

# SNMP Integration



Custom  
Integrations

# Why SNMP Integrations from LightSpeed PM?

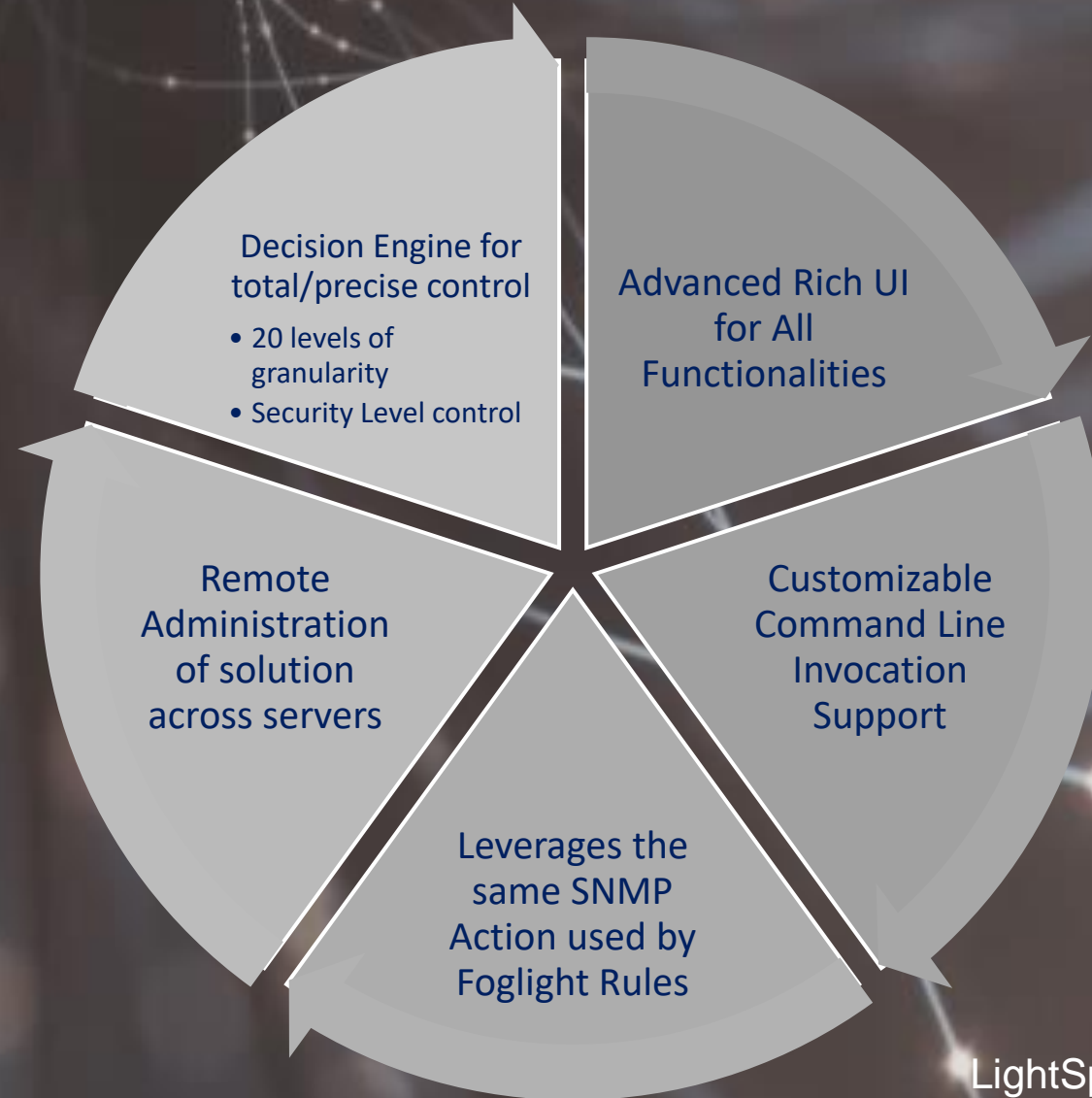
LightSpeed PM's Integrations for SNMP helps streamline and enrich SNMP performance data capture in these ways:

- Broaden the data captured from SNMP performance beyond custom implemented logic
- Easily define and enforce precise control
- Limited groovy scripting if any allowing for more control
- Easy implementation



# Simplify SNMP Integration

## LightSpeed PM's Custom Integration



# SNMP Integration Highlights

## Pattern Editor allows easy access to information related to the alarm

- No Groovy required
- Access to dozens of fields to easily provide values to parameters
- A dozen common operators available to easily avoid any coding

