



ENTUITY  
SOFTWARE™

# Entuity v22.0 Release Notification

April 29, 2024

# Entuity v22.0 Release Notification

TECHNICAL BULLETIN APRIL 29, 2024

## Version 2024.04.29

We are delighted to announce that the latest version of **Entuity**, to be known as **Entuity v22.0**, is now available for customer use. Details of the benefits to be gained from this new release are set out below.

## Entuity v22.0 New Release Details

The following key additions and changes have been made to Entuity v22.0:

- AWS and Azure Monitoring Enhancements
- Configuration Management and Monitoring Enhancements
- Maintenance Window Alerting Enhancements
- User Defined Thresholds
- Vulnerability Monitoring
- Web Application Management

## AWS and Azure Monitoring Enhancements

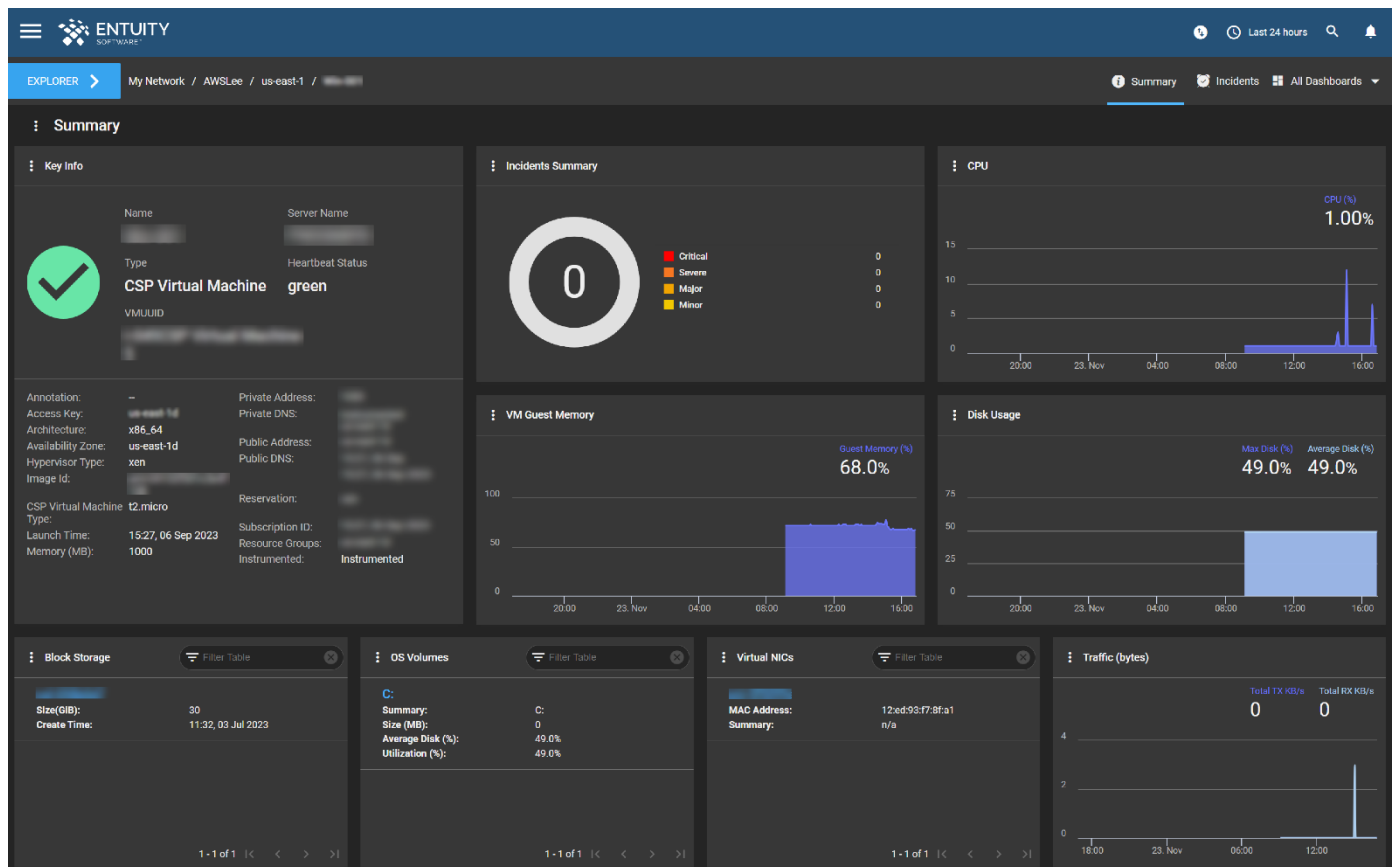
Improvement to virtualization monitoring to better reflect the difference in data collected between private (e.g. VMWare, Hyper-V etc) and public, cloud-based (e.g. AWS and Azure) VM platforms. To cater for this, new Summary dashboards have been added to monitor specific AWS and Azure data:

- Public VM Platform Summary dashboard
- Region Summary dashboard
- Block Storage Summary dashboard
- CSP Virtual Machine Summary dashboard
- CSP Virtual NIC Summary dashboard.

