



Prognosis Labs

Alerting - Beginner

Wednesday, October 18, 2017

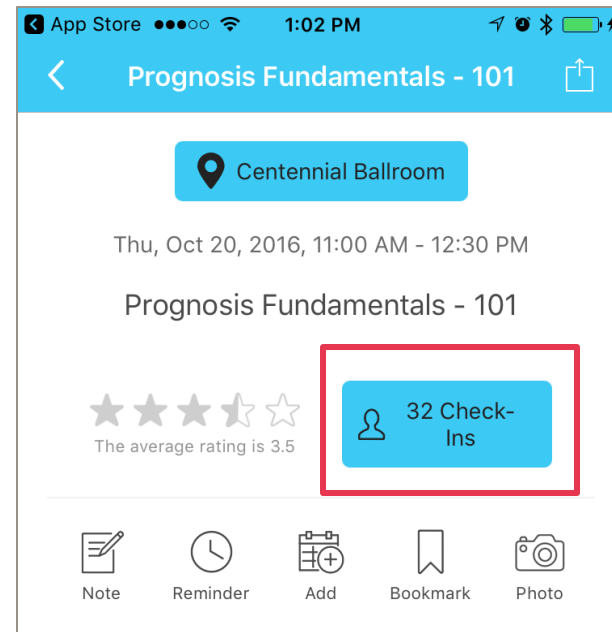
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Welcome!

Please check-in on the mobile app - see your class record, remember what tests to take, and help us improve





- **WiFi SSID:** IR Summit
- **WiFi PW:** Prognosis
- Download the Slides from
Online.Prognosis.com(insert URL)
- Login to the Demo Instance (insert URL)



Agenda

This Labs session will cover the following topics and have exercises to reinforce the topics

- Basic Threshold properties and operation
- Best practices for building thresholds
- Where Clauses
- Threshold conditions and destinations
- Changing existing threshold conditions
- Make you think!!!



Learning Objectives

- After completing this course you should:
 - Have a better understanding of what the capabilities of Prognosis thresholds are
 - Be able to modify existing threshold to better meet the needs of your operation
 - Be able to create new Threshold conditions as needed



Topic - Threshold Quick Review

- A Threshold is a Prognosis service that scans system data looking for predefined exception conditions.
- Once an exception is detected, the Threshold definition can send details via an event message to one or more of a variety of destinations such as; Events log, SNMP trap, Dispatch Manager, Commands etc.



Threshold Components

The screenshot shows the configuration window for an Avaya Alert on a system named \CON-08R2-PROG10. The window has several tabs: General, Conditions, Default Destinations, Schedule, and Nodes to Run On. The 'Conditions' tab is active.

Key components are highlighted with callouts:

- Threshold Name:** The text 'Avaya_Alert' in the 'Unique Threshold Process Name' field is highlighted with a red box and a callout.
- Condition Name and Where Clause:** The condition 'Aura CPU Usage (OCTOTAL > 80)' is highlighted with a red box and a callout. Below it, the associated actions are also highlighted: 'Problem Summary (1031: @AVSEMKPI.MGRTYPE@ Manager @AVSEMKPI.PNODE@ has CPU usage exceeding 80%)', 'Dispatch Manager (@AVSEMKPI.MGRTYPE@ Manager @AVSEMKPI.PNODE@ has CPU usage exceeding 80%)', and 'SNMP Trap (1031: @AVSEMKPI.MGRTYPE@ Manager @AVSEMKPI.PNODE@ has CPU usage exceeding 80%)'.
- Condition Destinations:** A callout points to the 'Condition Destinations' field, which is partially visible at the bottom of the list.

Other visible conditions in the list include:

- Aura Avail Up (CURRSTAT = "UP" OR CURRSTAT = "DE")
- Aura Degraded (CURRSTAT = "DE")
- Aura Down (CURRSTAT = "DN")
- Aura Memory Usage (MEMTOTAL > 85)
- Board Avail Up ((CURRSTAT = "UP" OR CURRSTAT = "DE") AND ...)
- Board Degraded (CURRSTAT = "DE" AND BRDNUM MATCHES RE...