## Use of Groovy scripts for power users

- Use of Groovy scripting with complete injected flow context
- Ability to reject/delay ticket generation

## Persisted Queue so no events are lost

- Guaranteed delivery
- Keep history for rejected, failed and successful operations for total control
- Pause or delay control
- Consumer Thread settings/control as to manage concurrency and volume



# SNMP Integration Alarming Features

## Alarm Transition Support

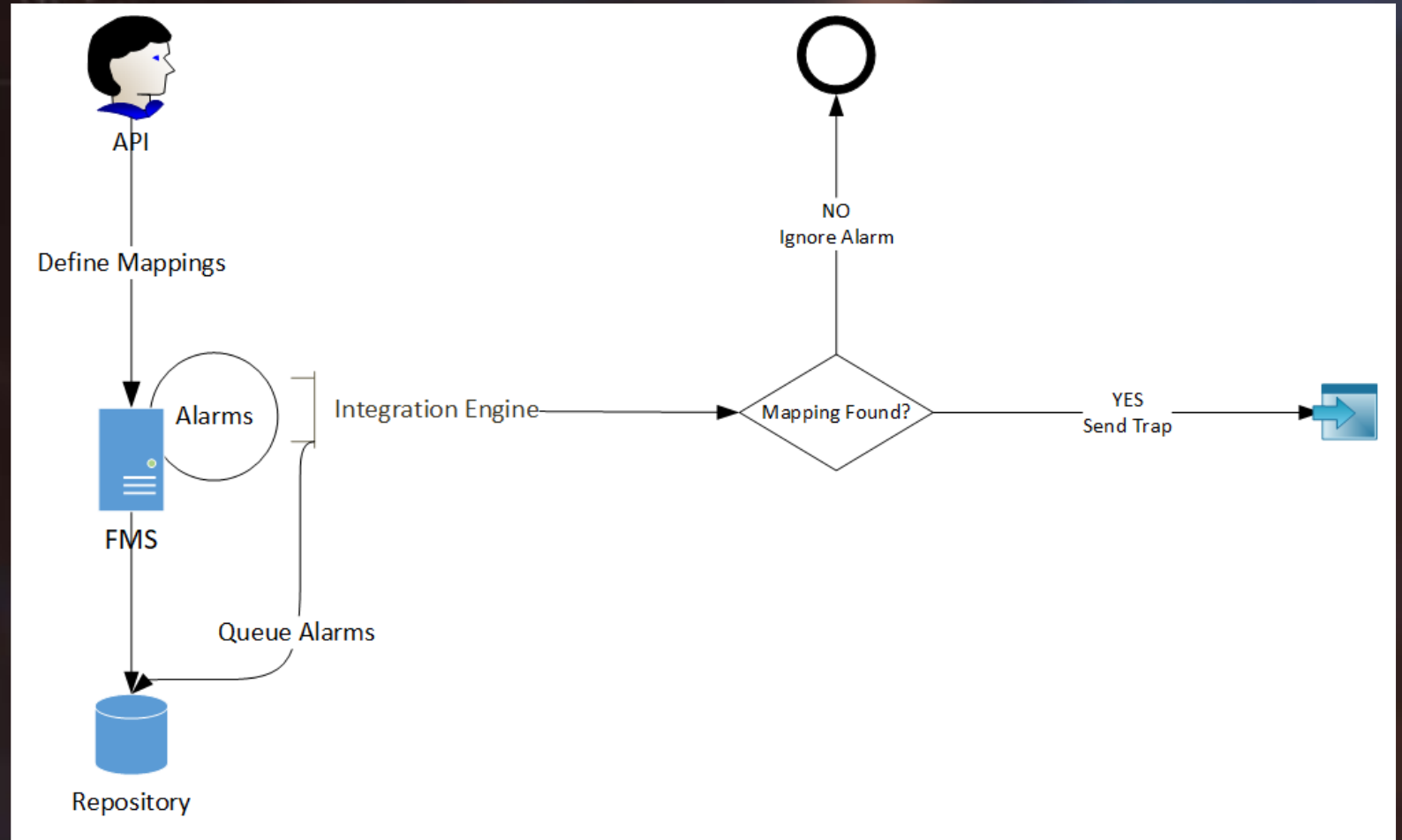
- Can be turned ON or OFF
- Update tickets when alarm is transitioning from one severity to another
  - Can be either to higher severity only or any transition
- Close ticket only when the last alarm in the transition has been cleared
- All transition information is accessible from the Pattern Editor