Addition of functionality to determine if VMs are instrumented with Cloud Watch Agent (AWS) or PerfInsights (Azure).

General fixes and improvements to virtualization monitoring.

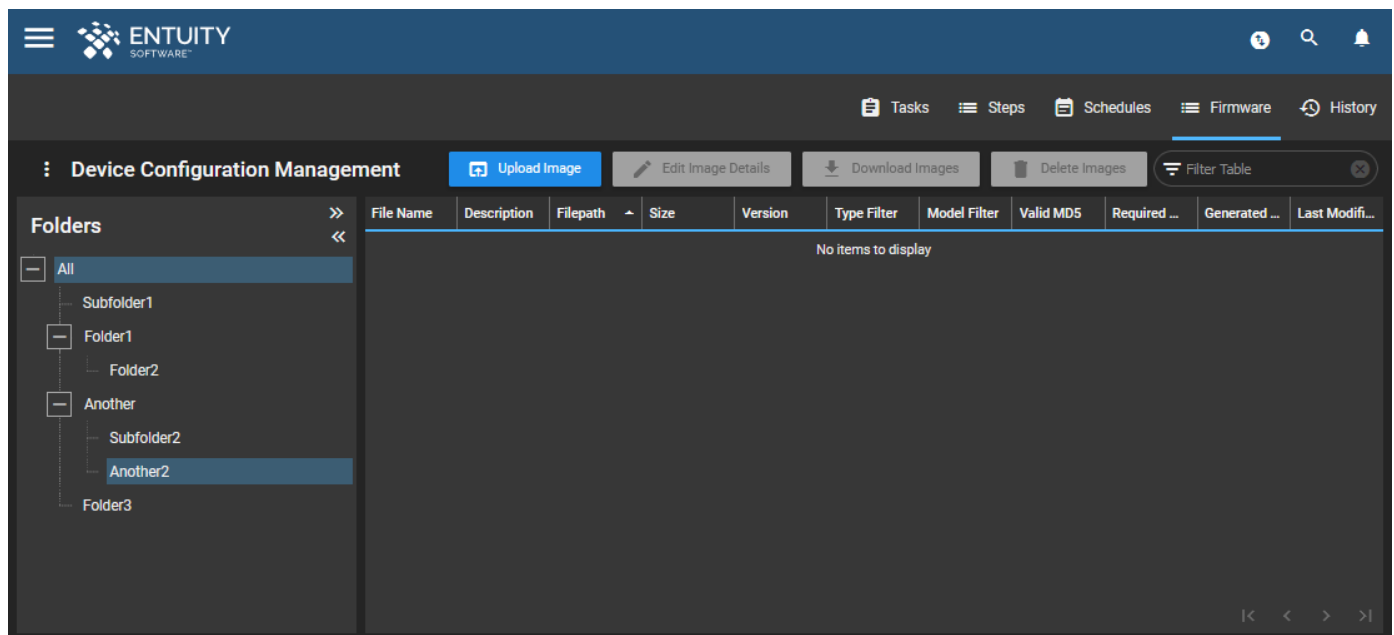
[Please see this article](#) for further help and information on the Virtualization Summary dashboards in Entuity.



## Configuration Management and Monitoring Enhancements

- Addition to the UI of option to run commands for Cisco devices over SSH. These commands can be duplicated and edited for subsequent applicability to devices from other vendors.
- Addition of support for single configuration files on devices alongside existing support for dual (startup and running) configuration files.
- Addition to the Policy Management page of a 'History' tab, detailing in a single table all policy violations against archived configurations currently saved to Entuity.
- Addition of option to upload copies of archived configurations to a given directory on a device.
- Addition of support for subfolders in the navigation tree under the 'Firmware' tab of the Configuration Management page.
- Addition of ability to add and delete folders, and transfer and download folder contents, from the navigation tree under the 'Firmware' tab.
- Addition of option to assign a folder when uploading a firmware image.
- Addition of option to download firmware images from the UI.
- Improvement to 'Firmware Backup (Cisco)' configuration management task.
- Addition of configuration monitoring support for the following devices:
  - mGuard
  - Palo Alto
  - F5 uRoam
  - SonicWall
  - Cisco IOS-XR.

