

# Module 7

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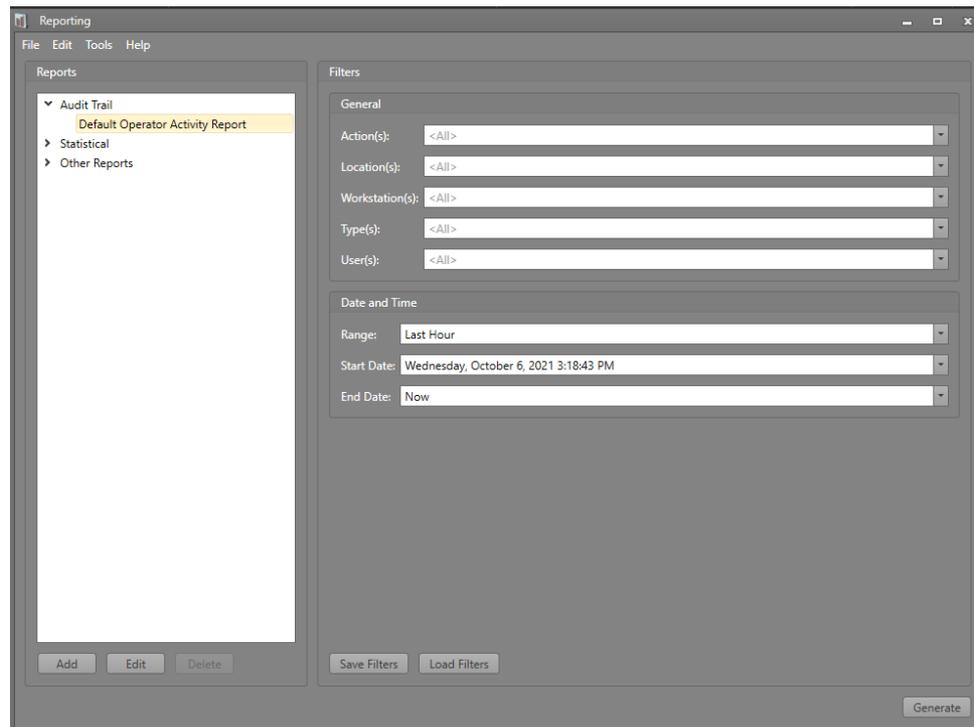
## Advanced Features: Logging and Reporting

# Overview

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# Overview

- The IPFusion Logging and Reporting Application allows the logging and generation of data about the activities in the software.
- It uses the Logging driver using Microsoft Message Queueing and SQL Server.
- With this app, system events and user actions can then be monitored and archived.



# Installing the Logging Database and Software

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# Installing the Logging Database and the Application

- Install a version of the Microsoft SQL Server database in the main logging server/Workstation
  - Minimum version is SQL Server 2012 R2
  - SQL Server 2017 can be installed by the Logging installer
- Make sure that the SQL Server installation is correct by connecting to the database.
- After installing the SQL Server Database, install the remaining Logging and Reporting components.

# Installing the Software — Workstations

- The Reporting application can optionally be installed with IPFusion.
- To update the Logging server information, open the Reporting application and go to **File > Options**.
  - Set the server IP address or host name
  - Set the database name
  - If the user you are logged is as does not have permissions to the SQL database, uncheck **Trusted Connection** and enter in the username and password for the SQL user.



# Viewing Logs with the Reporting Application

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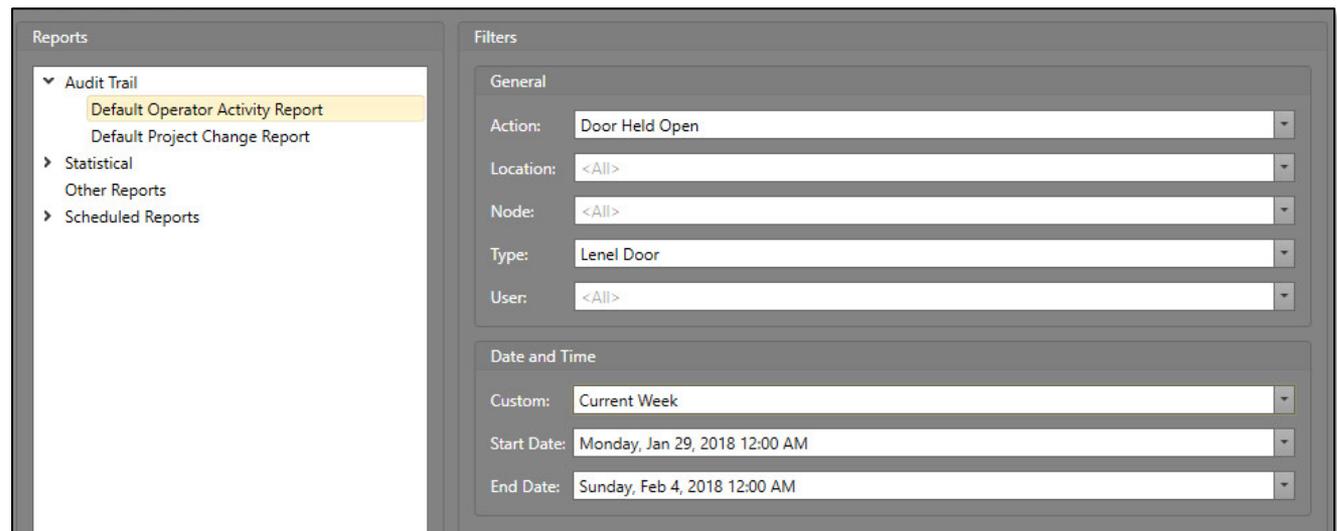
# Viewing Logs — Basics