## Auto Acknowledge Alarms

## Alarm Flood Prevention



# SNMP Integration — Flow



# SNMP Integration – Decision Engine

A rich UI within the solution presents the various mappings produced by the decision engine

Low Priority

No Service

High Priority

With Service

	Service	Host	Agent Type	Agent	Topology Object	Rule
0						
1		x				
2			x			
3				x		
4						x
5					x	
6		x				x
7			x			x
8				x		x
9					x	x
10	x					
11	x	x				
12	x		x			
13	x			x		
14	x					x
15	x				x	
16	x	x				x
17	x		x			x
18	x			x		x
19	x				x	x



# SNMP Integration – Changing Settings

The screenshot displays the 'Integration Pack Registry Settings - Local FMS' interface. The left sidebar shows navigation options: Bookmarks, Homes, Dashboards, and Foglight Servers. Under Foglight Servers, 'Local FMS' is selected, and a search box is visible. The main content area shows a table of settings for 'xMatters Integration'.

Integration Pack Registry Settings - Local FMS

Saturday, October 10, 2020 11:32:21 PM - 12:32:21 AM 60 minutes | Reports

Save Undo Filter Search

Name	Value	Scoping	
<b>xMatters Integration</b>			
<b>Open Ticket</b>			
PSO.xMattersIntegration.OpenTicket.NoEmptyValue	true		If true any tag that returns a null will be replaced by a space
PSO.xMattersIntegration.OpenTicket.TimeZone	GMT		Defines the time zone to use when outputting date and time
PSO.xMattersIntegration.OpenTicket.DateTimeFormat	dd/MM/yyyy:HH:mm:ss		Defines the format for the date and time to use when output
<b>Queue</b>			
<b>Ignore</b>			
PSO.xMattersIntegration.Queue.Ignore.Normal	true		Should cleared alarms be ignored by the queuing engine? Ign
PSO.xMattersIntegration.Queue.Ignore.Warning	false		Should Warning alarms be ignored by the queuing engine? Ign
PSO.xMattersIntegration.Queue.Ignore.Critical	false		Should Critical alarms be ignored by the queuing engine? Ign
PSO.xMattersIntegration.Queue.Ignore.Fatal	false		Should Fatal alarms be ignored by the queuing engine? Ign
PSO.xMattersIntegration.Queue.Ignore.Rules			A list of comma separated rule names that the queue should
<b>Delay</b>			
PSO.xMattersIntegration.Queue.Alarm.DelayPeriod.Warning	0		Time in minutes a warning alarm should be delayed in the que
PSO.xMattersIntegration.Queue.Alarm.DelayPeriod.Critical	0		Time in minutes a critical alarm should be delayed in the que
PSO.xMattersIntegration.Queue.Alarm.DelayPeriod.Fatal	0		Time in minutes a fatal alarm should be delayed in the queue
PSO.xMattersIntegration.Queue.AlarmTransition.Enable	false		Should alarm transition be supported. If enabled the integrat
PSO.xMattersIntegration.Queue.Alarm.AcknowledgeUponSuccess	false		Should the alarm be acknowledged when the alarm has been
PSO.xMattersIntegration.Queue.Alarm.EnforceServiceFilter	false		When an alarm is being processed enforce the filters applied
PSO.xMattersIntegration.Queue.PausePeriod	0		Time in minutes no alarms should be forwarded to the target





# SNMP Integration – Mappings Editor

## Combinations

Levels | Level 0 | Credential Event | Add | Multi-Add | Save | Undo | Filter | Select All | Select None | Delete | Edit | Duplicate

Granularity ▲ | Service | Host | Object | Rule

- Mapping Combinations
- Mapping Combinations with Service

## Multiple Mappings

Levels | Level 0 | Credential Event | Add | Multi-Add | Save | Undo | Filter | Select All | Select None | Delete | Edit | Duplicate

Granularity ▲ | Service | Host | Agent Type | Rule

- Mappings for Agents
- Mappings for Agent Types
- Mappings for Hosts
- Mappings for Rules
- Mappings for Services
- Mappings for Topology Objects
- Mappings with Service

## Filtering

Levels | Level 0 | Credential Event | Add | Multi-Add | Save | Undo | Filter | Select All | Select None | Delete | Edit | Duplicate

Granularity ▲ | Service | Host | Agent Type | Rule

- Filter for a Specific Alarm
- Filter for a Specific Alarm (On Service)
- Only Show Mappings Valid on Current FMS