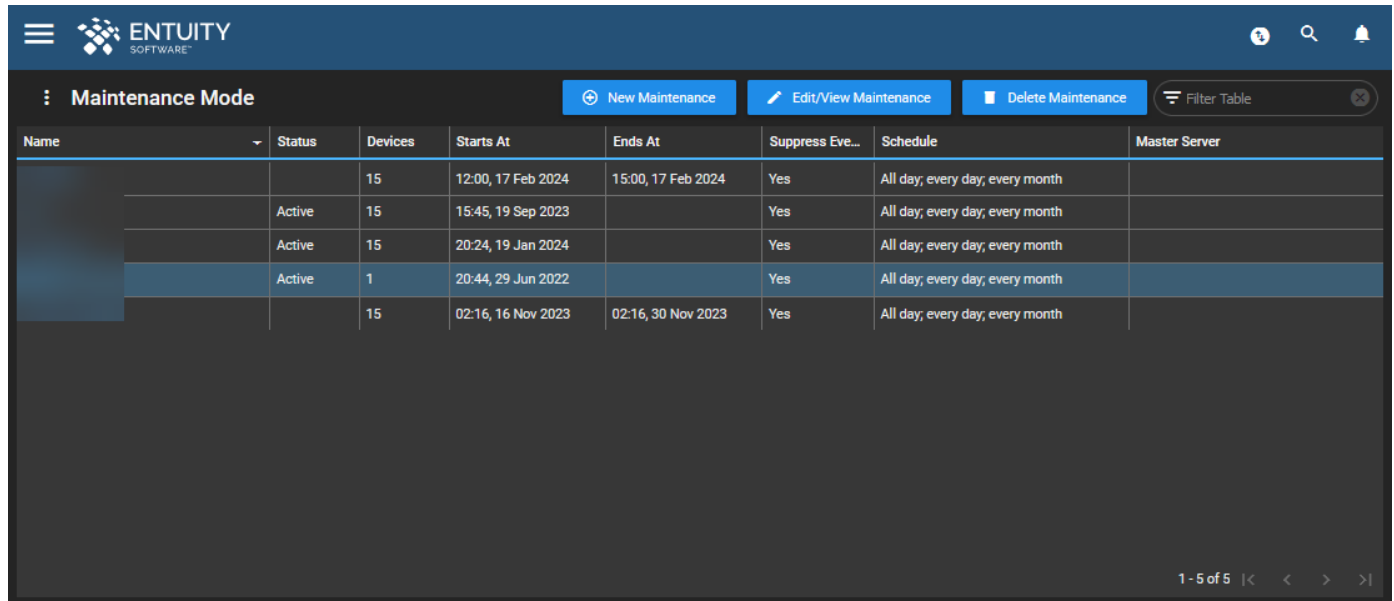
[Please see this section](#) for further help and information on Configuration Management and Monitoring in Entuity.



## Maintenance Window Alerting Enhancements

Improvement to maintenance window functionality, so that if devices come out of a maintenance window in a different state to when they went in, then state change events and incidents are raised as appropriate. For example, if a device is up before a maintenance window starts and is down when the window ends, an event/incident is raised to alert the user.

[Please see this section](#) for further help and information on maintenance mode in Entuity.