- All the logs created by the Workstations are grouped into reports.
- Users can add and edit reports to filter out logs and data based on their needs.
- Reports can then be generated which can be reviewed, printed, or saved as a file.
- Upon starting the application there are some reports already created by default.
  - Any changes to the format of the default reports will be discarded. Save the edits as new reports instead.



# Default Operator Activity Report

- This report is pre-configured to filter information in a generic security system.
- The **General** section determines the fields that the report will filter the logs with.
- Setting the fields in the **Date and Time** section will only obtain the specified logs from that time frame.



The screenshot displays the configuration interface for the Default Operator Activity Report. It is divided into two main panels: Reports and Filters.

**Reports Panel:**

- Reports
- ▼ Audit Trail
  - Default Operator Activity Report (Selected)
  - Default Project Change Report
- Statistical
- Other Reports
- Scheduled Reports

**Filters Panel:**

**General**

- Action: Door Held Open
- Location: <All>
- Node: <All>
- Type: Lenel Door
- User: <All>

**Date and Time**

- Custom: Current Week
- Start Date: Monday, Jan 29, 2018 12:00 AM
- End Date: Sunday, Feb 4, 2018 12:00 AM

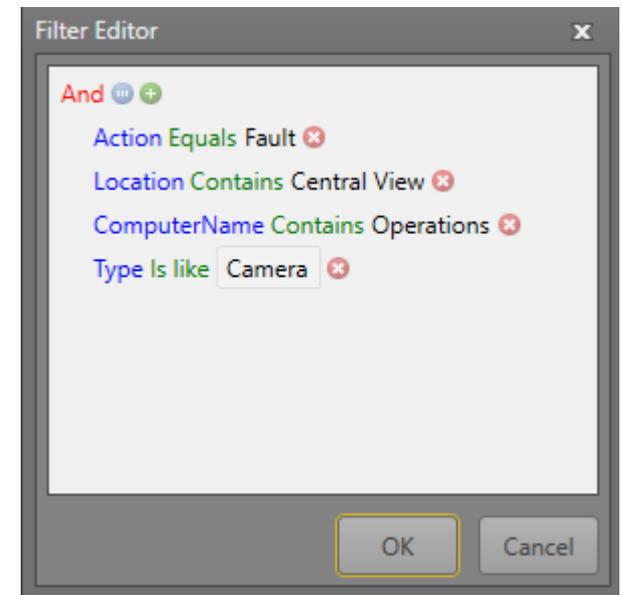
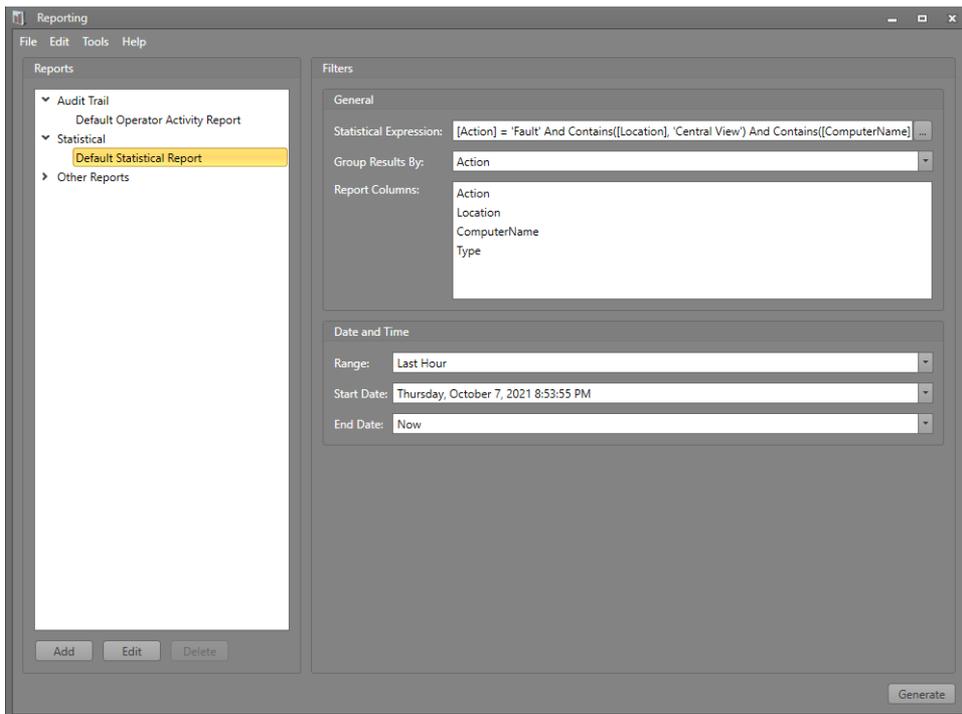


