



# Ansible Integration



- LightSpeed PM – A Certified Quest Partner



Updated 11-20-2019

# Foglight Integrations – Current OOTB Status

- Foglight does not have an out of the box solution for Ansible Integration, and is limited by the following:
  - Custom Event Driven Rule have to be created
  - Command Invocation is required
  - Groovy Scripting is required
  - There is very Little control over event information
    - Control requires lots of groovy scripting
  - There are no options offered or available to define Ansible Fields in Foglight

# Ansible Integration – Custom Cartridge Highlights

- Our Custom solution for Ansible Integration simplifies the effort integrate Foglight with Ansible:
  - Advanced Rich UI for all functionalities
  - Customizable REST invocation support
    - Create/Update Tickets
    - Flexible parameter definitions
    - Auto Annotate Alarms with returned information
  - **Remote Administration** of solution across servers
  - Decision engine for total and precise control
    - 20 Levels of granularity
    - Severity Level control

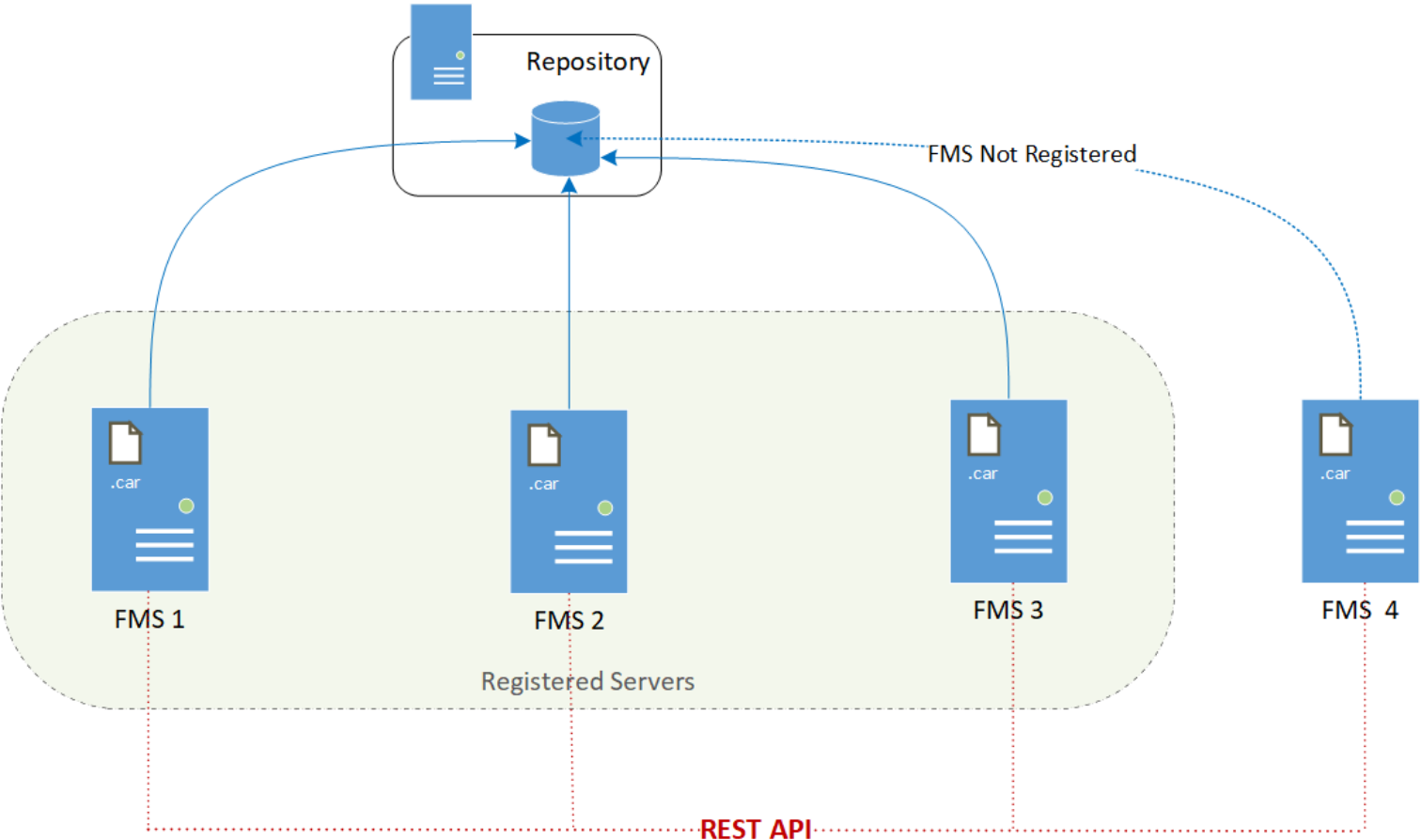
# Ansible Integration – Highlights

- Pattern editor to easily access many of the 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.