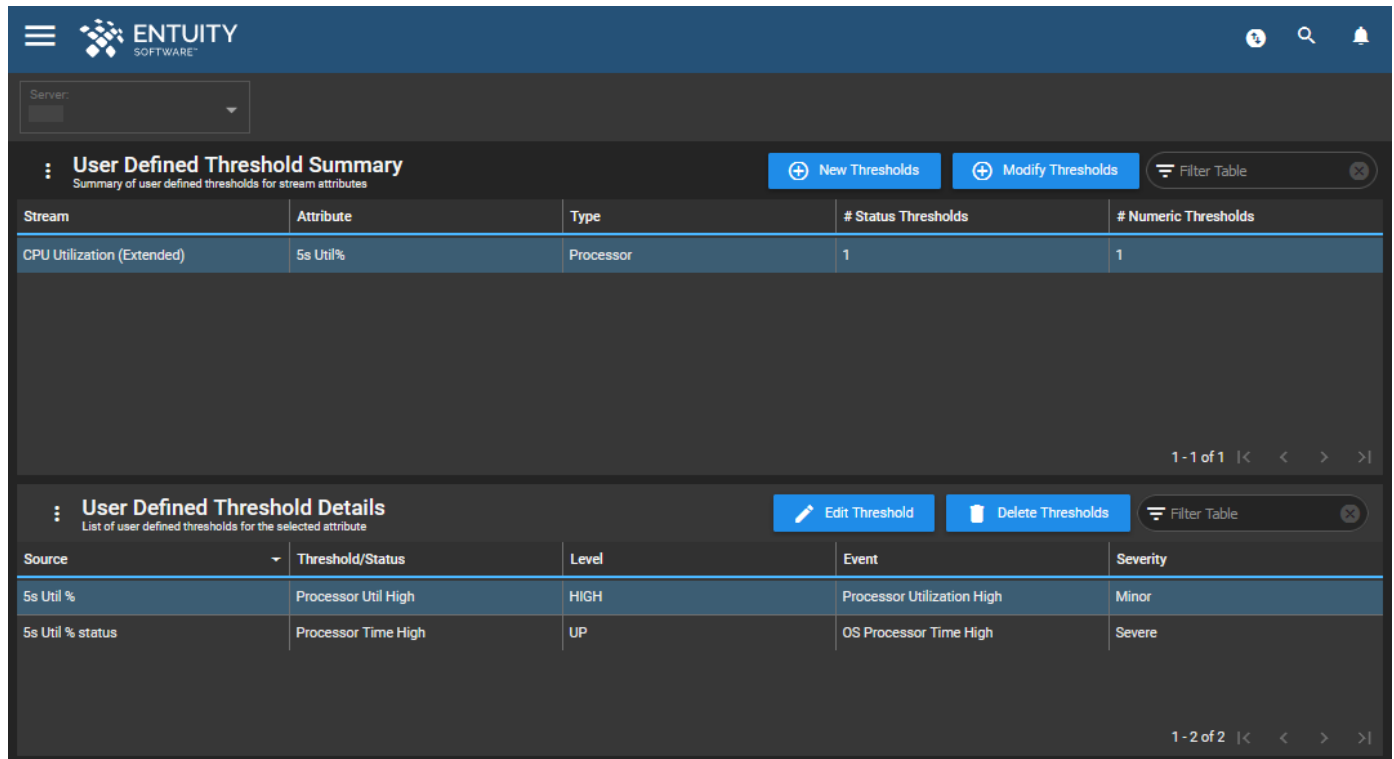
The screenshot shows the 'Maintenance Mode' interface in Entuity. It features a table with columns for Name, Status, Devices, Starts At, Ends At, Suppress Eve..., Schedule, and Master Server. The table contains five rows of maintenance window data. The interface also includes navigation buttons for 'New Maintenance', 'Edit/View Maintenance', and 'Delete Maintenance', along with a 'Filter Table' search box. The bottom right corner shows '1 - 5 of 5' with navigation arrows.

Name	Status	Devices	Starts At	Ends At	Suppress Eve...	Schedule	Master Server
		15	12:00, 17 Feb 2024	15:00, 17 Feb 2024	Yes	All day, every day, every month	
	Active	15	15:45, 19 Sep 2023		Yes	All day, every day, every month	
	Active	15	20:24, 19 Jan 2024		Yes	All day, every day, every month	
	Active	1	20:44, 29 Jun 2022		Yes	All day, every day, every month	
		15	02:16, 16 Nov 2023	02:16, 30 Nov 2023	Yes	All day, every day, every month	

## User Defined Thresholds

Addition of functionality enabling users to define user defined thresholds on specified stream attributes via the Entuity UI. These user defined thresholds can be created, enabled and disabled at any time without needing to write config, and can be managed from a single page. The user can specify system or custom events that are raised when the threshold value is met or exceeded. User defined thresholds can be created on individual servers or in server configuration sets.

[Please see this section](#) for further help and information on user defined thresholds.



The screenshot displays the 'User Defined Threshold Summary' and 'User Defined Threshold Details' sections of the Entuity UI.

**User Defined Threshold Summary**  
 Summary of user defined thresholds for stream attributes

Stream	Attribute	Type	# Status Thresholds	# Numeric Thresholds
CPU Utilization (Extended)	5s Util%	Processor	1	1

**User Defined Threshold Details**  
 List of user defined thresholds for the selected attribute

Source	Threshold/Status	Level	Event	Severity
5s Util %	Processor Util High	HIGH	Processor Utilization High	Minor
5s Util % status	Processor Time High	UP	OS Processor Time High	Severe

