ENTUITY
SOFTWARE™

Entuity v20.0 Release Notification

April 15th 2022

Entuity v20.0 Release Notification

TECHNICAL BULLETIN APRIL 15, 2022

Version 2022.04.15

We are delighted to announce that the latest version of Entuity, to be known as Entuity v20.0, is now available for customer use. Details of the benefits to be gained from this new release are set out below.

Entuity v20.0 New Release Details

The following key additions and changes have been made to Entuity v20.0:

- Configuration Monitoring and Management Enhancements
- Firmware Update Management
- Storage Performance Metrics
- Custom Webhooks
- Enhanced User Defined REST API Poller
- Remote Poller Connectivity Enhancement

Configuration Monitoring and Management Enhancements

Addition of a new report, 'Device Configuration Diffs', that provides a summary of individual changes in selected device configurations during a specified time span. A link to this report is also provided in the Device Configuration Summary report.

Addition of option to view the details of an out-of-the-box configuration management step directly from the Configuration Management page. Viewing these details was previously only achievable by copying and editing the step.

Addition of option to view color-coded, change-based diffs between the running and previous configurations for a device.

Addition of option to view associated events from the 'Configuration Changes Over Time' and 'Policy Violations Over Time' dashlets on the Configuration Monitoring Summary system dashboard. The events are as follows:
'Configuration Changes Over Time':

- CM Firmware Version Changed
- CM Running Configuration Changed
- CM Startup Configuration Changed

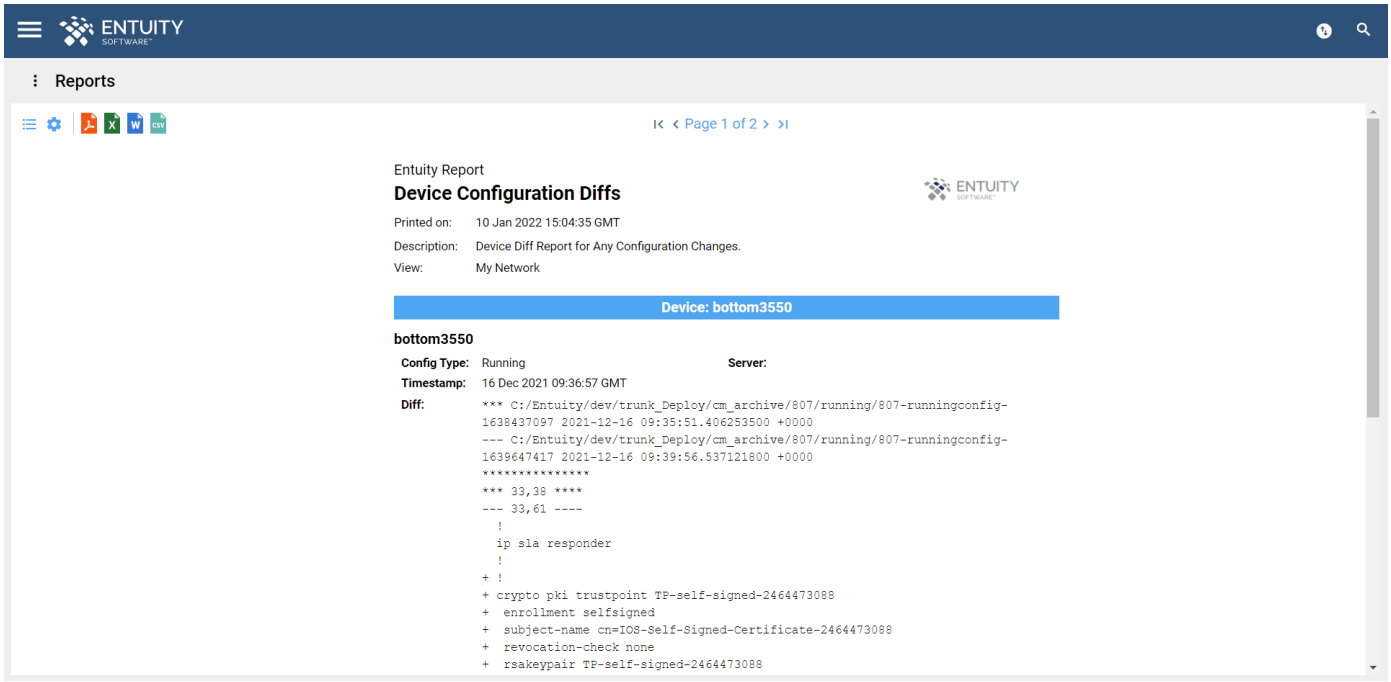
'Policy Violations Over Time':

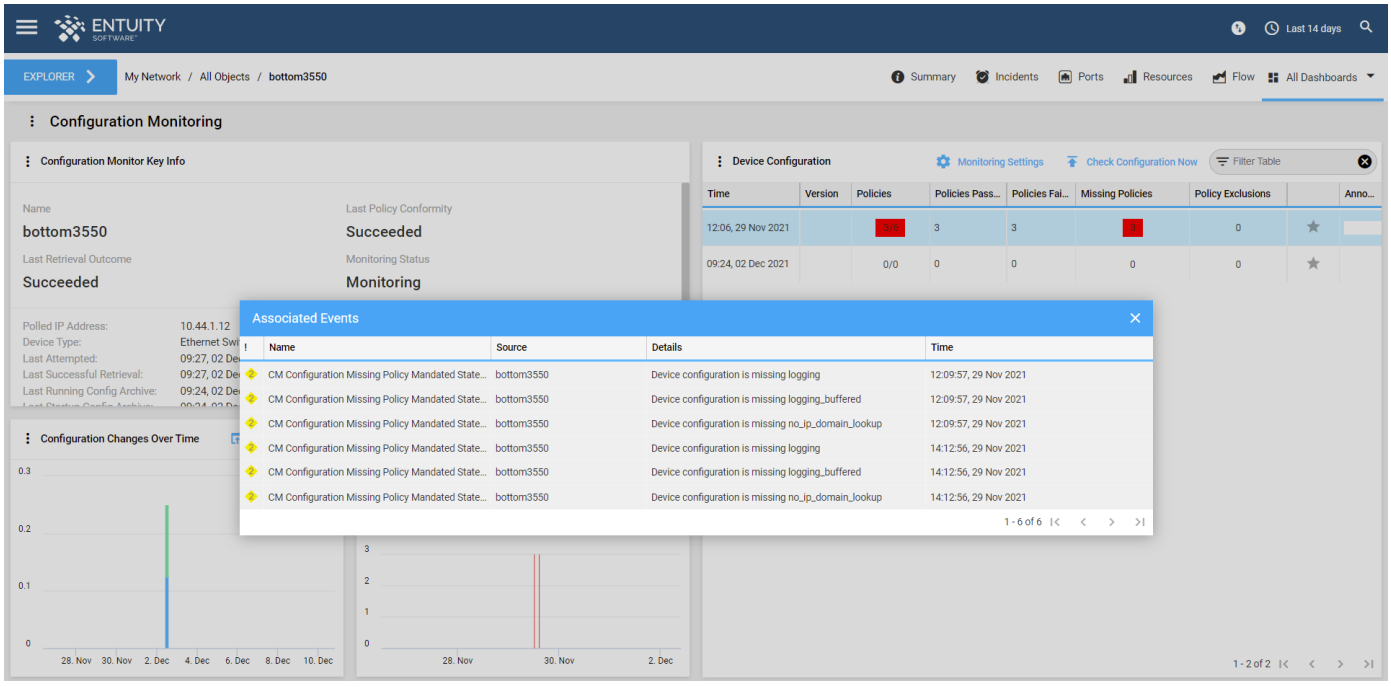
- CM Configuration Includes Policy Exclusion
- CM Configuration Missing Policy Mandated Statement

Addition of an optional popout dialog box to provide a larger area and easier format for adding, viewing and editing scripts for configuration steps.

