Adroit Technologies



Adroit Report Suite

EMS Report Pack

Adroit | MITSUBISHI ELECTRIC FACTORY AUTOMATION

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1. Introduction

Adroit Environmental Management System (EMS) allows the routing of any alarms in Adroit through to the structured Alarm Management and DumpConfig databases respectively and allows user functionality such as adding and logging incident context, performance targets, notes and database housekeeping.

The Adroit Alarm Management Reports utility provide tools necessary to a system's logged alarming data with reports such as the Incident Count, incident Duration, Export Incident Count and Export Incident Duration reports helping to analyse the number of alarm incidents.

This document provides a basic introduction to Adroit Technologies and the Adroit Environmental Management System Reports with a brief overview of the Adroit SCADA software package for the purpose of convenience and reference.

For assistance with the installation and use of Adroit Report Suite value-add system, please consult the user manual. For assistance with the installation of the Environmental Management System report pack, please consult the Adroit Report Deployment Utility user manual.

1.1. Adroit Technologies

Since 1992 Adroit Technologies, a company based in South Africa, have been developing SCADA/HMI software solutions for the industrial automation and process control industries. With over 20,000 successful installations, in over 16 countries in the world, Adroit is one of the world's top-selling SCADA/HMI products.

Adroit Technologies are a Microsoft Certified Gold Partner Company. This allows Adroit Technologies to stay in regular contact with Microsoft and remain up to date with the latest advancements in software development. All this ensures that Adroit remains one of the leading SCADA packages, both now and in the future.

1.2. Adroit SCADA

A·D·R·O·I·T *is an acronym for "Advanced Distributed Real-time Object-oriented Intelligent Toolkit".*

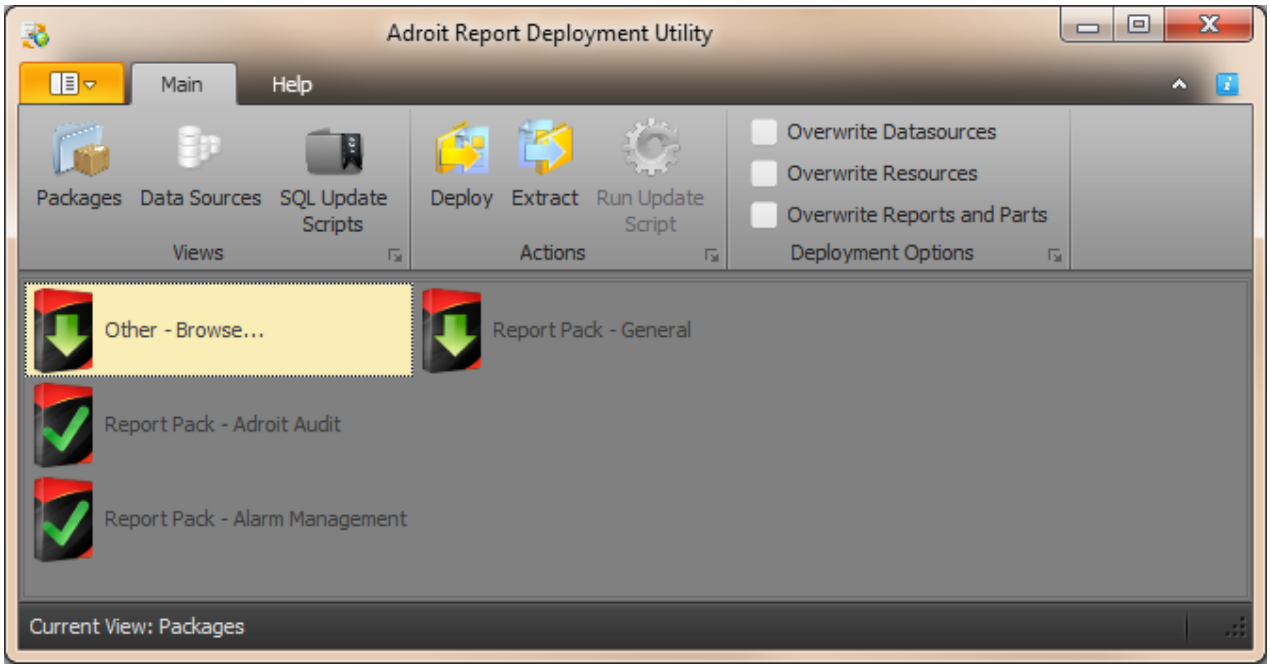
Adroit is a Windows-based SCADA/HMI software product that has been developed over a period of more than ten years by dedicated professionals. Robust and flexible enough for the toughest industrial application, Adroit is the ideal platform from which to meet the information needs of a modern control solution. Adroit is a technologically advanced SCADA (Supervisory Control & Data Acquisition) system designed for process control, manufacturing systems and open automation applications.
Developed specifically for Windows operating systems, Adroit has a flexible object-oriented client-server architecture that supports from a standalone implementation to an installation spanning multiple sites.

2. Adroit Report Deployment Utility

- The Adroit Report Deployment Utility function is to help you create and deploy Report Packs. These report packs consist of Reporting Services' reports, data sources and components. The utility interfaces with SQL Reporting Services' web service.



- The Adroit Report Deployment Utility will help you with the more complex tasks of managing your SQL Server Reporting Services.
- For more detailed information, please consult the user Manual document for this utility available to download from our website.



3.EMS Audit Reports Switchboard

The general report switchboard is the navigation menu system for EMS Audit reports.



3.1. Audit Summary Report

This report summaries the mine for the user selected category (or categories) in top 10 graphs, by mines, by shafts, by levels, by locations, by controllers and by sensors. Incidents are then shown in a data grid by category.