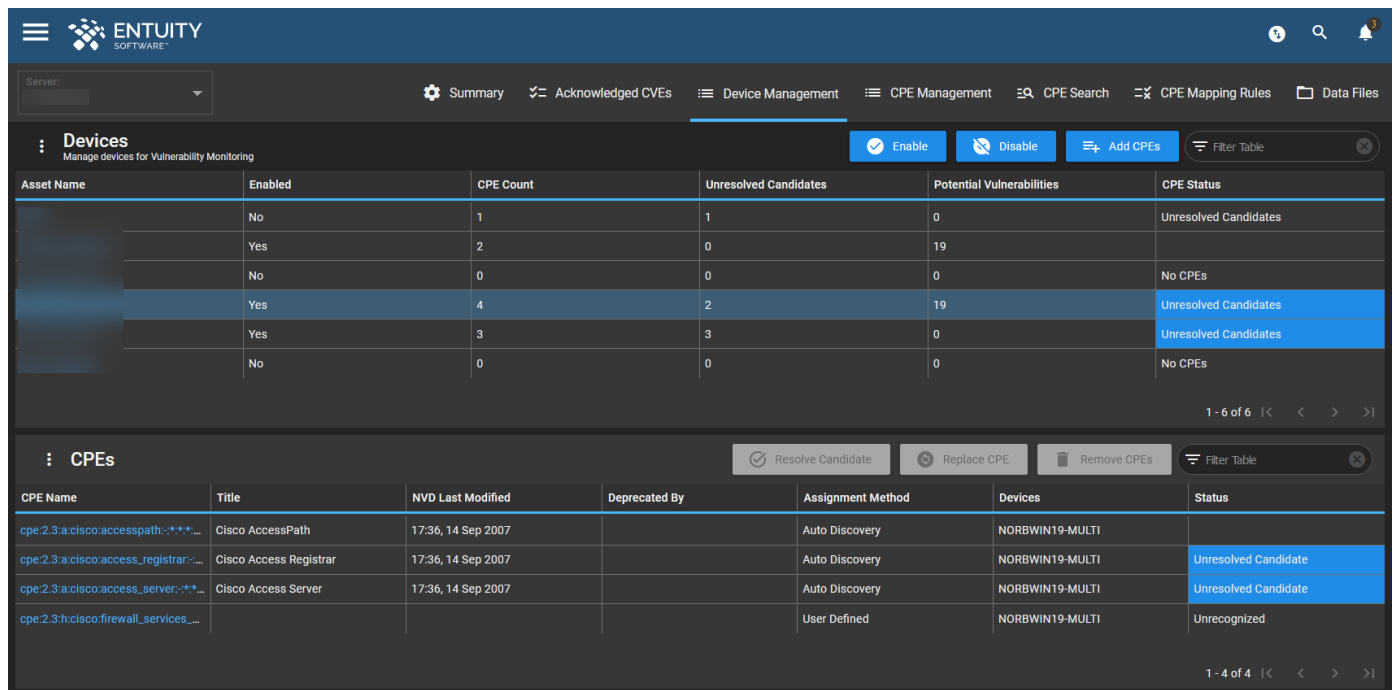
## Vulnerability Monitoring

Addition of Vulnerability Monitoring, utilizing the NIST (National Institute of Standards and Technology) National Vulnerability Database (NVD), that enables users to monitor the devices in their networks for Common Vulnerabilities and Exposures (CVEs).

Entuity scans local CVE Data files to find potential vulnerabilities that are matched against the CPE configurations assigned to the devices on users' networks. Incidents and events are raised against any matched CVEs.

Addition of new 'Security Analysis' system dashboard, applicable to View and device contexts, enabling users to view a summary of vulnerability monitoring configurations, view results of vulnerability monitoring scans.

[Please see this section](#) for further help and information on vulnerability monitoring in Entuity.



The screenshot displays the Entuity Software interface for Vulnerability Monitoring. The top navigation bar includes the Entuity logo and a search icon. Below the navigation bar, there are several tabs: Summary, Acknowledged CVEs, Device Management, CPE Management, CPE Search, CPE Mapping Rules, and Data Files. The main content area is divided into two sections: 'Devices' and 'CPEs'.

**Devices Section:** This section is titled 'Manage devices for Vulnerability Monitoring'. It features a table with columns: Asset Name, Enabled, CPE Count, Unresolved Candidates, Potential Vulnerabilities, and CPE Status. The table contains six rows of data, with the third and fourth rows highlighted in blue. Below the table, there are pagination controls showing '1 - 6 of 6'.