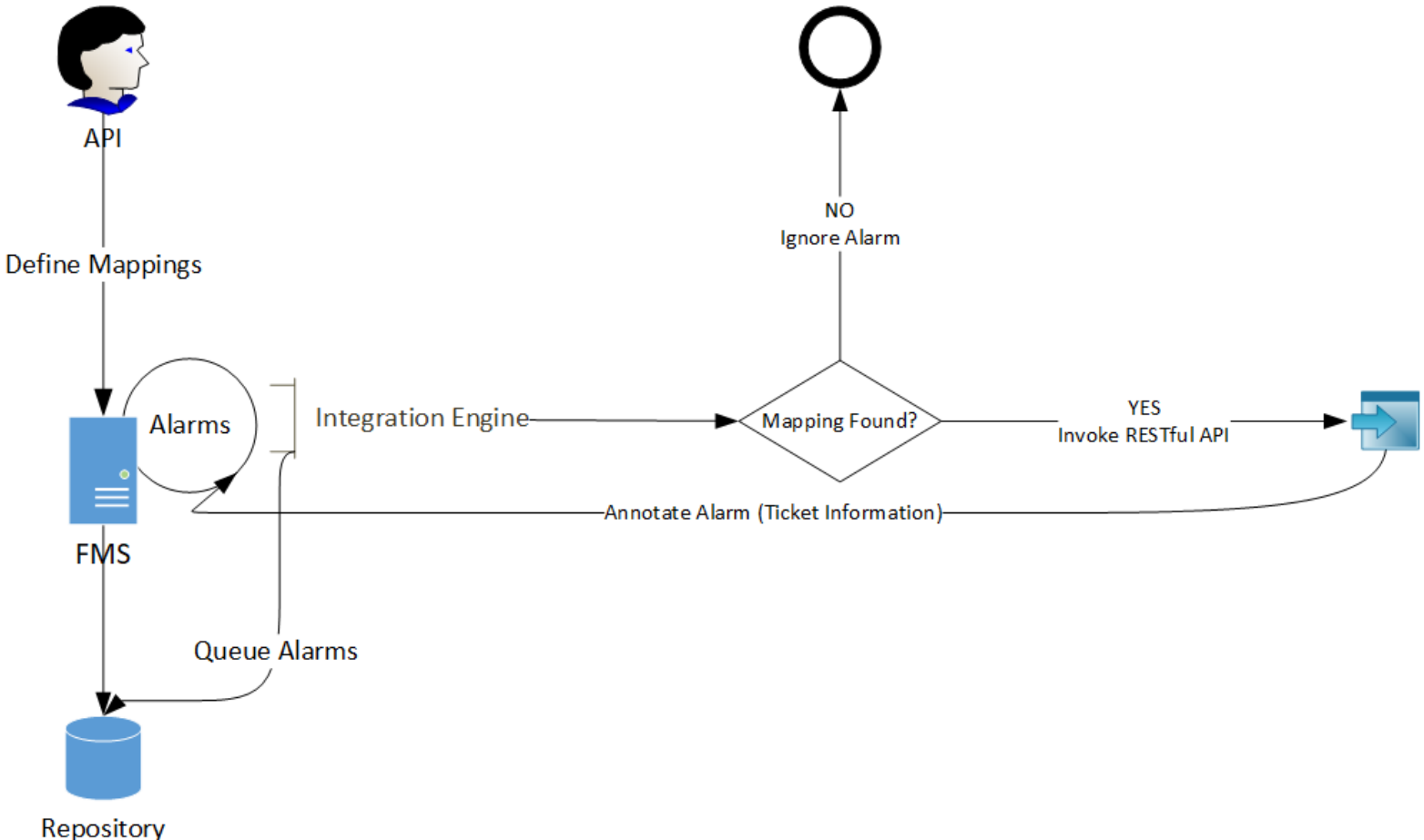
# Ansible Integration – Highlights

- 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
- Alarm Flood Prevention
- Auto Acknowledge Alarms

# Ansible Integration – High Level



# Ansible Integration – RESTful API Flow



# Ansible Integration – Decision Engine

- The decision engine is based on various mappings defined within the solution. A very rich UI is provided to create the mappings.