3.1.1. Report Component and Measures

Top 10 location
Column Chart – A summary of the top 10 locations types in descending order

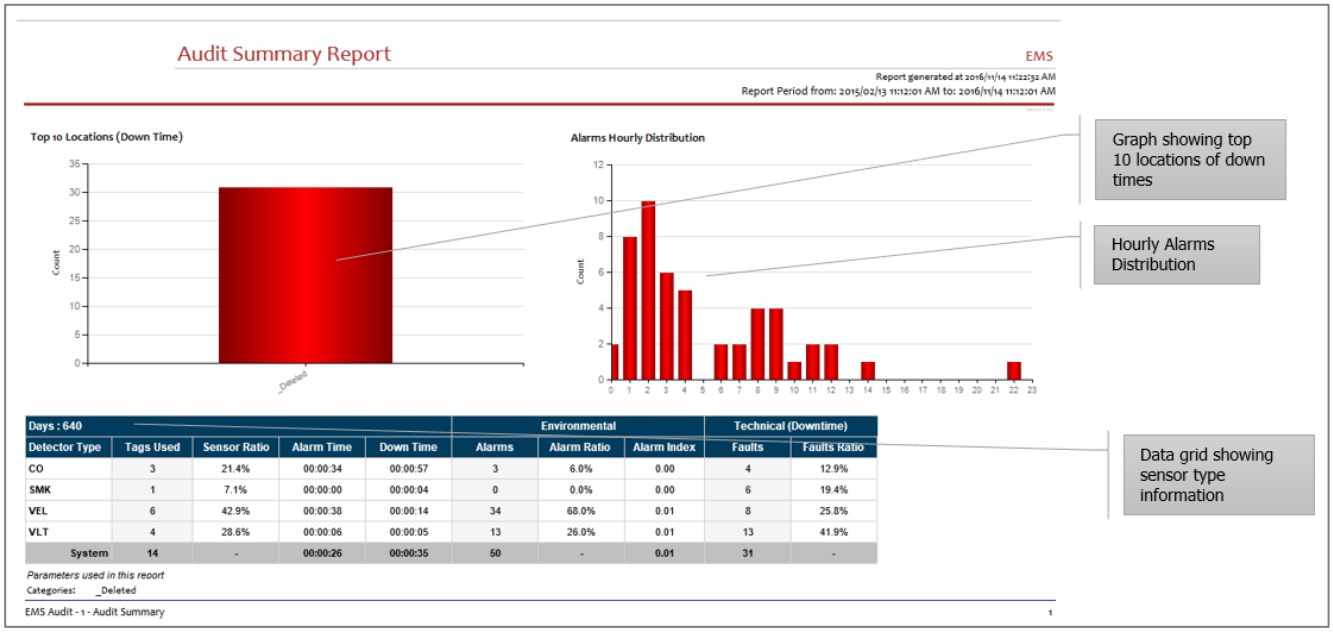
Alarms Hourly Distribution
Column Chart – A summary of the top alarms on the hour related to the selected category.

3.1.2. Report Parameters

Date From and Date To	**Filter Category**
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	This is a list of categories. If a parent is selected all incidents in the parents and child categories will be included in the report.

Compute Summary By	**Filter Category**
Display graphs by the number alarms and locations per group.	This is a list of categories. If a parent category is selected all incidents in the parents and child categories will be included in the report.

3.1.3. Report Layout



Days : 640					Environmental			Technical (Downtime)	
Detector Type	Tags Used	Sensor Ratio	Alarm Time	Down Time	Alarms	Alarm Ratio	Alarm Index	Faults	Faults Ratio
CO	3	21.4%	00:00:34	00:00:57	3	6.0%	0.00	4	12.9%
SMK	1	7.1%	00:00:00	00:00:04	0	0.0%	0.00	6	19.4%
VEL	6	42.9%	00:00:38	00:00:14	34	68.0%	0.01	8	25.8%
VLT	4	28.6%	00:00:06	00:00:05	13	26.0%	0.01	13	41.9%
System	14	-	00:00:26	00:00:35	50	-	0.01	31	-

3.2. Incident Duration Report

This report summarises the incidents duration for all the alarm incidents. It can be filtered by categories, alarm type, incident, you can set daily incidents target and show all activities of a category or incident or Show incidents only.

3.2.1. Report Component and Measures

Incident Duration
Data grid -.the summary of incidents by count in descending order with average, total, max, actual % and status to present day