Asset Name	Enabled	CPE Count	Unresolved Candidates	Potential Vulnerabilities	CPE Status
	No	1	1	0	Unresolved Candidates
	Yes	2	0	19	
	No	0	0	0	No CPEs
	Yes	4	2	19	Unresolved Candidates
	Yes	3	3	0	Unresolved Candidates
	No	0	0	0	No CPEs

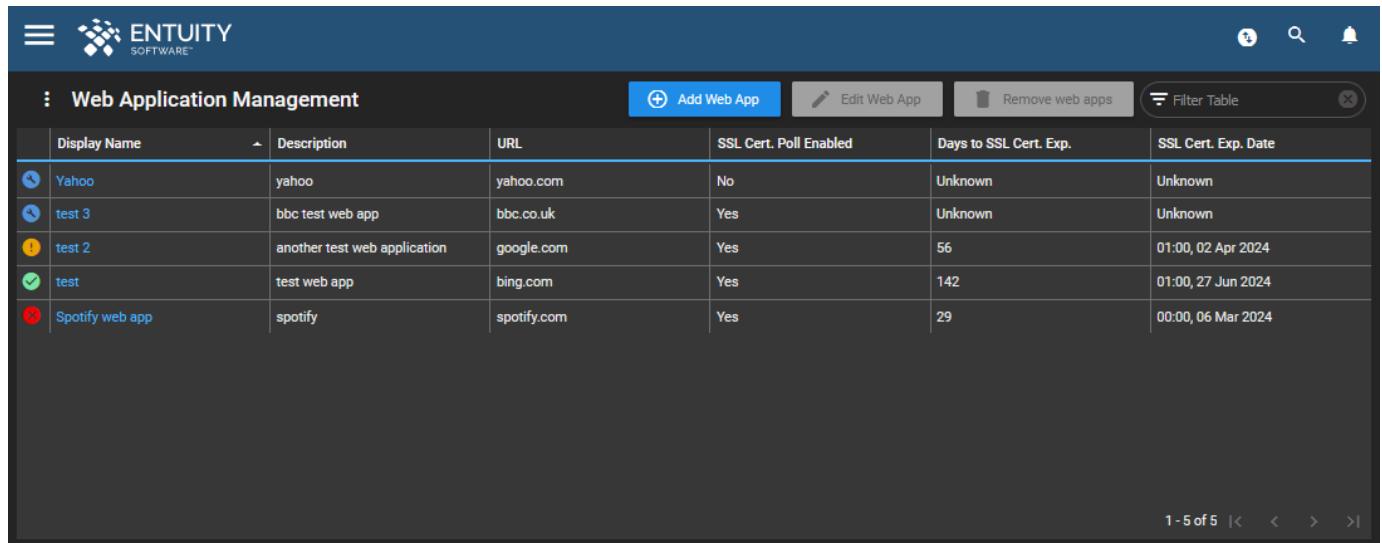
**CPEs Section:** This section is titled 'Manage CPEs for Vulnerability Monitoring'. It features a table with columns: CPE Name, Title, NVD Last Modified, Deprecated By, Assignment Method, Devices, and Status. The table contains four rows of data, with the second and third rows highlighted in blue. Below the table, there are pagination controls showing '1 - 4 of 4'.

CPE Name	Title	NVD Last Modified	Deprecated By	Assignment Method	Devices	Status
cpe:2.3:a:cisco:accesspath:-:++:...	Cisco AccessPath	17:36, 14 Sep 2007		Auto Discovery	NORBWIN19-MULTI	
cpe:2.3:a:cisco:access_registrar:-:...	Cisco Access Registrar	17:36, 14 Sep 2007		Auto Discovery	NORBWIN19-MULTI	Unresolved Candidate
cpe:2.3:a:cisco:access_server:-:++:...	Cisco Access Server	17:36, 14 Sep 2007		Auto Discovery	NORBWIN19-MULTI	Unresolved Candidate
cpe:2.3:h:cisco:firewall_services_...				User Defined	NORBWIN19-MULTI	Unrecognized

## Web Application Management

Addition of functionality to monitor SSL certificate expiry of user-specified web applications. Editable thresholds raise incidents and events upon the approach of certificate expiry dates.

[Please see this section](#) for further information on web application management in Entuity.



The screenshot displays the 'Web Application Management' interface in Entuity. At the top, there is a navigation bar with the Entuity logo and a search icon. Below the navigation bar, the title 'Web Application Management' is followed by three action buttons: 'Add Web App' (blue), 'Edit Web App' (grey), and 'Remove web apps' (grey). A 'Filter Table' dropdown is also present. The main content is a table with the following columns: 'Display Name', 'Description', 'URL', 'SSL Cert. Poll Enabled', 'Days to SSL Cert. Exp.', and 'SSL Cert. Exp. Date'. The table contains five rows of data, each with a status icon on the left.