Addition to the Administration section of a Policy Management page that enables you to see policies that are in use, create new policy rules, and edit and delete existing policies.

Please see this section for further information on configuration monitoring and management.


ENTUITY
SOFTWARE
Reports
Page 1 of 2
Entuity Report
Device Configuration Diffs
Printed on: 10 Jan 2022 15:04:35 GMT
Description: Device Diff Report for Any Configuration Changes.
View: My Network
Device: bottom3550
bottom3550
Config Type: Running
Server:
Timestamp: 16 Dec 2021 09:36:57 GMT
Diff:
*** C:/Entuity/dev/trunk_Deploy/cm_archive/807/running/807-runningconfig-1638437097 2021-12-16 09:35:51.406253500 +0000
--- C:/Entuity/dev/trunk_Deploy/cm_archive/807/running/807-runningconfig-1639647417 2021-12-16 09:39:56.537121800 +0000
****
*** 33,38 ****
--- 33,61 ----
!
ip sla responder
!
+ !
+ crypto pki trustpoint TP-self-signed-2464473088
+ enrollment selfsigned
+ subject-name cn=IOS-Self-Signed-Certificate-2464473088
+ revocation-check none
+ rsakeypair TP-self-signed-2464473088


ENTUITY
SOFTWARE
Last 14 days
EXPLORER
My Network / All Objects / bottom3550
Summary
Incidents
Ports
Resources
Flow
All Dashboards
Configuration Monitoring
Configuration Monitor Key Info
Name
bottom3550
Last Policy Conformity
Succeeded
Last Retrieval Outcome
Succeeded
Monitoring Status
Monitoring
Device Configuration
Monitoring Settings
Check Configuration Now
Filter Table
Time
Version
Policies
Policies Pass...
Policies Fai...
Missing Policies
Policy Exclusions
12:06, 29 Nov 2021
09:24, 02 Dec 2021
Associated Events
Name
Source
Details
Time
CM Configuration Missing Policy Mandated State...
bottom3550
Device configuration is missing logging
12:09:57, 29 Nov 2021
Device configuration is missing logging_buffered
Device configuration is missing no_ip_domain_lookup
14:12:56, 29 Nov 2021
1 - 6 of 6
Configuration Changes Over Time
1 - 2 of 2

Firmware Update Management

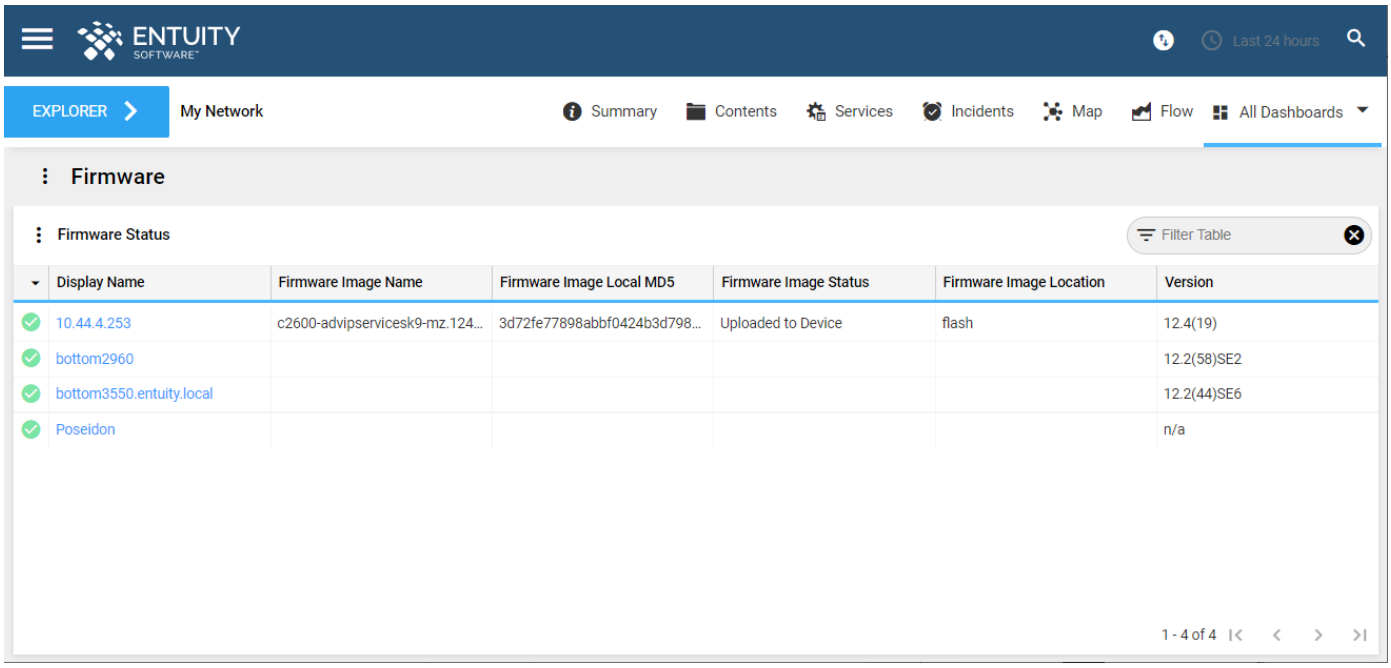
Addition of functionality that enables users to update firmware images across Cisco IOS network devices.

