



Dhyan SmartMan® is a robust and feature-rich tool that can manage smart meters and other elements in the wired or wireless network that connects them. With Dhyan's Component Architecture, Dhyan SmartMan® can be customized to work with all Smart Grid elements. SmartMan has advanced functionality that makes Smart Grid use more efficient and cost-effective.

In addition to managing meters, SmartMan® can also manage the wireless or wired network infrastructure that is part of the overall data collection network. SmartMan can manage other electrical devices on the grid such as air conditioners, refrigerators, and other home appliances.

The user interface of SmartMan® has been designed with utility operators in mind. The interface uses technologies such as AJAX, HTML5 and Bootstrap to enhance the user experience and help with productivity. Graphical and text-based reports are available with analysis tools. These tools allow operators to filter what they see and address priority events.

Deployment Manager

Dhyan SmartMan® Deployment Manager can use the Google Maps view to display individual meters, meter regions, and all devices that are part of the Smart Grid network. It uses color coding to help users easily detect faulty devices and view outages.



Dhyan

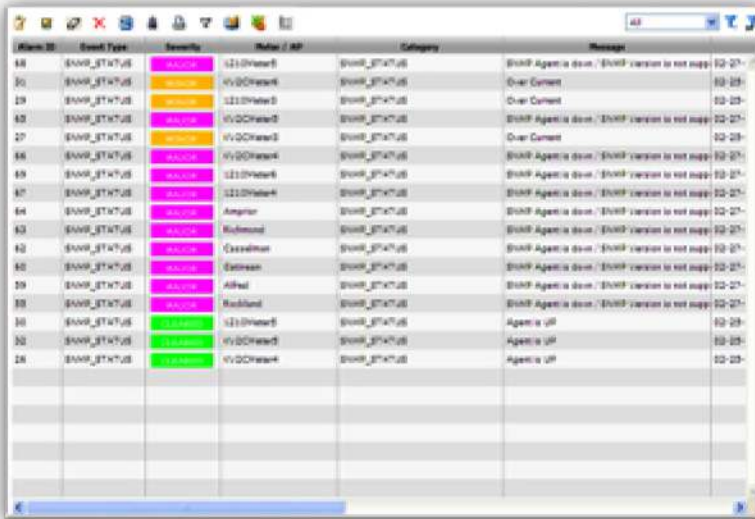
KEY FEATURES

- Scalable Architecture to manage millions of smart devices (such as meters)
- Can be deployed in the cloud
- Deployment Manager with meter auto-discovery
- Defect Detection and Tracking for isolating and correcting problems
- Software Upgrade Manager to streamline field updates
- Enhanced visualization of meter deployment with Google Maps
- Built-in Trouble Ticketing Interface for tracking field issues
- Flexible Graphing and Reporting for outages and usage
- Automatic reports on critical meters and critical regions for fast drill down
- Reports on Top 'N' users or Bottom 'N' meters in any region
- Monitors energy usage to support alternative rate agreements
- Manages monitoring devices connected to a meter
- Provides support for WiFi, WiMAX and ZigBee standards
- Network support to manage Smart Meter network links



Defect Detection & Tracking

Dhyan SmartMan® offers an intuitive GUI for recording all outages and faults in the Smart Grid network. It has a built-in trouble ticketing interface to aid the administrator in managing faults. SmartMan® includes tools that allow automatic filtering and the forwarding of alarms to devices. It also features an integrated escalation engine with the ability to escalate tickets that are not addressed within a pre-defined time. SmartMan® generates reports on critical meters and regions to help operators at a utility quickly identify and address issues. Built intuitively for your needs, SmartMan's tools give your support staff an edge to stay on top of problems.