Display Name	Description	URL	SSL Cert. Poll Enabled	Days to SSL Cert. Exp.	SSL Cert. Exp. Date
ⓘ Yahoo	yahoo	yahoo.com	No	Unknown	Unknown
ⓘ test 3	bbc test web app	bbc.co.uk	Yes	Unknown	Unknown
⚠ test 2	another test web application	google.com	Yes	56	01:00, 02 Apr 2024
✅ test	test web app	bing.com	Yes	142	01:00, 27 Jun 2024
❌ Spotify web app	spotify	spotify.com	Yes	29	00:00, 06 Mar 2024

1 - 5 of 5 |< < > >|



## **Additional Changes in Entuity v22.0**

### **Configure**

Change so that the Green IT module is disabled by default during configure for new installs.

Improvement to configure so that symbolic links are updated if they differ from compatibility configuration.

### **Dashboards**

Addition to the Storage Device Resources dashboard of a new 'Tapes' Table dashlet.

Improvement to the date picker for dashboard timeframes.

### **Dashlets**

Addition of functionality to filter Incidents Summary pie chart dashlets by incident type, and to determine contexts when drilling down into a section of the chart.

Fixed an issue whereby empty values were not hidden by default on the Key Info dashlet.

Improvement to timestamp filters for Table dashlets.

### **Event Management System (EMS)**

Fixed an issue whereby 'Network Outage' events were not raised when devices with no monitored ports (ping-only devices, basic SNMP-managed devices, fully-managed SNMP devices with no ports, and server devices) went down for a second time.

### **Firmware Update Management**

Fixed an issue affecting the Upload Image button and form under the 'Firmware' tab of the Configuration Management page.

## General Performance Improvements

Performance improvements to refreshing Views.

## General UI/UX Improvements

Fixed an issue affecting multiselect of objects in a table via toggle selection.

Improvement so that 'Asset Type' dropdown fields (when manually adding an asset) are sorted alphabetically.

General UI/UX improvements.

## Reporting

Fixed a UI issue affecting the 'Share Saved Report Options' dialog.

Fixed an issue that could prevent the Spare Ports Overview report from running.

Change so that Green IT reports are disabled if the Green IT module is disabled.

## RESTful API

Fixed a parsing issue that could cause special XML characters to be incorrectly stored.

## Security Updates

Maverick SSH library updated to version 1.7.57, which supports secure key exchange for the ciphers impacted by the Terrapin SSH vulnerability.

Update to Map dashlet libraries to improve security and export.

General security improvements.

## Server OS Monitoring and OS Service Management

Fixed an issue whereby on receipt of unknown values for OS Service status (e.g. when credentials lacking sufficient permissions are used to access the OS Service's status), the OS Service status could incorrectly default to 'Down'. As a result of this fix, the OS Service Status in circumstances as these will instead report as 'Unknown'.

## Zones

UI improvements to the Zones administration page and forms.

## Improvements and Fixes

Entuity v22.0 further includes the following improvements and fixes upon the previously published patch version of Entuity, which is Entuity v21.0 P04. These improvements and fixes are also included in Entuity v21.0 P05, which will be released shortly after Entuity v22.0.

Functional Area	Platform(s)	Description
Account Management	All	UI improvements to Account Management page.
Asset Management	All	<p>Change to discovery of LLDP remote info to improve performance for some devices.</p> <p>Fixed an issue that could prevent monitoring of IBM AIX OS SSH server devices.</p> <p>Fixed an issue that could prevent monitoring of Solaris servers.</p> <p>Fixed an issue affecting polling and calculation of Azure VM Guest Memory data.</p> <p>Fixed an issue that prevented non-administrators without the User Defined Polling tool permission from adding assets via Asset Management. This tool permission is no longer required to add assets.</p>

Configuration Management and Monitoring	All	<p>Fixed an issue that could cause an RPC failure when creating a schedule for a configuration management task. As a result of this fix, the 'Server' selection field has been removed from the schedule configuration management task form.</p> <p>Fixed an issue whereby configuration management job schedules created from Views on a consolidation server would fail when the View was populated with a device or devices from the polling server (and there were no devices on the consolidation server).</p> <p>Removal of the server select field from the 'Edit Schedule: [schedule]' form. To create a schedule for a remote polling server from the consolidation server, users will instead need to specify the desired server from the server dropdown field on the 'Configuration Management' page. Schedules previously created on the consolidation server for remote polling servers will still function but can no longer be edited; to make changes to these, users will instead need to delete and recreate them on the polling server in the method mentioned above.</p>
Custom Webhooks	All	<p>Fixed an issue whereby custom webhook payloads could be broken by use of the '-' character in JSON or XML names.</p>
Dashboards	All	<p>Fixed an issue whereby some attribute values were incorrectly populated on the Storage Devices Resources dashboard.</p> <p>Fixed an issue affecting time range filtering on Incidents dashboards and Events dashboards.</p> <p>Fixed an issue whereby thresholds added to attributes via user defined REST pollers were incorrectly not accessible from the View- and device-level Thresholds dashboard, and therefore could not be edited.</p>