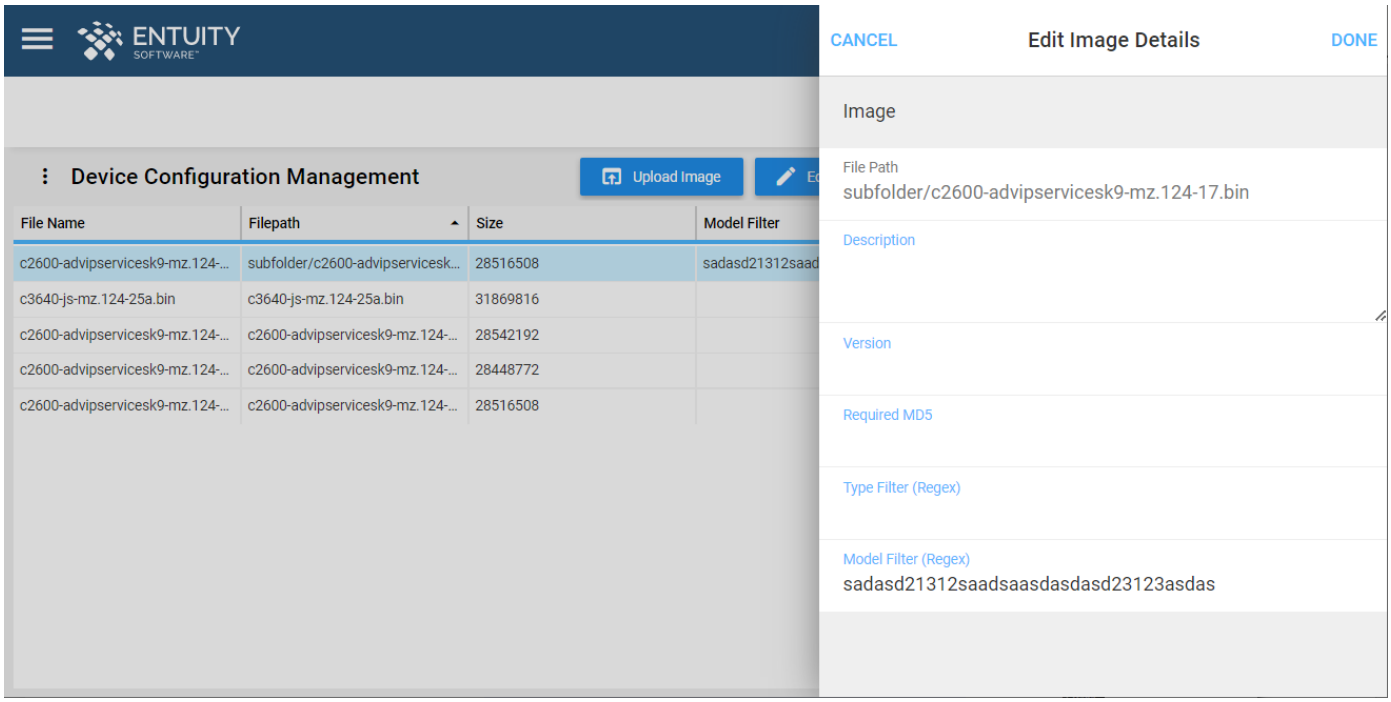
Addition of ability to manage a directory of IOS images on the current server under a new 'Firmware' tab on the updated Configuration Management page.

Addition of the following new incidents and events:

- Firmware Task Failed
- Firmware Task Warning

Please see this section for further information on firmware update management.




ENTUITY
SOFTWARE
Device Configuration Management
Upload Image
File Name
Filepath
Size
Model Filter
c2600-advipservicesk9-mz.124-...
subfolder/c2600-advipservicesk...
28516508
sadasd21312saad
c3640-js-mz.124-25a.bin
c3640-js-mz.124-25a.bin
31869816
c2600-advipservicesk9-mz.124-...
c2600-advipservicesk9-mz.124-...
28542192
c2600-advipservicesk9-mz.124-...
c2600-advipservicesk9-mz.124-...
28448772
c2600-advipservicesk9-mz.124-...
c2600-advipservicesk9-mz.124-...
28516508
CANCEL
Edit Image Details
DONE
Image
File Path
subfolder/c2600-advipservicesk9-mz.124-17.bin
Description
Version
Required MD5
Type Filter (Regex)
Model Filter (Regex)
sadasd21312saadsaasdasdasd23123asdas

Storage Performance Metrics

Addition of performance monitoring for the following storage devices, to complement existing storage inventory and status polling:

- Dell EMC VNX
- Dell EM VNXe
- Pure Storage
- Dell Isilon

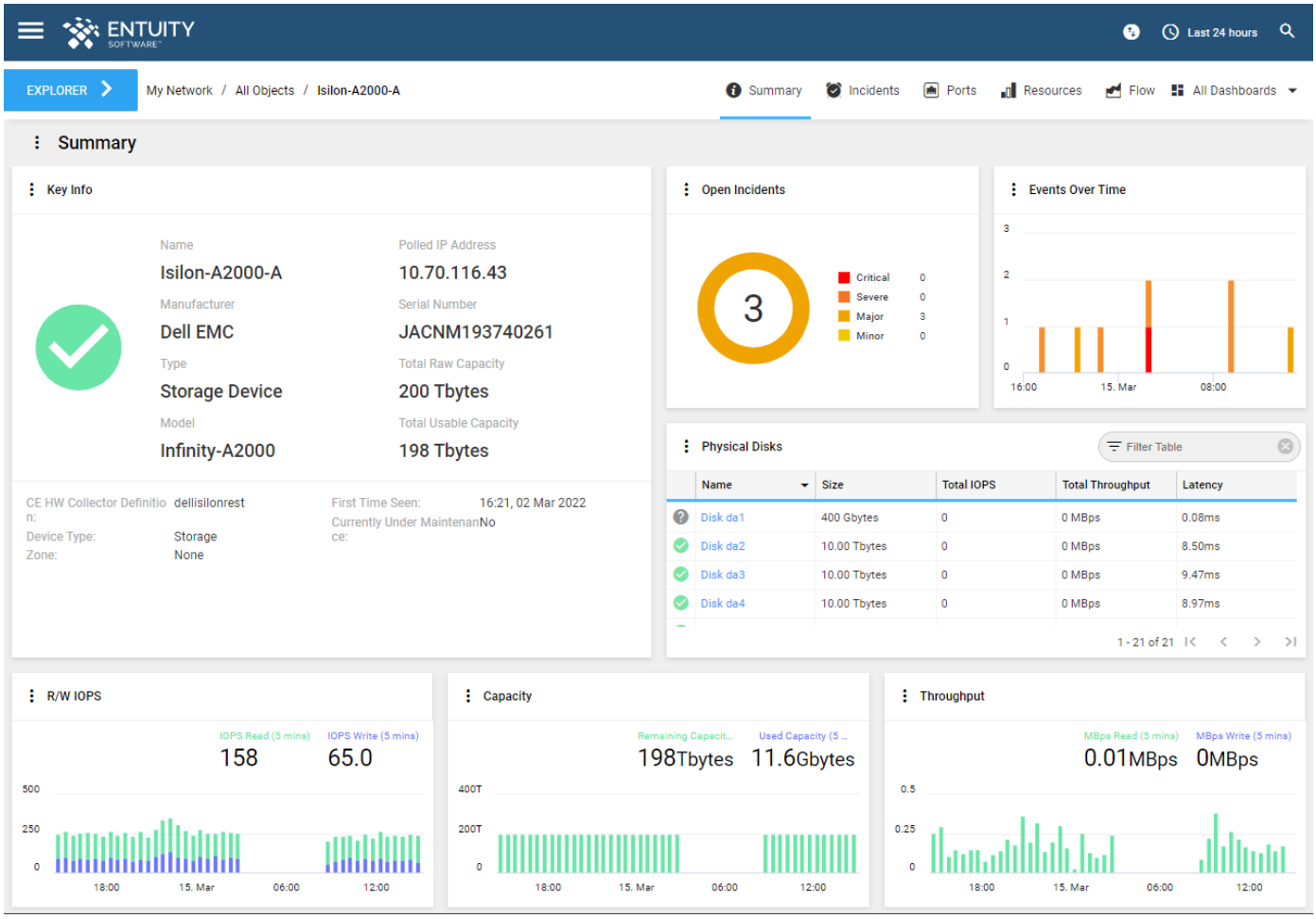
Addition of the following system dashboards to monitor storage performance:

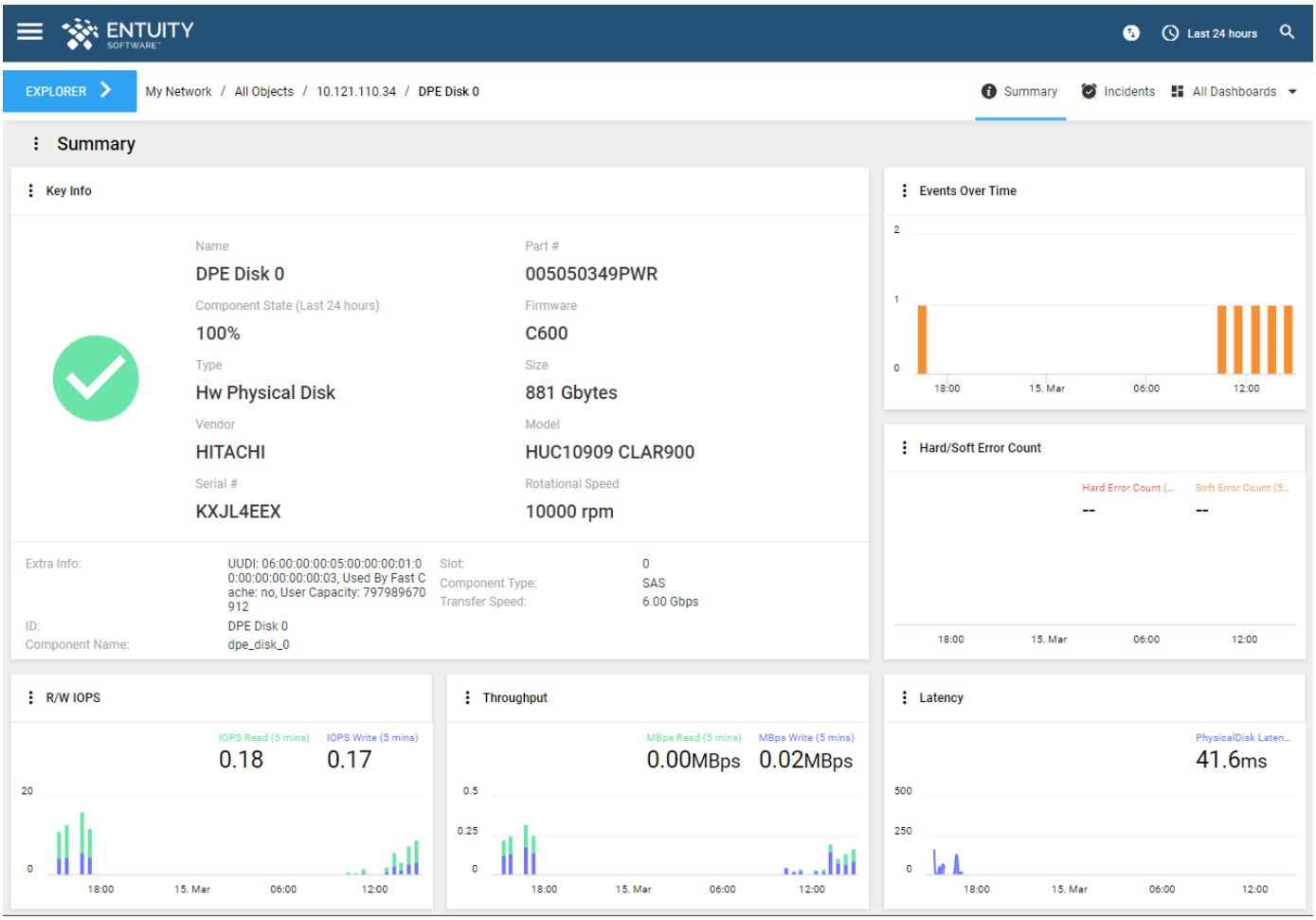
- Storage Summary
- Storage Device Summary
- HW Storage Pool Summary
- HW Volume Summary
- HW LUN Summary
- Update to the HW Physical Disk Summary to monitor storage performance.

Addition of the following new incidents and events:

- Storage Device High CPU Usage
- Storage Device High Memory Usage
- Storage Device Low Usable Capacity
- Physical Disk High Hard Error Rate
- Physical Disk High Soft Error Rate
- Storage Pool High Hard Error Rate
- Storage Pool High Latency
- Storage Pool High Soft Error Rate
- Storage Pool High Used Capacity
- LUN High Latency
- LUN High Used Provisioned
- Volume High Latency
- Volume High Used Provisioned

Please see this section for further information on storage device and metric monitoring.