Threshold Conditions

- A condition uses “Where Clauses” to create a trigger to feed a condition destination
 - Condition Destinations will also need to be configured
 - Problem Summary – Internal Prognosis records
 - Dispatch Manager , DISPMAN, SMTP alert destination
 - SNMP trap out
 - Command – Can execute scripts on the Prognosis server
 - Others will be discussed



Threshold Conditions-Visual

The screenshot shows the configuration window for an Avaya Alert on a system named \CON-08R2-PROG10. The window has several tabs: General, Conditions, Default Destinations, Schedule, and Nodes to Run On. The 'Conditions' tab is active.

Under the 'Conditions' tab, the 'Unique Threshold Process Name' is set to 'Avaya_Alert'. Below this, a tree view titled 'Threshold Conditions' lists several conditions. The condition 'Aura CPU Usage (OCTOTAL > 80)' is highlighted with a red box. A callout box labeled 'Condition Name and Where Clause' points to this condition. Below the highlighted condition, a red box highlights the 'Problem Summary' and 'Dispatch Manager' entries, with a callout box labeled 'Condition Destinations' pointing to them.

Other conditions listed include:

- Aura Avail Up (CURRSTAT = "UP" OR CURRSTAT = "DE")
- Aura Degraded (CURRSTAT = "DE")
- Aura Down (CURRSTAT = "DN")
- Aura Memory Usage (MEMTOTAL > 85)
- Board Avail Up ((CURRSTAT = "UP" OR CURRSTAT = "DE") AND
- Board Degraded (CURRSTAT = "DE" AND BRDNUM MATCHES RE



Thresholds Best Practices

- Build a display using the record you will be thresholding.
- Be familiar with the record being used and what it contains, primarily field types and source node
- Be clear on the differences of “Nodes to Run on” vs “Nodes to Monitor”
- Be familiar with on events and off events



Alerts - New Features

- Prognosis 11.2 introduced new Alert features of note. They are located in the “ALERTS” configuration
 - Preserve Alerts
 - Suppress Threshold



Preserve Alerts

- Avoids Alert Floods during a Prognosis service restart or server restart
- Keeps a persistent file in the <drive> \Prognosis Server\Configuration\autoancache directory
- Disabled (commented out) by default



Preserve Alerts configuration

- PRESERVE-ALERTS (Y)
- ! The current alert state is saved to disk on an interval in seconds configurable below.
- CACHE-INTERVAL (30)
- ! The alert state will be discarded if it is older than the configured value in seconds below.
- CACHE-TIMEOUT (86400)
- ! This setting is used to suppress thresholds. In this mode, thresholds will not trigger events
- ! and will not dispatch any messages to destinations.



Suppress Threshold

- The 'Alert Suppression' feature is used to turn off all Threshold processing on a Prognosis server. When activated, all Threshold processes running on the selected Prognosis server will temporarily stop receiving data for any triggered alerts. This feature will help to stop false alerts from being raised when they are expected, such as during routine maintenance.



Suppress Threshold Configuration

- Commented out/disabled by default
- Configuration item
 - SUPPRESS-THRESHOLD()
 - Syntax is just as it is, just needs to be uncommented in the ALERTS configuration and start the configuration.



Lab Exercises

- Exercise 1
 - Build a tabular display
- Exercise 2
 - Where Clause Modifications
- Exercise 3
 - Creating custom node groups
- Exercise 4
 - Adding multiple destinations
 - Condition copy and paste



Exercise 1- Build a Tabular Display

- Node Selection “Entire Network”
- Select invisible meta field “.nodeName”
- Validate field types
 - Strings – Left justified in a tabular display
 - Numerics – Right justified in a tabular display
 - Timestamps = Right justified in a tabular display and available field format
- Helps in crafting an appropriate where clause
 - Strings need quotes, numerics do not