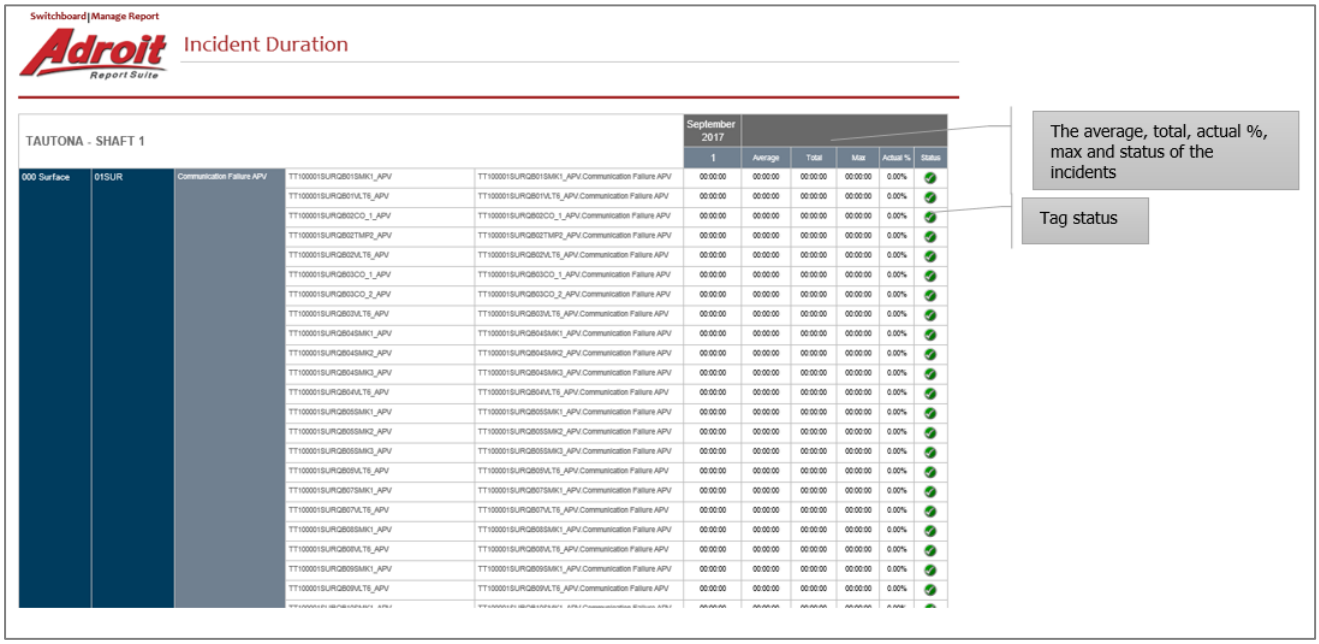
3.2.2. Report Parameters

Date From and Date To	Filter Category
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To	This is a list of categories. If a parent is selected all incidents in the parents and child categories will be included in the report order.

Filter incident	Show
This is a list incidents. If a parent is selected all incidents in the parents and child categories will be included in the report order.	Show by incidents only or All

Filter Alarm type	Daily Target
This is a list of the Alarm type specified in AMA. If a parent is selected all incidents in the parents and child categories will be included in the report order.	The target set by the user in seconds to view the report against it.

3.2.3. Report Layout



3.3. Incident Count Report

This report summarises the number of incidents for categories and Alarm types. It can be filtered by categories, incidents, and alarm type. A daily target can also be set. All activities of a category can be shown or incidents only

3.3.1. Report Component and Measures

Incident Duration
Data grid - The summary of incidents by count in descending order with average, total, max, actual % and status to present day.

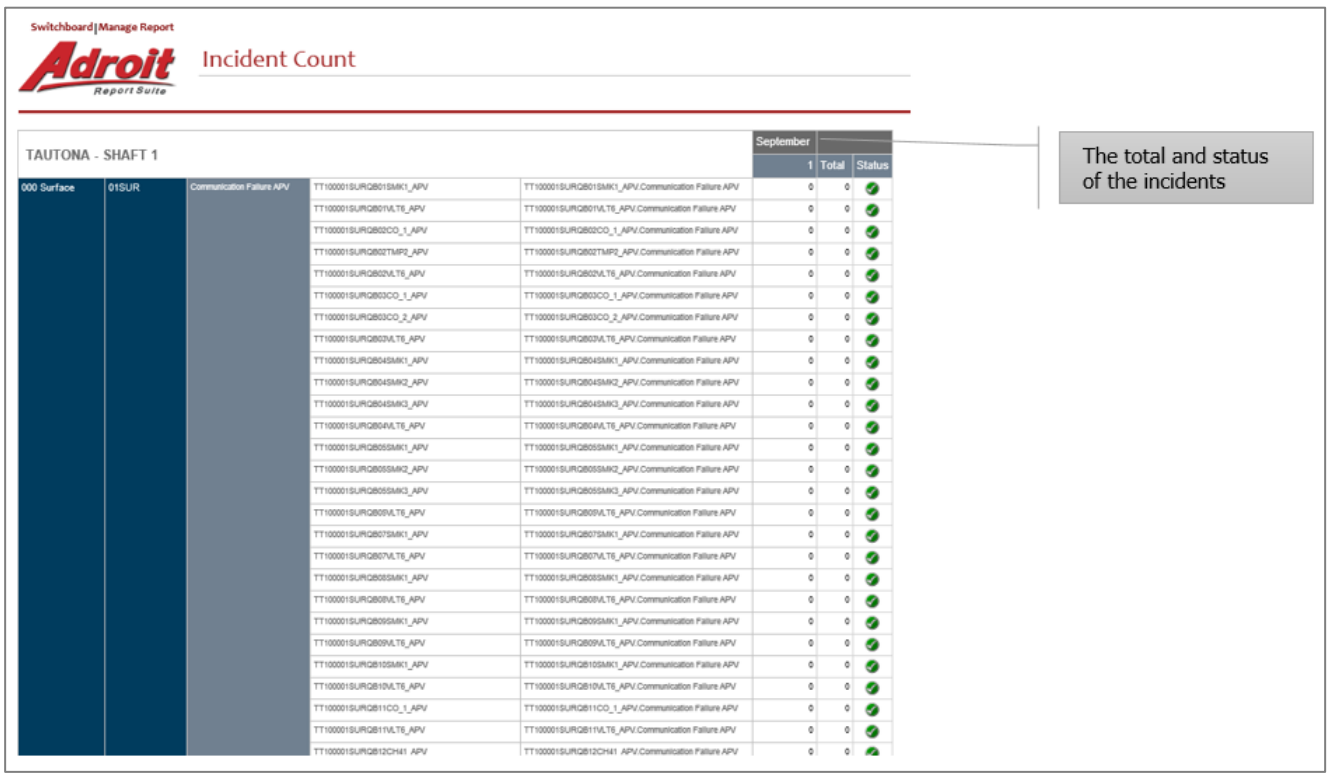
3.3.2. Report Parameters

Date From and Date To	Filter Category
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To"	This is a list of categories. If a parent is selected all incidents in the parents and child categories will be included in the report order.

Filter incident	Show
This is a list incidents. If a parent is selected all incidents in the parents and child categories will be included in the report order.	To show all the activities of a category or to show incidents only.

Filter Alarm type	Daily Target
This is a list of the Alarm type specified in AMA. If a parent is selected all incidents in the parents and child categories will be included in the report order.	The target set by the user in seconds to view the report against it.