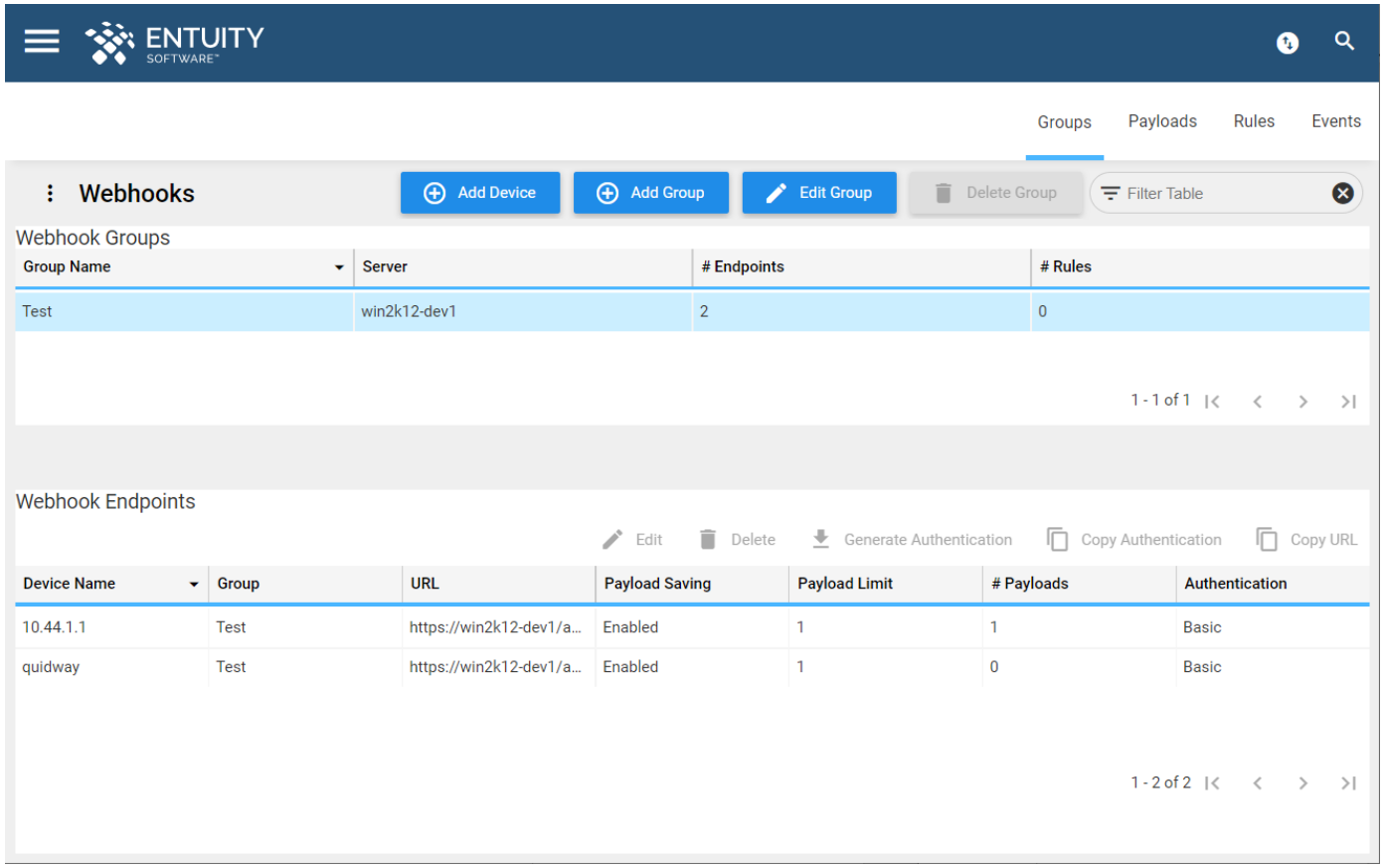

ENTUITY
SOFTWARE
Last 24 hours
EXPLORER
My Network / All Objects / Isilon-A2000-A
Summary
Incidents
Ports
Resources
Flow
All Dashboards
Summary
Key Info
Name
Isilon-A2000-A
Polled IP Address
10.70.116.43
Manufacturer
Dell EMC
Serial Number
JACNM193740261
Type
Storage Device
Total Raw Capacity
200 Tbytes
Model
Infinity-A2000
Total Usable Capacity
198 Tbytes
CE HW Collector Definition:
dellisilonrest
First Time Seen:
16:21, 02 Mar 2022
Device Type:
Storage
Currently Under Maintenance:
No
Zone:
None
Open Incidents
3
Critical 0
Severe 0
Major 3
Minor 0
Events Over Time
3
2
1
0
16:00
15. Mar
08:00
Physical Disks
Filter Table
Name
Size
Total IOPS
Total Throughput
Latency
Disk da1
400 Gbytes
0
0 MBps
0.08ms
Disk da2
10.00 Tbytes
0
0 MBps
8.50ms
Disk da3
10.00 Tbytes
0
0 MBps
9.47ms
Disk da4
10.00 Tbytes
0
0 MBps
8.97ms
1 - 21 of 21
R/W IOPS
IOPS Read (5 mins)
158
IOPS Write (5 mins)
65.0
500
250
0
18:00
15. Mar
06:00
12:00
Capacity
Remaining Capacit...
198Tbytes
Used Capacity (5 ...
11.6Gbytes
400T
200T
0
18:00
15. Mar
06:00
12:00
Throughput
MBps Read (5 mins)
0.01MBps
MBps Write (5 mins)
0MBps
0.5
0.25
0
18:00
15. Mar
06:00
12:00

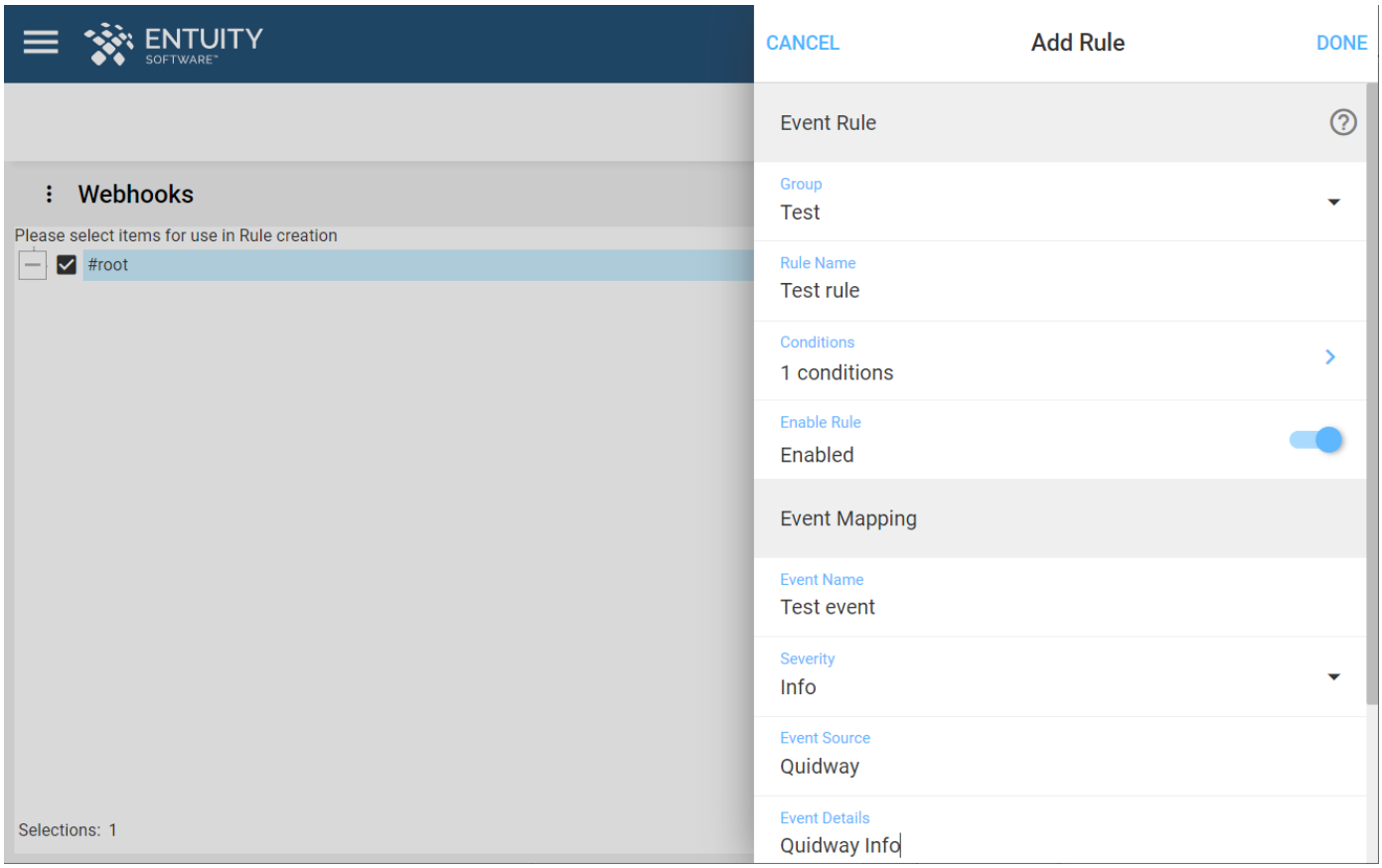

ENTUITY
SOFTWARE™
Last 24 hours
EXPLORER
My Network / All Objects / 10.121.110.34 / DPE Disk 0
Summary
Incidents
All Dashboards
Summary
Key Info
Name
DPE Disk 0
Part #
005050349PWR
Component State (Last 24 hours)
100%
Firmware
C600
Type
Hw Physical Disk
Size
881 Gbytes
Vendor
HITACHI
Model
HUC10909 CLAR900
Serial #
KXJL4EEX
Rotational Speed
10000 rpm
Extra Info:
UUDI: 06:00:00:00:05:00:00:00:01:00:00:00:00:00:00:03, Used By Fast Cache: no, User Capacity: 797989670912
Slot:
0
Component Type:
SAS
Transfer Speed:
6.00 Gbps
ID:
DPE Disk 0
Component Name:
dpe_disk_0
Events Over Time
2
1
0
18:00
15. Mar
06:00
12:00
Hard/Soft Error Count
Hard Error Count (...
Soft Error Count (5...
--
--
18:00
15. Mar
06:00
12:00
R/W IOPS
IOPS Read (5 mins)
0.18
IOPS Write (5 mins)
0.17
20
0
18:00
15. Mar
06:00
12:00
Throughput
MBps Read (5 mins)
0.00MBps
MBps Write (5 mins)
0.02MBps
0.5
0.25
0
18:00
15. Mar
06:00
12:00
Latency
PhysicalDisk Laten...
41.6ms
500
250
0
18:00
15. Mar
06:00
12:00

Custom Webhooks

Addition of functionality enabling users to add JSON webhooks from any device vendor, application or service to Entuity and turn those webhooks into custom webhook events via webhook rules.

