reports and calculations. There are no other dimensions of system scalability.

Tag Counts typically consist of 50, 250, 500, 1,000, 2,000, 5,000, 10,000 and unlimited.

Concurrent Web Clients consist of 2, 5, 10, 25, 50, and 100 concurrent users. (Custom options available)

Market and Application Options include: Life Sciences option (electronic signature, versioning, audit trail and Fo), Unlimited SQL option (MES), DBatch – batch data awareness option, and a Redundant Node option.

Please contact your local Dream Report partner for product details.



Trihedral is a Dream Report Proven Partner

That means we've tested our products and stand behind their combined use for your benefit. If you have a support or application question, you can rest assured that together, we'll collaborate to support you now, and in the future.