- Low Priority

	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

No Service

With Service

- High Priority



# Ansible Integration – Changing Settings

Integration Pack Registry Settings - Local FMS

Navigation: Expert View

Bookmarks: There are no bookmarks

Homes

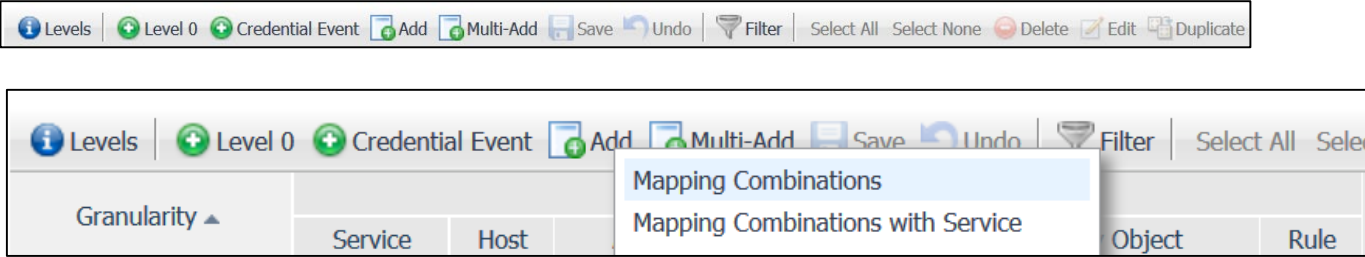
Dashboards

Foglight Servers: Local FMS (Host Name) - There Is No Data To Display

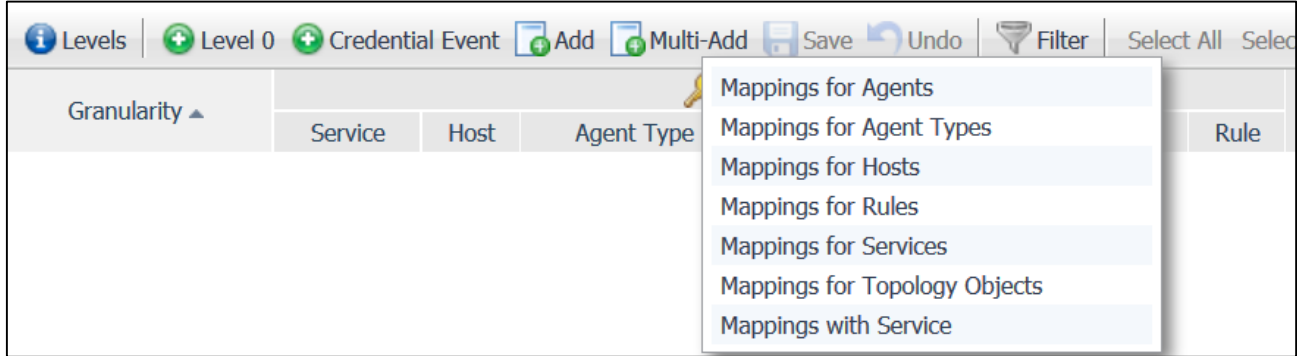
Name	Value	Scoping	
<b>Ansible Integration</b>			
<b>Open Ticket</b>			
PSO.AnsibleIntegration.OpenTicket.NoEmptyValue	true		If true any tag that returns a null will be replaced by a space. If false null values are simply not outputted.
PSO.AnsibleIntegration.OpenTicket.TimeZone	GMT		Defines the time zone to use when outputting date and time in the Command.
PSO.AnsibleIntegration.OpenTicket.DateTimeFormat	dd/MM/yyyy:HH:mm:ss		Defines the format for the date and time to use when outputting date and time in the Command.
<b>Queue</b>			
<b>Ignore</b>			
PSO.AnsibleIntegration.Queue.Ignore.Normal	true		Should cleared alarms be ignored by the queuing engine? Ignored alarms are not queued thus reducing the overall load on the system and engine.
PSO.AnsibleIntegration.Queue.Ignore.Warning	false		Should Warning alarms be ignored by the queuing engine? Ignored alarms are not queued thus reducing the overall load on the system and engine.
PSO.AnsibleIntegration.Queue.Ignore.Critical	false		Should Critical alarms be ignored by the queuing engine? Ignored alarms are not queued thus reducing the overall load on the system and engine.
PSO.AnsibleIntegration.Queue.Ignore.Fatal	false		Should Fatal alarms be ignored by the queuing engine? Ignored alarms are not queued thus reducing the overall load on the system and engine.
PSO.AnsibleIntegration.Queue.Ignore.Rules			A list of comma separated rule names that the queue should ignore. Alarms generated by ignored rules are not queued thus reducing the overall load on the system and engine.
<b>Delay</b>			
PSO.AnsibleIntegration.Queue.Alarm.DelayPeriod.Warning	0		Time in minutes a warning alarm should be delayed in the queue before being forwarded to the target system if still active (not cleared) after the delay period expires.
PSO.AnsibleIntegration.Queue.Alarm.DelayPeriod.Critical	0		Time in minutes a critical alarm should be delayed in the queue before being forwarded to the target system if still active (not cleared) after the delay period expires.
PSO.AnsibleIntegration.Queue.Alarm.DelayPeriod.Fatal	0		Time in minutes a fatal alarm should be delayed in the queue before being forwarded to the target system if still active (not cleared) after the delay period expires.
PSO.AnsibleIntegration.Queue.AlarmTransition.Enable	false		Should alarm transition be supported. If enabled the integration will update a ticket vs creating a new one when an alarm goes from severity to severity and will also only clear the ticket.
PSO.AnsibleIntegration.Queue.Alarm.AcknowledgeUponSuccess	false		Should the alarm be acknowledged when the alarm has been successfully processed.
PSO.AnsibleIntegration.Queue.Alarm.EnforceServiceFilter	false		When an alarm is being processed enforce the filters applied to the service. If true a service is not considered to be a hit (mapping wise) if the alarm is excluded by the filter.
PSO.AnsibleIntegration.Queue.PausePeriod	0		Time in minutes no alarms should be forwarded to the target system. This is useful when the target system is unavailable due to maintenance in which case alarms are queued.
<b>REST</b>			
PSO.AnsibleIntegration.REST.Enable	false		Should the integration use the REST method (true)
PSO.AnsibleIntegration.REST.URL			The URL for the RESTful API the integration should use in order to open a ticket.
PSO.AnsibleIntegration.REST.Path			The path following the URL.
PSO.AnsibleIntegration.REST.Update.Path			The path following the URL to use when an alarm is cleared or if Alarm Transition is enabled when an alarm transitions from one severity to another.
PSO.AnsibleIntegration.REST.Update.Method	POST		Which method to use when doing an update: POST or PUT
PSO.AnsibleIntegration.REST.ResponseProperty			The name of the property to retrieve the Ansible ticket ID after opening a ticket.
PSO.AnsibleIntegration.REST.OtherResponseProperties			A comma separated list of properties to retrieve from the REST response. These properties are secondary to the main property used to retrieve the Ticket ID.
PSO.AnsibleIntegration.REST.TrustAllSSLCerts	false		If true all SSL certificates will be trusted. Should only be used in Development environments where certificates are not always kept up to date.
<b>Authentication</b>			
PSO.AnsibleIntegration.REST.AuthenticationMode	HTTP_HEADER		HTTP_HEADER, BASE64_ENCODING or URL_ENCODE authentication when not tokens are needed, or BASE64_ENCODING_AND_TOKEN and URL_ENCODE_AND_TOKEN when tokens are needed.
PSO.AnsibleIntegration.REST.Username			The username to gain access to the RESTful API the integration should use in order to open a ticket.