Please see this section for further information on custom webhooks in Entuity.



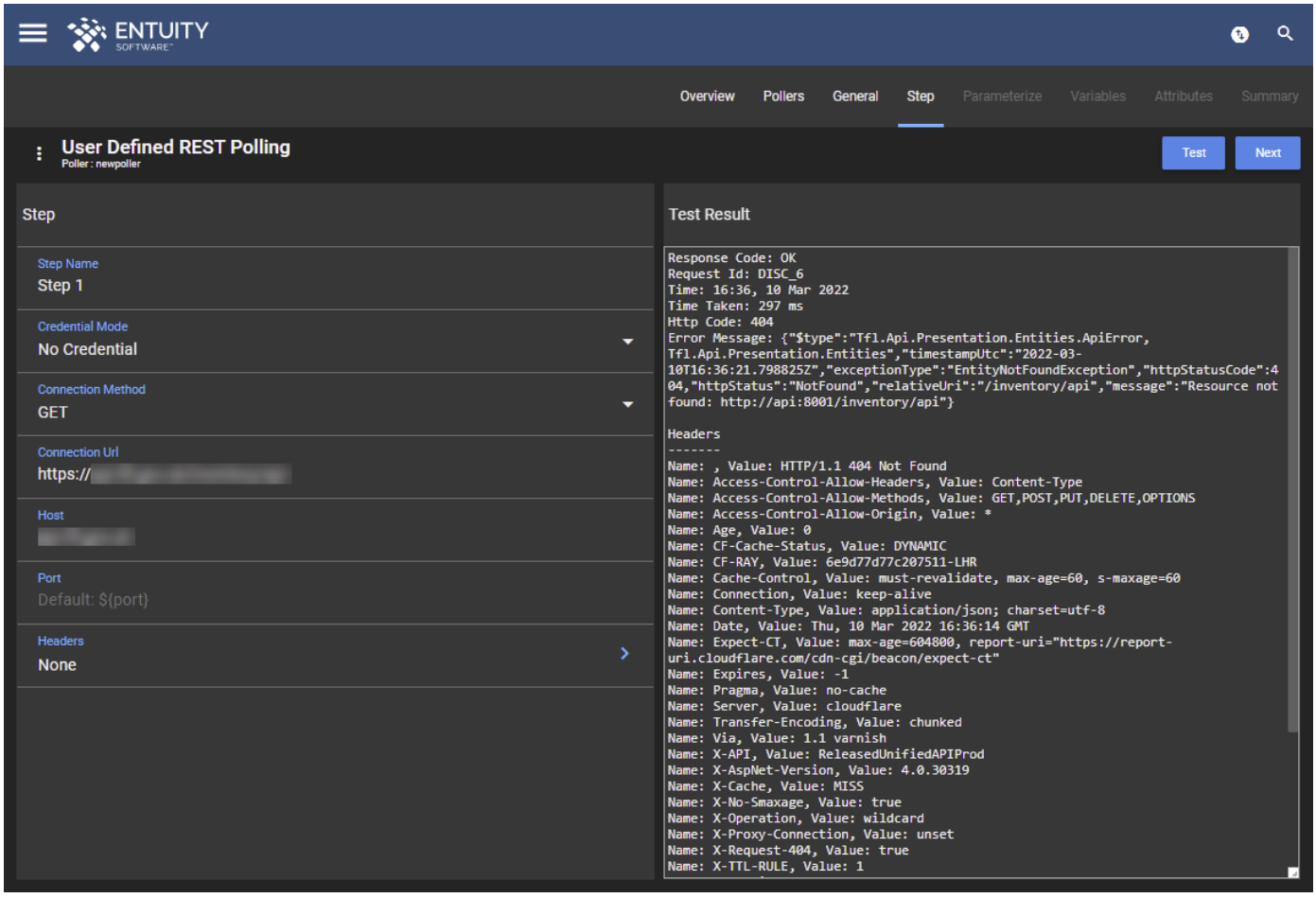

ENTUITY
SOFTWARE
CANCEL
Add Rule
DONE
Webhooks
Please select items for use in Rule creation
#root
Selections: 1
Event Rule
Group
Test
Rule Name
Test rule
Conditions
1 conditions
Enable Rule
Enabled
Event Mapping
Event Name
Test event
Severity
Info
Event Source
Quidway
Event Details
Quidway Info