3.3.3. Report Layout



3.4. Export Incident Count Report

This report summarises the number of incidents for categories and Alarm types. It can be filtered by categories, incidents, and alarm type. A daily target can also be set. All activities of a category can be shown or incidents only. This report format the exported report in excel.

3.4.1. Report Component and Measures

Top 10 Alarm Types	Top 10 Incidents
Column Chart – A summary of the top 10 alarm types in descending order.	Column Chart – A summary of the top 10 incidents in descending order.

Alarm Detail
Data Grid – A separate data grid is created for each category returned in the data set. Within each category the alarm detail is grouped and summarised by alarm type. The alarm type summary can be expanded to show incident detail, which in turn is grouped by incident.

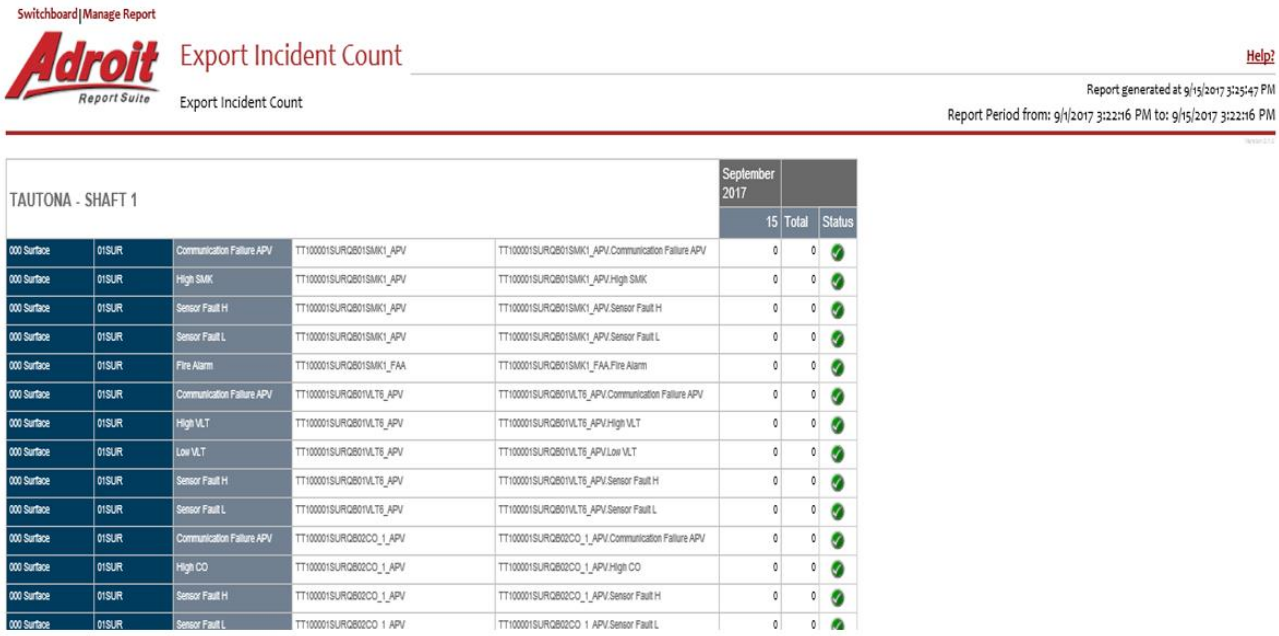
3.4.2. Report Parameters

Date From and Date To	Alarm or Event
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	Report on alarms, events or both by selecting the appropriate option from the dropdown.

Priority	Filter Category
Select all or a particular alarm priority to run the report against.	This is a list of categories. If a parent category is selected all incidents in the parents and child categories will be included in the report.

Compute Summary By
Display graphs by number of incidents (count) or total active tie (duration) per grouping.

3.4.3. Report Layout



3.5. Export Incident Duration Report

This report summarises the incidents duration for all the alarm incidents. It can be filtered by categories, alarm type, incident, you can set daily incidents target and show all activities of a category or incident or Show incidents only. This report format the exported report in excel.

3.5.1. Report Component and Measures

Top 10 Alarm Types	Top 10 Incidents
Column Chart – A summary of the top 10 alarm types in descending order.	Column Chart – A summary of the top 10 incidents in descending order.

Alarm Detail
Data Grid – A separate data grid is created for each category returned in the data set. Within each category the alarm detail is grouped and summarised by alarm type. The alarm type summary can be expanded to show incident detail, which in turn is grouped by incident.