# Ansible Integration – Mappings Editor

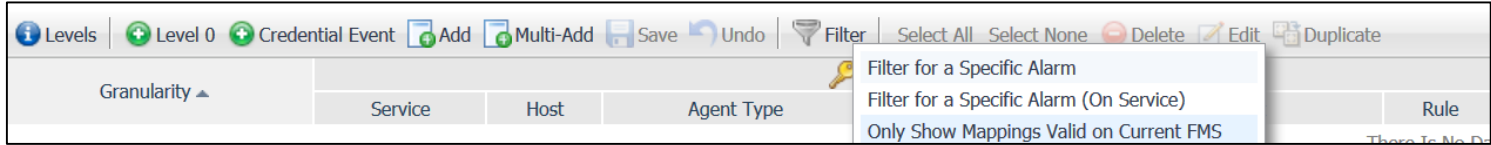
- Combinations



- Multiple Mappings



- Filtering



- . . .

# Ansible Integration – Field Editor

Corrective Message :			
Duration :			
Expires On :			
Message :			
Severity :			
Source :			
Timestamp :			
Type :			
Uuid :			
Enable Normal : true			
Warning : true			
Critical : true			
Fatal : true			

# Ansible Integration – Pattern Editor

The interface is titled "Alarm Severity Name Elements" and contains a toolbar with "Add", "Insert", "Edit Complete", "Save", and "Undo" buttons. A "Pattern Element" list shows "@ALARM\_SEVERITY\_NAME" with a red minus button. The main editor area displays the text "@ALARM\_SEVERITY\_NAME". A red warning message reads: "Remember to click Apply if you manually edit the pattern. Spaces are automatically trimmed, please use Edit Complete to insert spaces and have them preserved." Below the editor is an "Apply" button. At the bottom, there are two panels: "TAGS" and "OPERATORS".

Tag	Caption
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

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.
=0	Equality
=0?[]:[]	If equal else
![[ ]]	Groovy Script
^U	Uppercase
^L	Lowercase
^T	Trim
^N	New Line Output
^R	Return

# Ansible Integration – System Requirements

- **Minimum required FMS version**

5.9.3

- **Supported Databases**

Microsoft SQL

Oracle

MySQL

PostgreSQL

## **Minimum Version**

2008 (version 10.0.1600 or later)

9i R2

5.1.45

9.4.0