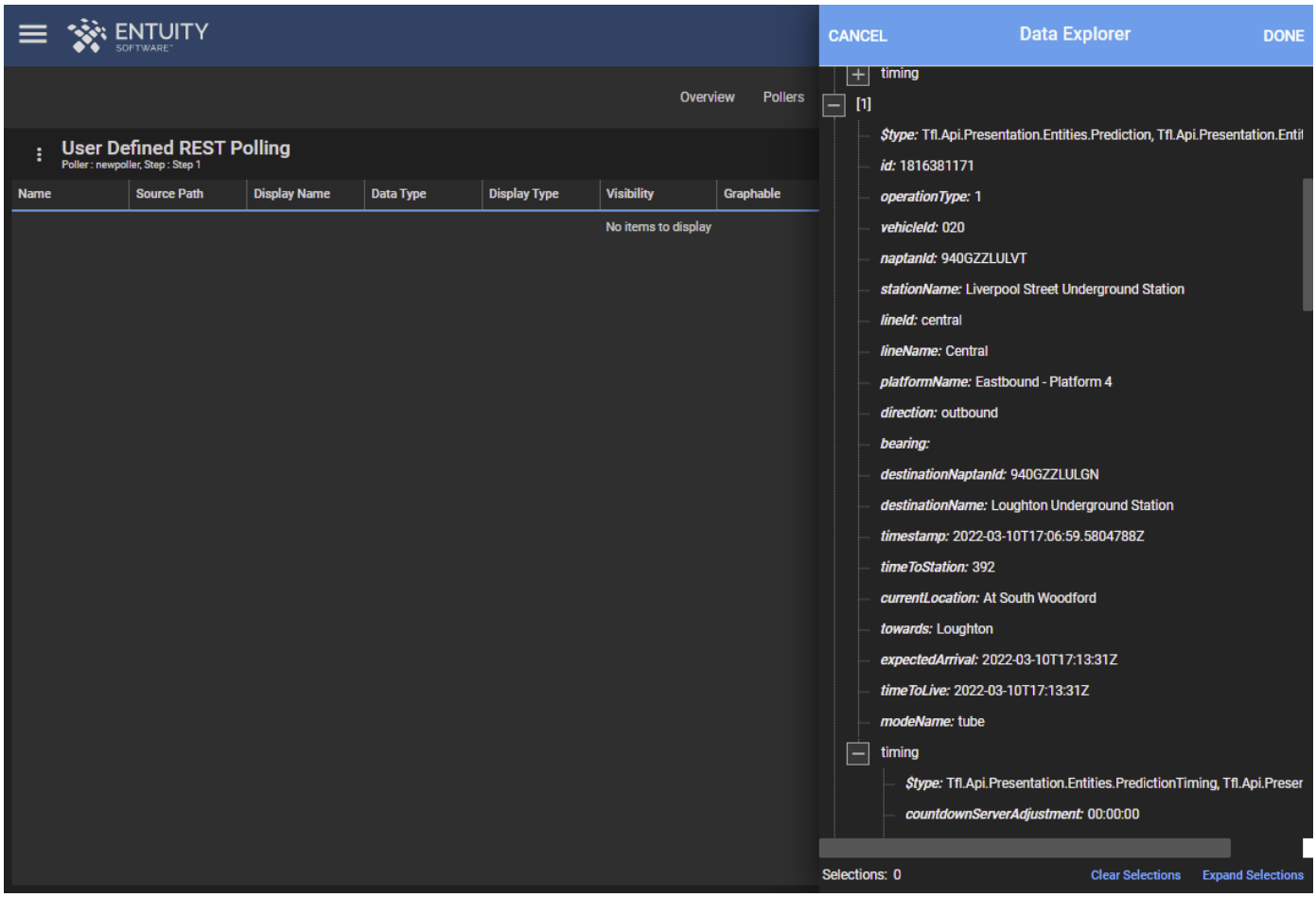
Enhanced User Defined REST API Poller

Introduction of a new user defined REST API poller enabling users to add support for network devices, software-defined platforms and application that provide data via REST APIs.

Users can define a REST API poller via the Entuity UI or RESTful API functionality. The REST API poller then allows user defined attributes to be populated via REST API calls. Each attribute automatically stores historical stream data.

Please see this section for further information on the User Defined API poller.



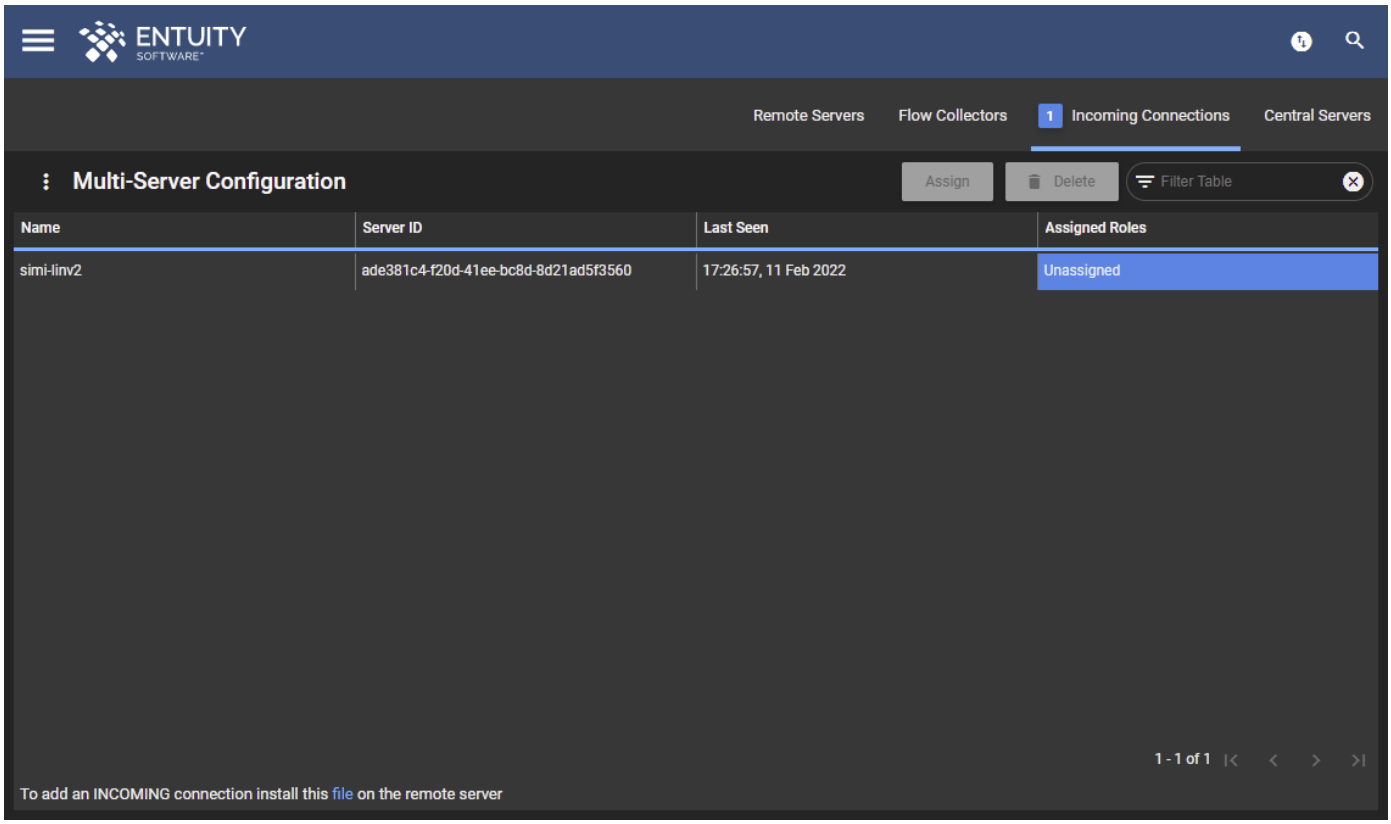

ENTUITY
SOFTWARE
Overview
Pollers
User Defined REST Polling
Poller : newpoller, Step : Step 1
Name
Source Path
Display Name
Data Type
Display Type
Visibility
Graphable
No items to display
CANCEL
Data Explorer
DONE
timing
[1]
$type: Tfl.Api.Presentation.Entities.Prediction, Tfl.Api.Presentation.Entit
id: 1816381171
operationType: 1
vehicleId: 020
naptanId: 940GZZLULVT
stationName: Liverpool Street Underground Station
lineId: central
lineName: Central
platformName: Eastbound - Platform 4
direction: outbound
bearing:
destinationNaptanId: 940GZZLULGN
destinationName: Loughton Underground Station
timestamp: 2022-03-10T17:06:59.5804788Z
timeToStation: 392
currentLocation: At South Woodford
towards: Loughton
expectedArrival: 2022-03-10T17:13:31Z
timeToLive: 2022-03-10T17:13:31Z
modeName: tube
timing
$type: Tfl.Api.Presentation.Entities.PredictionTiming, Tfl.Api.Preser
countdownServerAdjustment: 00:00:00
Selections: 0
Clear Selections
Expand Selections

Remote Poller Connectivity Enhancement

Introduction of functionality that allows the connection between a consolidation server and polling server(s) to be initiated from the polling server and out to the consolidation server over standard HTTPS ('downstream' to 'upstream' connection).

Change to the UI of the multi-server configuration administration page to cater for remote poller connectivity enhancements and improvements to useability.

Please see this section for further information on remote poller connectivity within multi-server configuration.



Additional Changes in Entuity v20.0

Asset Management

Improvement so that the connection method type (REST) is now specified in the form when adding a Pure Storage device via the Asset Management page.

Fixed an issue whereby adding server devices (either hardware or OS) with a local credential to a remote server would fail.

Configuration Monitor

Change so that only devices that are licensed for configuration management will appear in any list or form within the Configuration Management page.

Change so that configuration management options within the right-click context menu will only be accessible for devices that are licensed for configuration management.