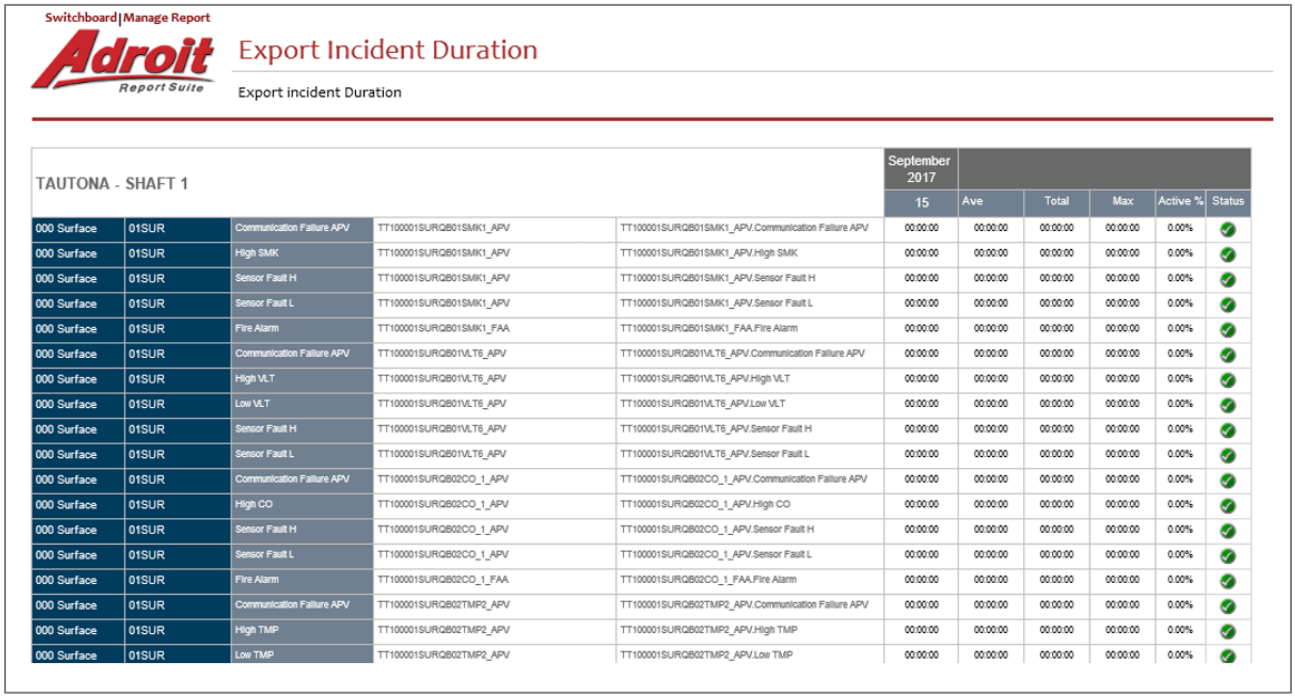
3.5.2. Report Parameters

Date From and Date To	Alarm or Event
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	Report on alarms, events or both by selecting the appropriate option from the dropdown.

Priority	Filter Category
Select all or a particular alarm priority to run the report against.	This is a list of categories. If a parent category is selected all incidents in the parents and child categories will be included in the report.

Compute Summary By
Display graphs by number of incidents (count) or total active tie (duration) per grouping.

3.5.3. Report Layout



Switchboard | Manage Report

Adroit Report Suite

Export Incident Duration

Export incident Duration

TAUTONA - SHAFT 1					September 2017					
					15	Ave	Total	Max	Active %	Status
000 Surface	01SUR	Communication Failure APV	TT100001SURQB01SMK1_APV	TT100001SURQB01SMK1_APV.Communication Failure APV	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	High SMK	TT100001SURQB01SMK1_APV	TT100001SURQB01SMK1_APV.High SMK	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault H	TT100001SURQB01SMK1_APV	TT100001SURQB01SMK1_APV.Sensor Fault H	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault L	TT100001SURQB01SMK1_APV	TT100001SURQB01SMK1_APV.Sensor Fault L	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Fire Alarm	TT100001SURQB01SMK1_FAA	TT100001SURQB01SMK1_FAA.Fire Alarm	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Communication Failure APV	TT100001SURQB01VLT6_APV	TT100001SURQB01VLT6_APV.Communication Failure APV	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	High VLT	TT100001SURQB01VLT6_APV	TT100001SURQB01VLT6_APV.High VLT	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Low VLT	TT100001SURQB01VLT6_APV	TT100001SURQB01VLT6_APV.Low VLT	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault H	TT100001SURQB01VLT6_APV	TT100001SURQB01VLT6_APV.Sensor Fault H	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault L	TT100001SURQB01VLT6_APV	TT100001SURQB01VLT6_APV.Sensor Fault L	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Communication Failure APV	TT100001SURQB02CO_1_APV	TT100001SURQB02CO_1_APV.Communication Failure APV	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	High CO	TT100001SURQB02CO_1_APV	TT100001SURQB02CO_1_APV.High CO	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault H	TT100001SURQB02CO_1_APV	TT100001SURQB02CO_1_APV.Sensor Fault H	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Sensor Fault L	TT100001SURQB02CO_1_APV	TT100001SURQB02CO_1_APV.Sensor Fault L	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Fire Alarm	TT100001SURQB02CO_1_FAA	TT100001SURQB02CO_1_FAA.Fire Alarm	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Communication Failure APV	TT100001SURQB02TMP2_APV	TT100001SURQB02TMP2_APV.Communication Failure APV	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	High TMP	TT100001SURQB02TMP2_APV	TT100001SURQB02TMP2_APV.High TMP	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	
000 Surface	01SUR	Low TMP	TT100001SURQB02TMP2_APV	TT100001SURQB02TMP2_APV.Low TMP	00:00:00	00:00:00	00:00:00	00:00:00	0.00%	

3.6. Sensor Configuration Report

This report summarises the EMS Sensor and EMS Mode agents' configuration. It is a report that shows the EMS Sensors and Mode setup.