# Generated Default Operator Activity Report example

10-05-2021 11:17:28.997 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:17:34.000 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:17:46.297 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:17:51.297 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:17:58.027 AM	Camera	Status	Recording + Selected	TECH	dm	P5532PTZ
10-05-2021 11:18:03.570 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:06.030 AM	Camera	Command	PTZ Left	TECH	dm	P5532PTZ
10-05-2021 11:18:08.577 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:12.547 AM	Camera	Command	PTZ Up	TECH	dm	P5532PTZ
10-05-2021 11:18:14.347 AM	Camera	Command	PTZ Down	TECH	dm	P5532PTZ
10-05-2021 11:18:15.840 AM	Camera	Command	PTZ Stop	TECH	dm	P5532PTZ
10-05-2021 11:18:18.120 AM	Camera	Status	Recording	TECH	dm	P5532PTZ
10-05-2021 11:18:18.120 AM	Camera	Status	Recording + Selected	TECH	dm	AXIS M3006 baab
10-05-2021 11:18:20.820 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:25.837 AM	Failover Manager	Status	Recovery To Failover	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:38.077 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:43.083 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:18:55.300 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:19:00.310 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:19:12.547 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:19:17.553 AM	Failover Manager	Status	Recovery Started	TECH	dm	Global OPC Client tech:8081
10-05-2021 11:19:29.773 AM	Failover Manager	Status	Connection Failed	TECH	dm	Global OPC Client tech:8081

# Statistical Reports

- Statistical reports display the number of occurrences of similar events during project usage.
- Add more filters/columns to the **Statistical Expression** to obtain the needed information.
- Group the results by one of the criteria to cluster the data.
  - All data that share the same group by criterion is one “Occurrence”.



# Creating and Editing Custom Reports

- When creating new reports or editing existing ones, it will bring up the **Report Tool Host Window**.
- This is where users can edit the look and data of the report sheets that the application will generate.

The screenshot displays the Report Tool Host Window, a software interface for designing reports. The window is titled "ReportToolHostWindow" and contains several panes and toolbars. At the top, there is a menu bar with options like "New Report", "Open...", "Save", and "Save All". Below the menu bar is a toolbar with icons for various report design functions, including font settings (Times New Roman, 9.75), alignment, layout, zoom, and view options. On the left side, there is a "Toolbox" pane with "Standard Controls" such as Pointer, Label, Check Box, Rich Text, Picture Box, Panel, Table, Character Comb, Line, Shape, Bar Code, Chart, Gauge, Sparkline, Pivot Grid, Sub-Report, Table Of Contents, Page Info, and Page Break. The main workspace shows a report design for "DefaultActivityReport". It includes a header section with the following text: "Date Range: 2021-10-06 3:52:05 PM - 2021-10-06 4:52:05 PM", "Action(s): All", "Location(s): All", "Workstation(s): All", "Type(s): All", and "User(s): All". Below this is a data table with the following columns: "Record Date", "Device Type", "Command/Status", "Action", "Computer", "User Name", and "Location". The table has a header row and a data row with values: "[RecordDate]", "[Type]", "[CmdStat]", "[Action]", "[ComputerName]", "[UserName]", and "[Location]". Below the table, there is a footer section with the text "Print Date: 2021-10-06 4:52:20 PM". On the right side, there is a "Properties" pane for the "DefaultActivityReport Report" with various settings like Background Color, Border Color, Border Dash, Border Width, Borders, Font (Times New Roman, 9.75), Foreground Color, Formatting, Padding, Page Color, Style Sheet, Text Align, and Watermark. The "Background Color" property is currently set to "none".

Record Date	Device Type	Command/Status	Action	Computer	User Name	Location
[RecordDate]	[Type]	[CmdStat]	[Action]	[ComputerName]	[UserName]	[Location]

# Module 7 Complete

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