Build a Display - Visuals

	Node Name	Err Num	Obj File	Prod Ver	Mod Name	Line Num	Msg Text	Info	Time
1	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-00:02:00.000000
2	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	SAMPLE	20171009-00:22:00.000000
3	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-01:02:00.000000
4	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	SAMPLE	20171009-01:22:01.000000
5	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
6	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
7	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
8	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
9	ISUP-P11DEMO	3064	IRNETRTR	11.3.0	dbmgrp	7616	Failed to		
10	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
11	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
12	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
13	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
14	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
15	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
16	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
17	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
18	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
19	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
20	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
21	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
22	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
23	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000
24	ISUP-P11DEMO	5512064	IRDSPSRV	11.3.0	msginp	387	Unknown Profile -	EMAIL	20171009-02:02:00.000000

Right Justified - Numeric field

Right Justified - Timestamp field

Left Justified - String Field

Test - New Window

Data | Presentation | Links | Drill Downs | Commands | Notes

Data | Sort/Total | Custom Legend

Data View Definitions

View Name	Nodes	Where Clause	Limits	Combines	Names	Subsystem
PrognosisErrorLog	Entire Network	ALL	100			

Refresh Rate: 10 Seconds

Don't substitute nodes from parent document

Data Field Name	Visible	Format	Use Default Heading	Heading	Wrap Text (GUI)
NodeName	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Node\nName	<input type="checkbox"/>
PrognosisErrorLog_ErrorNumber	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Err\nNum	<input type="checkbox"/>
PrognosisErrorLog_ObjectFileName	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	File	<input type="checkbox"/>
PrognosisErrorLog_ProductVersion	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Ver	<input type="checkbox"/>
PrognosisErrorLog_SourceFileName	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Name	<input type="checkbox"/>
PrognosisErrorLog_SourceLineNumber	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Num	<input type="checkbox"/>
PrognosisErrorLog_Text	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Msg\nText	<input type="checkbox"/>
PrognosisErrorLog_TextAdditional	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Info\n	<input type="checkbox"/>
PrognosisErrorLog.Time	<input checked="" type="checkbox"/>	Default	<input checked="" type="checkbox"/>	Time\n	<input type="checkbox"/>

Available timestamp format shows it as a timestamp field

OK Cancel Help



Exercise 1

- Choose one of the following Prognosis records to create a tabular display with all fields to view data format
 - LyncCompletedConferences
 - AvayaMediaGateway
 - CallManagerGateway



Exercise 2 – Where clauses

- Modify existing where clause to remove an item from alerting
- Talk about node groups possibilities



Exercise 3 – Node groups

- Creating custom node groups
 - Dynamic
 - Static



Exercise 4 – Destinations

- Adding Multiple destinations
- Copy and Pasting conditions



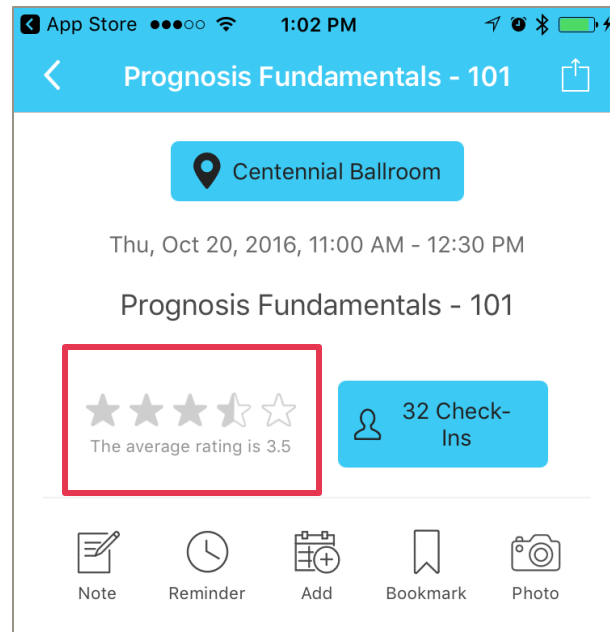
Recap

- We've covered:
 - Threshold creation best practices and functions
 - Should allow you to create simple alerts and allow you to modify existing threshold conditions
 - Online Help Topics:
 - http://help.prognosis.com/dr/Prognosis_11-3/mergedProjects/System_Functions/HTML_Files/Thresholds/Thresholds-Contents.htm



Next Steps

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Questions?