3.6.1. Report Component and Measures

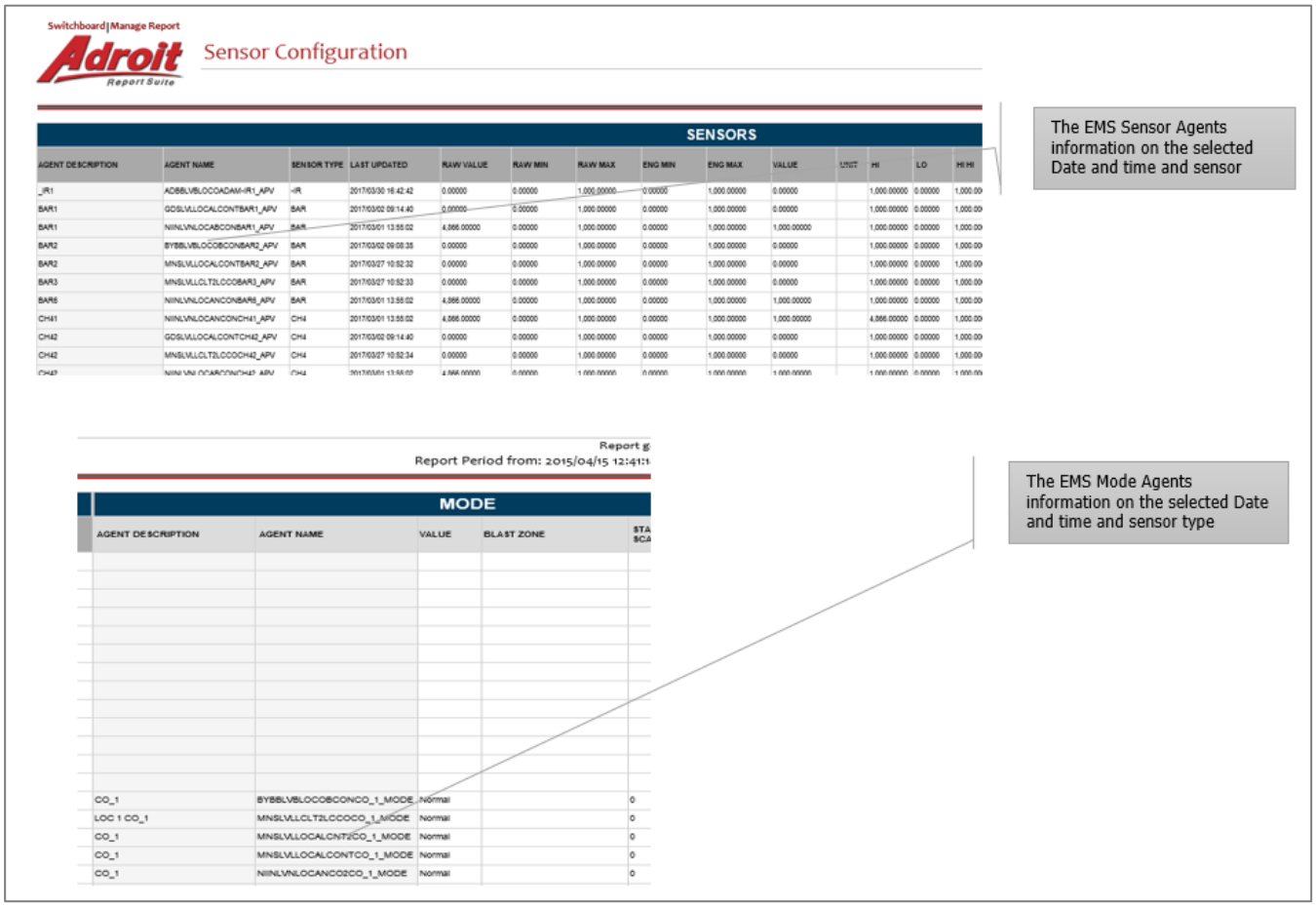
Incident Duration
Data grid – The summary of the EMS sensor system including the Mode of the Sensors

3.6.2. Report Parameters

Date From and Date To	Downloaded Date
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	The date on which the Information on the agents was supplied or logged

Sensor Type
Select all or a particular sensor type to run the report against.

3.6.3. Report Layout



3.7. Fire Detection Configuration Report

This report summarises the EMS Sensor, Fire detection agents (FAAs) and EMS Mode agents' configuration. It is a report that shows the EMS Sensors, Fire detection and Mode setup.