<b>Agent UID</b>	: @AGENT_UID			
<b>Agent Name</b>	: @AGENT_NAME			
<b>Agent Type</b>	: @AGENT_TYPE			
<b>Alarm Message</b>	: @ALARM_MESSAGE			
<b>DateTime</b>	: @ALARM_IS_CLEARED?[@ALARM_CLEARED_TIME]:[@ALARM_CR...			
<b>Host IP</b>	: @HOSTNAME![[ def host = PSO_AdminUtil_GetTopology...			
<b>Host MAC</b>	:			
<b>Hostname</b>	: @HOSTNAME			
<b>Rule ID</b>	: @RULE_UID			
<b>Rule Name</b>	: @RULE_NAME			
<b>Severity</b>	: @ALARM_SEVERITY_NAME_NORMAL			
<b>TopologyObject UID</b>	: @TOP_OBJECT_UID			
<b>TopologyObject Name</b>	: @TOP_OBJECT_NAME			
<b>URL</b>	: @ALARM_LINK			
<b>Agent UID OID</b>	: 1.3.6.1.4.1.7572.1.4.3			
<b>Agent Name OID</b>	: 1.3.6.1.4.1.7572.1.4.4			
<b>Agent Type OID</b>	: 1.3.6.1.4.1.7572.1.4.2			
<b>Alarm Message OID</b>	: 1.3.6.1.4.1.7572.1.4.1			
<b>DateTime OID</b>	: 1.3.6.1.4.1.7572.1.4.14			
<b>Host IP OID</b>	: 1.3.6.1.4.1.7572.1.4.11			
<b>Host MAC OID</b>	: 1.3.6.1.4.1.7572.1.4.12			
<b>Hostname OID</b>	: 1.3.6.1.4.1.7572.1.4.10			
<b>Rule ID OID</b>	: 1.3.6.1.4.1.7572.1.4.5			
<b>Rule Name OID</b>	: 1.3.6.1.4.1.7572.1.4.6			
<b>Severity OID</b>	: 1.3.6.1.4.1.7572.1.4.9			
<b>TopologyObject UID OID</b>	: 1.3.6.1.4.1.7572.1.4.7			
<b>TopologyObject Name OID</b>	: 1.3.6.1.4.1.7572.1.4.8			
<b>URL OID</b>	: 1.3.6.1.4.1.7572.1.4.13			

Update   Reset   Clear

# SNMP Integration — Field Editor



# SNMP Integration — Pattern Editor

**DateTime Elements**

Add Insert Edit by Element Save Undo Test

Pattern Element

@ALARM\_IS\_CLEARED?[@ALARM\_CLEARED\_TIME]:[@ALARM\_

Please select a Pattern Element

Apply

Tag	Caption
AGENT_NAME	Agent Name
AGENT_TYPE	Agent Type
AGENT_UID	Agent UID
ALARM_ACKNOWLEDGED_BY	Alarm Acknowledged By
ALARM_ACKNOWLEDGED_TIME	Alarm Acknowledged Time
ALARM_CLEARED_BY	Alarm Cleared By
ALARM_CLEARED_TIME	Alarm Cleared Time
ALARM_CREATED_TIME	Alarm Created Time
ALARM_ID	Alarm ID
ALARM_IS_ACKNOWLEDGED	Is Alarm Acknowledged
ALARM_IS_CLEARED	Is Alarm Cleared
ALARM_LINK	Alarm Link
ALARM_MESSAGE	Alarm Message
ALARM_MESSAGE_CLEAN	Alarm Message Clean
ALARM_SEVERITY	Alarm Severity
ALARM_SEVERITY_NAME	Alarm Severity Name

Operator	Short Description
?[]	If tag has a value.
:[]	If tag does not have a value.
?[]:[]	If tag has a value else.
^{}{}	Replace string with another.
=()	Equality
=()?[]:[]	If equal else
![[ ]]	Groovy Script
^U	Uppercase
^L	Lowercase
^T	Trim
^N	New Line Output
^R	Return



# SNMP Integration — System Requirements



Minimum required  
FMS version

5.9.3



Supported  
Database  
Minimum  
Version

MS SQL

2008  
v 10.0.1600 or later

Oracle

9i R2

MySQL

5.1.45

PostgreSQL

9.4.0





## Performance Monitoring customized to your unique environment

Ten plus years of providing Professional Services to Quest customers revealed these enhancements to be most requested modifications.

Let us take Foglight's out of the box capabilities and enhance for your unique environment.

Contact: [Sales@LightSpeedPM.com](mailto:Sales@LightSpeedPM.com)