Change so that configuration management history will update once every minute, rather than once every five minutes, and further addition of a configuration management variable to enable user to manually reduce this refresh time as desired.

Addition of support for SCP transfer method when retrieving configurations for Juniper devices.

Fixed an issue whereby parameters in a configuration task would be incorrectly ordered in alphabetical order after saving the task, rather than the order specified by the user.

Change so that if SSH is selected for configuration management access method and the port is unspecified, the port will default to 22, and if Telnet is selected and the port unspecified, the port will default to 23.

Dashboards

Fixed an issue affecting the creation of custom dashboards with a scrolling layout containing one or more dashlets, whereby if a user started the process of adding a dashlet but then cancelled before completing the process, then an error would be thrown upon returning to the custom dashboard preview screen.

Dashlets

Fixed an issue affecting Table dashlets whereby aggregating options (e.g. mean, min, max etc) for numeric values were sometimes incorrectly unavailable.

Device Support

Fixed an issue affecting storage and other devices using the 'Disk Size' display type, whereby the Disk Size incorrectly returned a null for zero values.

Fixed an issue whereby port speeds for HPE Nimble devices were incorrectly reported in bps rather than Gbps. They are now correctly reported in Gbps.

Fixed an issue whereby not all disks were being discovered for Dell EqualLogic storage devices.

Reporting

Updated Jasper reports to version 6.17.0.

RESTful API

Fixed an issue whereby the GET call for listing the services on a View did not return a valid XML object.

System

Change to prevent OS install to system directories that would break the OS.

System (Linux)

Fixed an issue whereby some Java processes were failing to start in Linux.

System (Windows)

Increased the maximum memory limit for DsKernel to match the Linux setting.

Improvements and Fixes

Entuity v20.0 further includes the following improvements and fixes from the previously-published patch version of Entuity, which is Entuity v19.0 P05. These improvements and fixes are also included in Entuity v19.0 P06, which will be released shortly after Entuity v20.0.

Functional Area	Platform(s)	Description
Asset Management	All	Fixed an issue whereby adding or modifying a device that has local credential(s) containing quote marks and/or non-ASCII characters would fail. Now, quote marks and non-ASCII characters are supported. Fixed an issue affecting devices with local credentials that failed to add due to an invalid username/password, whereby if a user attempted to modify the local credential then the device would be left in a failed state and Asset Management would not retry to add it with the new credentials. Fixed an issue whereby devices could not be taken under management using an SSH key.
Configuration Monitor	All	Change so that the access method for configuration management credentials is set to SSH by default.
Configuration Monitor	Linux	Fixed an issue whereby it was not possible to enable configuration management on server and storage devices.
Configure	All	Fixed an issue whereby CA certificate files were not copied in the JRE key store during configure. As a result of

		this fix, the JRE store will always be updated upon upgrade as expected.
Credential Management	All	Improvement so that credential keys can now be up to 4096 characters in length.
Dashboards	All	Fixed an issue that sometimes caused the lower part of charts to be missing on the Flow and NBAR dashboards at certain window sizes.
Dashlets	All	Fixed an issue affecting some charts that were opened in a new tab, whereby editing the time frame to a range (from – to) would by default incorrectly display dates from 2018/19. Fixed an issue affecting the sorting of some dashlets containing a table, whereby the ascending and descending sorting was incorrectly reversed. The dashlets affected were Events List, Incidents List, Object Attributes, Object Associations, and Service Summary. Fixed an issue whereby the legend for a Port Utilization chart dashlet did not display port bandwidth. Improvement to the display of charts opened in a new tab. Fixed an issue affecting the Flow Data dashlet in bar chart mode whereby a popout information dialog would not appear when hovering the mouse over the data in the chart. This has now been fixed so that the popout information does appear.

Device Support	All	Addition of support for Cisco Async Speed on Cisco devices. Addition of support for Suse Linux Enterprise Server version 11 SP4. Fixed issues affecting wireless controllers, whereby associated devices were not being successfully taken under management in the following cases: • If a database that already contained wireless access point objects was upgraded from version 18 or earlier to version 19. This fix provides a process for removing the previously existing access points and aerials. • If a user managed associated assets after the device was added and not at the time of adding the device. Fixed an issue affecting collection of duplex status data for DataDomain devices.
Event Management System	All	Change (to fix an XSS vulnerability) so that an Event Project can now no longer be saved and deployed if its description contains any of the following characters: • < • >> • \ Change so that newly created global triggers will now default to 'enabled' rather than

		'disabled'. Addition of a new column titled 'E' to the Incidents tab table under the Event Administration page and the Global Trigger dialog to indicate enabled status. Fixed an issue whereby Port Status events could be missed on ports of devices that had reachability problems. Fixed an issue whereby the specified reason for an event suppression is empty when editing it from the Event Suppressions page. The reason is now displayed as expected.
Flow	All	Addition so that Entuity flow collectors can now interpret deltas as an absolute flow value. General multi-server improvements for the display of flow data.
General UI/UX Improvements	All	Improvement so that the device name and, where applicable, port name is also included in the hover tooltip on charts. General UI improvements.
Licensing	All	Fixed an issue whereby the License Health page showed an incorrect expiry time for an unlimited configuration management or associated device license key.
Maps - Topological Maps	All	Fixed an issue affecting the Utilization overlay of Topological Maps, whereby the incorrect color was used for links between objects

		without an inbound utilization attribute.
Maintenance Mode	All	Change to the display names of virtual stream device attributes that are also applicable to devices in Maintenance Mode, to differentiate them from their equivalent non-Maintenance Mode attributes.
Polling	All	Fixed an issue that caused SNMP polling failures for a short while immediately following an upgrade. Fixed an issue affecting the formatting of IPv6 addresses.
Reporting	All	Fixed an issue affecting the Infrastructure Availability report, whereby incorrect values for device reachability and uptime were displayed when running the report for multiple devices.
RESTful API	All	Fixed an issue whereby password changes were not immediately picked up by the RESTful API. Password changes are now picked up immediately. Addition of support for external IDs when creating events (POST request) for /api/events, enabling users to specify extra identifiers or custom event attributes in an event. Fixed an issue whereby XML errors were not reporting correctly but instead displaying generic error pages. Fixed an issue whereby POST

		XML requests for /api/events would throw an error and consequently no event would be raised in the UI if the comp ID was part of the request.
Security Updates	All	General security updates and improvements. Upgrade to the SSH library used by Remote Terminal, configuration management, asset discovery and collection engine. Apache HTTPD updated to latest version 2.4.53.
System	All	Updated to openjdk v11.0.13. Updated to jquery library v1.12.4. Fixed an issue that very occasionally caused one of the log file writers to crash. Update to the default encryption ciphers and cipher suites allowed in TLS, including the removal of TLS1.1 support and the addition of TLS1.3 support.
User Defined Polling	All	Change so that the name of a user defined attribute cannot contain a hyphen ' - '.

Notes

Please refer to the Entuity Help Center for help and information on functionality added in this patch.

Entuity is supplied with the RSSO client version 20.02.00. Your RSSO client version should not be greater than the RSSO server version. Please contact Entuity support if your RSSO server version is less than 20.x in order to obtain a compatible RSSO client.

Entuity recommends that all servers in a multi-server configuration run the same patch version.

The incidents and events for storage performance monitoring and firmware management will only become available if you merge the new default Event Management System (EMS) project with your own live EMS project.

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