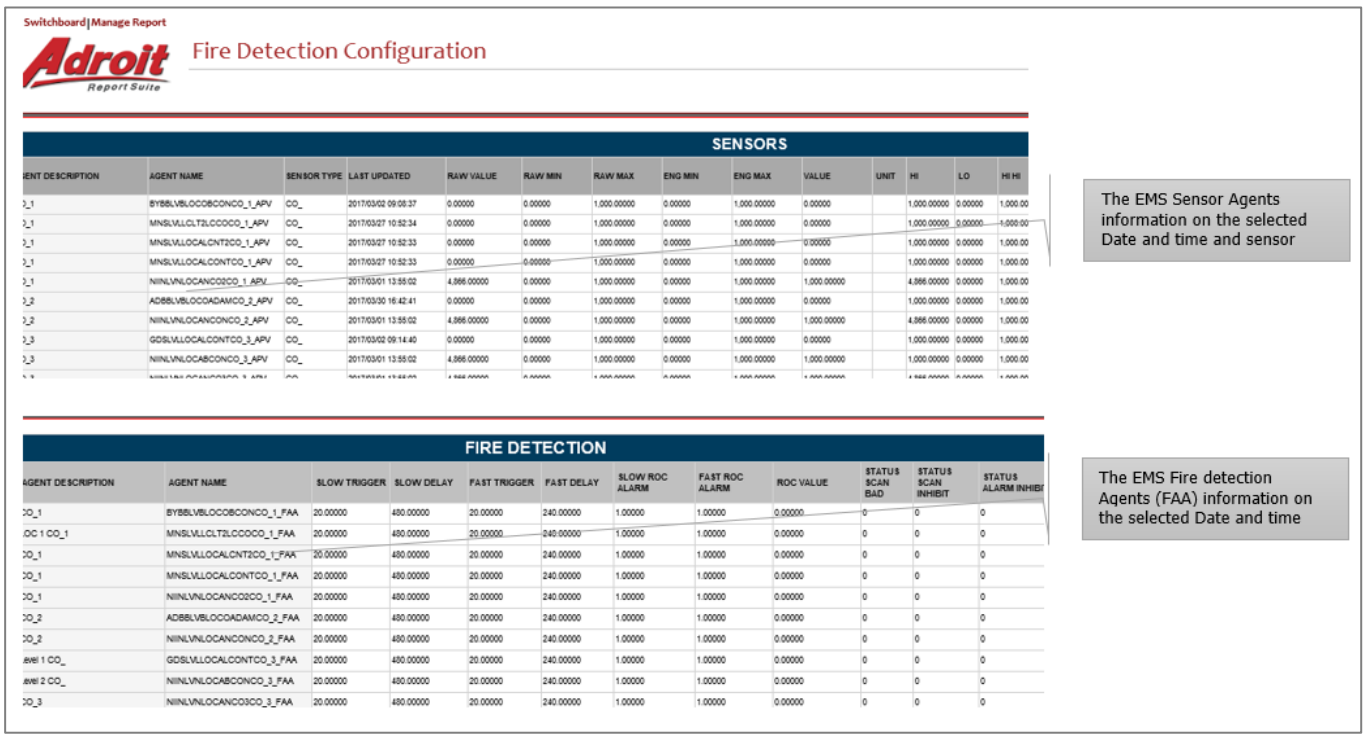
3.7.1. Report Component and Measures

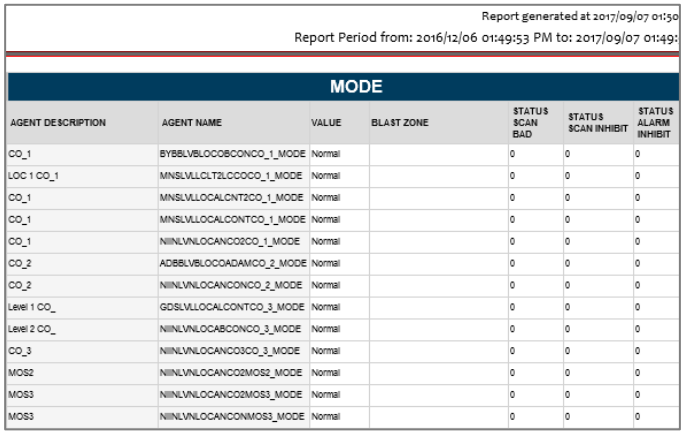
Fire Detection Configuration
Data Grid – The summary of EMS sensors, FAA agents and EMS Mode agents.

3.7.2. Report Parameters

Date From and Date To	Download Date
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	The date on which the Information on the agents was supplied or logged

3.7.3. Report Layout





3.8. Datalog Configuration Report

Provides a detailed list of all Datalog agents with the logging settings and information. It requires the table **Adr_Dump_datalog** to be present and configured. The table is created by a DUMPCONFIG agent.

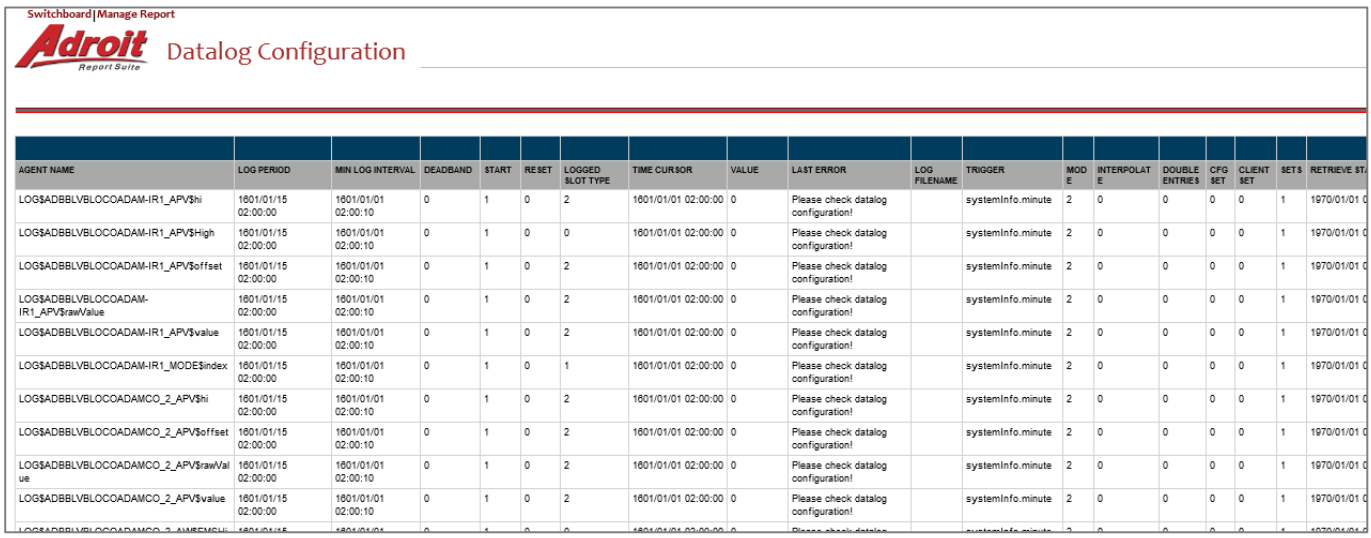
3.8.1. Report Component and Measures

Datalog Configuration
Data Grid – This shows the information of datalog agent with all its logged slots.

3.8.2. Report Parameters

Date From and Date To	Download Date
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	The date and time on which the Information on the agents was supplied or logged

3.8.3. Report Layout


Switchboard | Manage Report

Adroit Report Suite Datalog Configuration

AGENT NAME	LOG PERIOD	MIN LOG INTERVAL	DEADBAND	START	RESET	LOGGED SLOT TYPE	TIME CURSOR	VALUE	LAST ERROR	LOG FILENAME	TRIGGER	MODE	INTERPOLATE	DOUBLE ENTRIES	CFG SET	CLIENT SET	SETS	RETRIEVE ST
LOG$ADBBLVBLOCOADAM-IR1_APV$hi	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAM-IR1_APV$High	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	0	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAM-IR1_APV$offset	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAM-IR1_APV$rawValue	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAM-IR1_APV$value	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAM-IR1_MODE$index	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	1	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAMCO_2_APV$hi	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAMCO_2_APV$offset	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAMCO_2_APV$rawValue	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0
LOG$ADBBLVBLOCOADAMCO_2_APV$value	1601/01/15 02:00:00	1601/01/01 02:00:10	0	1	0	2	1601/01/01 02:00:00	0	Please check datalog configuration!		systemInfo.minute	2	0	0	0	0	1	1970/01/01 0