Item ID	Event Type	Severity	Meter / AP	Comments	Message	Time
18	SWR_STATUS	CRITICAL	1110Meter0	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
20	SWR_STATUS	WARNING	VVD0Meter0	SWR01_07x705	Over Current	02-28-
29	SWR_STATUS	WARNING	1110Meter0	SWR01_07x705	Over Current	02-28-
40	SWR_STATUS	CRITICAL	VVD0Meter0	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
27	SWR_STATUS	WARNING	VVD0Meter0	SWR01_07x705	Over Current	02-28-
56	SWR_STATUS	CRITICAL	VVD0Meter0	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
49	SWR_STATUS	CRITICAL	1110Meter0	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
67	SWR_STATUS	CRITICAL	1110Meter0	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
64	SWR_STATUS	CRITICAL	Ampere	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
63	SWR_STATUS	CRITICAL	Kulmeed	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
62	SWR_STATUS	CRITICAL	Cassidam	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
60	SWR_STATUS	CRITICAL	Estman	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
59	SWR_STATUS	CRITICAL	Alfed	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
58	SWR_STATUS	CRITICAL	Radham	SWR01_07x705	SWR01 Agencis down - SWR01 connection to net supp	02-27-
30	SWR_STATUS	WARNING	1110Meter0	SWR01_07x705	Agencis UP	02-28-
30	SWR_STATUS	WARNING	VVD0Meter0	SWR01_07x705	Agencis UP	02-28-
28	SWR_STATUS	WARNING	VVD0Meter0	SWR01_07x705	Agencis UP	02-28-

Reports

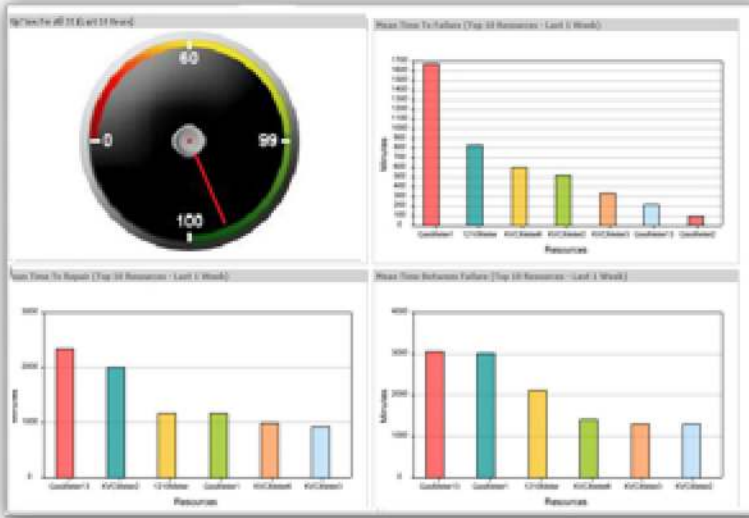
Are you in the dark about what your meters are doing? Take control of your data. SmartMan® continuously monitors all the key performance metrics for each element on the smart grid network and has the ability to generate a multitude of useful reports. Utilities can better manage demand with reports like “top 'N' users of power during peak time” or “bottom 'N' users with low-usage.” Extensive reports help the utility operator quickly identify problems within their grid. Armed with the power of data, utilities can offer customers different services based on their usage patterns.

Dhyan SmartMan® also has support for enforcing thresholds over various performance metrics. With the threshold feature, support administrators can spot performance degradation ahead of time. This allows them to take the preventive actions needed to maintain guaranteed service levels.



Installation and Upgrade Management

Dhyan SmartMan® has features to help a utility with the initial installation of smart meters or software upgrades, as well as with inventory management. Simplify the task of bringing your new devices online through the bulk import and auto-discovery features. SmartMan supports software upgrades in devices such as meters. This allows groups of devices to be upgraded on a schedule set by the operator. When hardware replacement is required, the automatic backup of device



configuration data adds resiliency to the network. Dhyan SmartMan® can also be configured to maintain a full inventory of deployed equipment.

Minimum Hardware Configuration for Dhyan SmartMan ®

System Requirements	Microsoft	Linux
Server Operating System	Windows 2008, 2012 R2 Server Windows 7, 8, 10 (32 and 64 bit)	Red Hat Enterprise Linux 6 CentOS 7 (32 and 64 bit)
Server Processor Type	Xenon and Equivalent	Xenon and Equivalent
Server Processor Speed	2GHz	2GHz
Server RAM	8 GB Minimum	8 GB Minimum
Server Disk Space	40 GB Minimum	40 GB Minimum
Client Browser	Internet Explorer 10.0 or higher Mozilla Firefox 50 or higher Chorme 40 or higher	Internet Explorer 10.0 or higher Mozilla Firefox 50 or higher Chorme 40 or higher
Database	Oracle, MySQL, PostgreSQL MS SQL	Oracle, MySQL, PostgreSQL MS SQL