Dashlets	All	<p>Fixed an issue that could prevent the 'Parent Device' column of the Service Components dashlet from being populated.</p> <p>Addition of ability to use status category icons in dashlet tables for any attribute that has the matching numeric value.</p>
Device Support	All	<p>Improvement to support for Juniper-EX3300 devices.</p> <p>Fixed an issue that prevented the display of links between Meraki Switch and Meraki AWAP objects for certain Meraki Switches.</p> <p>Addition of support for monitoring Resilient File Systems (ReFS) for Window servers.</p> <p>Removal of ability to take Oracle VM Manager platforms under management from the UI.</p> <p>Fix to support for IBM AIX OS SSH servers, allowing OS objects to be discovered.</p>
Event Management System	All	<p>Fixed an issue that could cause spurious raising of 'Module Disappeared' and 'Module Discovered' incidents and events when device SNMP reachability is intermittent due to poor WAN link connectivity.</p> <p>Fixed an issue that incorrectly prevented users from creating a schedule for event notifications.</p> <p>Fixed an issue that could prevent users from disabling event notifications.</p>
General UI/UX Improvements	All	<p>Improvement to display of text and long series entries in individual fields of dashlet settings forms.</p> <p>General UI improvements.</p>
Maps – Topological Maps	All	<p>Fixed an issue that caused OSPF, EIGRP, and IS-IS topology links to incorrectly disappear once the link went down. As a</p>

		<p>result of this fix, links will remain visible in a down state before disappearing, by default 604800 seconds (one week).</p>
Multi-Server Configuration	All	<p>Fixed an issue that could affect multi-server configurations with the user's 'Consolidate Servers' preference set to 'Off', whereby some dashboards for an individual server could incorrectly display data consolidated from other servers to which the user had access.</p> <p>Fixed an issue affecting the creation of incident filters for configuration sets via the View Management page, whereby some events could be incorrectly included amongst the list of available incidents.</p> <p>Fixed an issue affecting the 'Content Filters', 'Incident Filters' and 'Event Filters' tabs on the View Management page for a configuration set, whereby the 'In Use' column could incorrectly show 'No' even when the filters were in use.</p> <p>Fixed an issue whereby OS Services could be incorrectly overwritten in configuration sets although 'Sync OS Services' option is set to off.</p>
Polling	All	<p>Fixed an issue that could cause polling to fail for managed servers and storage devices.</p>
Reporting	All	<p>Fixed an issue whereby long URL request headers could cause report exports to fail.</p> <p>Fixed an issue that could cause the display name of included user defined attributes to display incorrectly when re-editing a custom report in the report builder.</p>
Security Updates	All	<p>General security updates and improvements.</p>
Server OS Monitoring and OS Service Management	All	<p>Fixed an issue that could cause Logical Volume Usage hourly and daily streams to fail on Windows OS servers.</p>
System	All	<p>Addition of parameter enabling users to</p>

		continue a snmpDump that has failed.
User Defined REST Polling	All	<p>Addition of ability to define value mapping for attributes on a user defined device type, alongside the existing status mapping.</p> <p>Addition to the 'Step Details' tab (when creating a new user defined REST poller) of an 'Include Body' option for any connection method (e.g. POST, PUT, PATCH, DELETE etc), enabling users to enter JSON or XML to send with the request.</p> <p>Improvement to saving thresholds to user defined REST pollers.</p>
View Management	All	<p>UI improvement to the 'Profiles' tab of the View Management page.</p> <p>Fixed an issue affecting the listing of content filters on the Via Management page, whereby IP addresses (that are part of the content filter description) could be incorrectly displayed.</p>

## Notes

Please refer to the [Entuity Help Center](#) for help and information on functionality added in this release, as well as the [Entuity v22.0 Migration Guide](#) and [Entuity v22.0 Upgrade Paths](#).

Following the addition of new incidents and events for Vulnerability Monitoring and Web Application Monitoring, users will need to merge a new event project into their live event project as part of this new version installation.

From Entuity v22.0 upwards, 3-DES encryption for SNMPv3 devices is no longer supported. This means that Entuity will fail to take under management devices with this encryption, and any managed devices using this encryption before upgrade to Entuity v22.0 will no longer poll.

Users installing Entuity v22.0 on Red Hat Enterprise Linux version 9 will need to follow the instructions [here](#).

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.

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