3.9. Digital Report

Provides a detailed list of all Digital agents with the logging settings and information. It requires the table **Adr_Dump_Digital** to be present and configured. The table is created by a DUMPCONFIG agent

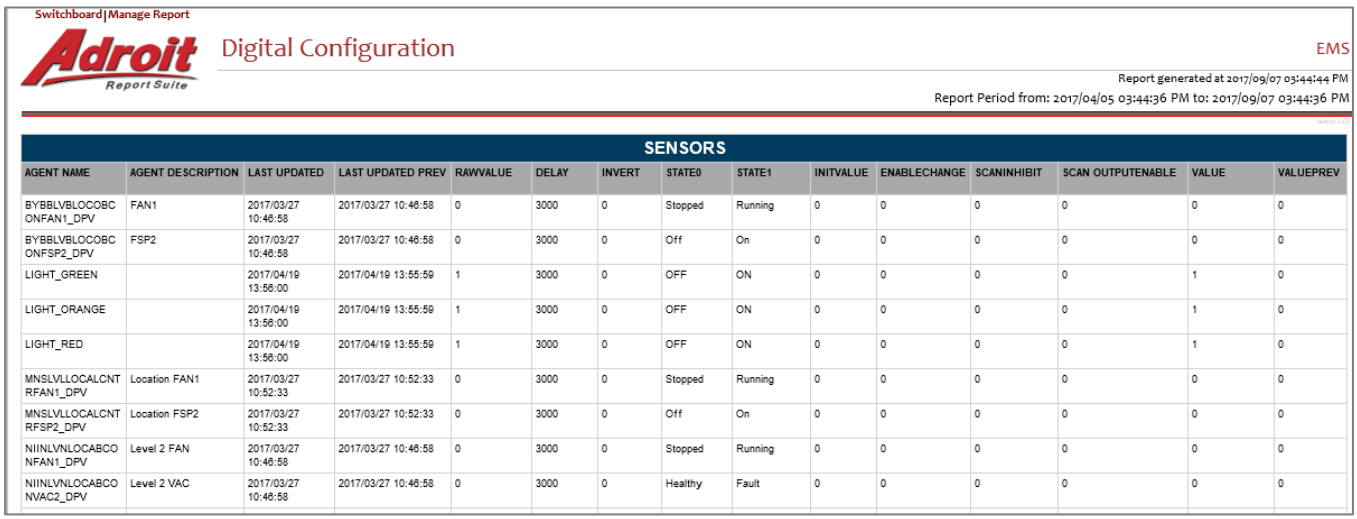
3.9.1. Report Component and Measures

Detail Reasons & Notes
Data Grid – This report is summarised for the selected criteria into a grid.

3.9.2. Report Parameters

Date From and Date To	Download Date
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	The date and time on which the Information on the agents was supplied or logged

3.9.3. Report Layout



Switchboard | Manage Report

Adroit Report Suite

Digital Configuration

EMS

Report generated at 2017/09/07 03:44:44 PM

Report Period from: 2017/04/05 03:44:36 PM to: 2017/09/07 03:44:36 PM

SENSORS

AGENT NAME	AGENT DESCRIPTION	LAST UPDATED	LAST UPDATED PREV	RAWVALUE	DELAY	INVERT	STATE0	STATE1	INITVALUE	ENABLECHANGE	SCANINHIBIT	SCAN OUTPUTENABLE	VALUE	VALUEPREV
BYBBLVBLOCOBCONFAN1_DPV	FAN1	2017/03/27 10:46:58	2017/03/27 10:46:58	0	3000	0	Stopped	Running	0	0	0	0	0	0
BYBBLVBLOCOBCONFSP2_DPV	FSP2	2017/03/27 10:46:58	2017/03/27 10:46:58	0	3000	0	Off	On	0	0	0	0	0	0
LIGHT_GREEN		2017/04/19 13:56:00	2017/04/19 13:55:59	1	3000	0	OFF	ON	0	0	0	0	1	0
LIGHT_ORANGE		2017/04/19 13:56:00	2017/04/19 13:55:59	1	3000	0	OFF	ON	0	0	0	0	1	0
LIGHT_RED		2017/04/19 13:56:00	2017/04/19 13:55:59	1	3000	0	OFF	ON	0	0	0	0	1	0
MNSLVLLOCALCNTRFAN1_DPV	Location FAN1	2017/03/27 10:52:33	2017/03/27 10:52:33	0	3000	0	Stopped	Running	0	0	0	0	0	0
MNSLVLLOCALCNTRFSP2_DPV	Location FSP2	2017/03/27 10:52:33	2017/03/27 10:52:33	0	3000	0	Off	On	0	0	0	0	0	0
NIINLVNLOCABCONFAN1_DPV	Level 2 FAN	2017/03/27 10:46:58	2017/03/27 10:46:58	0	3000	0	Stopped	Running	0	0	0	0	0	0
NIINLVNLOCABCONVAC2_DPV	Level 2 VAC	2017/03/27 10:46:58	2017/03/27 10:46:58	0	3000	0	Healthy	Fault	0	0	0	0	0	0

3.10. Unauthorized Blasting Report

This report shows early blasting or unauthorized blasting of a location and controller, it also shows the mode of the sensor type.

3.10.1. Report Component and Measures

Unauthorized Blasting
Data Grid – This report is summarised for the selected criteria into a grid.

3.10.2. Report Parameters

Date From and Date To	Filter Category
Specify a date range by picking "Date From" and "Date To". Incidents are included in the report provided they are dated on or after "Date From" and before "Date To".	This is a list of categories. If a parent is selected all incidents in the parents and child categories will be included in the report.

3.10.3. Report Layout

To follow

4. Support Detail

For further support, contact our Technical Support Desk on 011-658-8100 or email support@adroit.co.za.

You can also visit our website, follow us on Twitter, find us on Facebook or connect with us on LinkedIn.

