VOSS Insights
Release Notes

Release 22.1

Jun 24, 2022

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Contents

1. Versioning and Version Compatibility

1.1. Product Versioning Change

The version number format of VOSS Insights products has changed. The table below shows prior version numbers and numbering from version 22.1 onwards. This change aligns VOSS Insights products more closely with other VOSS products, such as VOSS Automate.

Product	Prior Version	Following Version	Numbering Format
Arbitrator	SP25	22.1	2x.x
Dashboard	SP66	22.1	2x.x
DS9	SP8	22.1	2x.x
MS Teams Collector	v3SP46	22.1	2x.x

1.2. Dashboard and Arbitrator Server Version Compatibility

Important: VOSS-4-UC 20.1 is not compatible with any of these versions.

See the Compatibility Matrix document.

For download and upgrade instructions, see VOSS Insights Install Guide.

Also refer to the Software EoS Policy & Support Matrix

2. Dashboard Server

2.1. Release Notes for Dashboard 22.1

2.1.1. Download

Insights Arbitrator 22.1, Insights Dashboard 22.1 and Insights DS9 22.1 releases are now available from the Downloads section of the VOSS Customer Portal.

To ensure continuity, the release updates will still be available from the LayerX download site, allowing customers to either download files manually, or via the automated download mechanisms from that location.

- Insights Arbitrator 22.1
- Insights Dashboard 22.1
- Insights DS9 22.1

2.1.2. Highlights

- Cisco UCM Health Check Reports

  New set of Cisco UCM health check reports such as NTP status, replication etc.

- Cisco Smart Licensing Monitoring

  New cisco/getCiscoSmartLicense probe

- Polycom Meeting Room / Endpoints

  Introduces SNMP data collection for Polycom devices and updated Polycom device dashboards.

- Theme backup and restore

  Themes added to the Backup / Restore process of Dashboard.

- Widget report names to be common across CSV and Excel outputs

2.1.3. Features: Summary

- *VOSS-963*: Cisco Smart and Flex License Reporting.
- *EKB-12135*: Create DS9 flow summary dashboard(s).
- *EKB-11605*: Update Reporter to receive Collector data files.
- *VOSS-987*: Cisco UCM Health Check Reports.
- *EKB-12796*: Add Cisco Dashboards to default Dashboard build.
- *EKB-12137*: Change DS9 delivery for DS9 installations.
- *EKB-11540*: Update Dashboard versioning scheme to 22.1.
- *EKB-11487*: Add themes to backup / restore process.
- *EKB-11488*: Add themes to backup / restore process.
- *VOSS-964*: Polycom Meeting Room and Endpoint Reporting.
- *EKB-12618*: Reporter: auto adjust table 2 columns when custom adjust is not set.
- *EKB-12577*: Reporter: allow multiple dashboards with same name.
- *EKB-12573*: Reporter: PEN testing security enhancements: access restrictions.
- *EKB-12211*: Multi lines in Dashboard Tabulator table header.
- *EKB-12059*: Dashboard time range filtering for UTC lacks precision of seconds.
- *EKB-11735*: Theme Management - Be able to resize login image in menu instead of uploading a different sized image.
- *EKB-11724*: Widget file format downloads creates different names.
- *EKB-11561*: System availability (Ping Probe).
- *EKB-11486*: WEB GUI passwords with certain special characters are allowed to be configured but cannot login with them.
- *EKB-11484*: New feature to import/export field groupings.

2.1.4. Features: Detail

- **VOSS-963: Cisco Smart and Flex License Reporting.** New Cisco/getCiscoSmartLicense probe
- **EKB-12135: Create DS9 flow summary dashboard(s).** Flow summary broken out into own configuration screen section. Related dashboards renamed.
- **EKB-11605: Update Reporter to receive Collector data files.** Support added for msteams collector to send JSON files directly to Dashboard server for parsing.

  NEW v2 APIs added:

  - GET /api/v2/msteams/tenant - Returns list of configured tenants
  - POST /api/v2/msteams/tenant - Register a new msteams tenant

  These APIs are strictly for the msteams collector. No other entity should need to use these routes.

- **VOSS-987: Cisco UCM Health Check Reports.** Implements a new set of Cisco UCM health check reports such as NTP status, replication etc.

- **EKB-12796: Add Cisco Dashboards to default Dashboard build.** The following dashboards have been added.

    1. CUCM Counters

    2. CUCM Resource Summary

    3. CUCM System Summary

    4. CUCM Service Status

    5. Cisco CUCM RTMT data

    6. UNITY Counters

    7. Windows

        a. Windows General Overview

    8. CPU & Memory Utilization

    9. UCCX

    10. Expressway

    11. Gateways - Performance

    12. Cisco Smart License

    13. Cisco CUCM Health Check

- **EKB-12137: Change DS9 delivery for DS9 installations.** Default DS9 dashboards are no longer part of the release. When you run the configuration DS9 option for Setup new DS9 an entire directory of dashboards for that DS9 are created. All the needed datasources, mapping files and configuration for that DS9 are automatically handled at this time.

- **EKB-11540: Update Dashboard versioning scheme to 22.1.** Naming convention will be changing, to match VOSS-style 22.1 numbering scheme.

- **EKB-11487: Add themes to backup / restore process.** Themes added to Backup / Restore process of Dashboard.

- **EKB-11488: Add themes to backup / restore process.** Themes added to Backup / Restore process of Arbitrator.

- **VOSS-964: Polycom Meeting Room and Endpoint Reporting.** Introduces SNMP data collection for Polycom devices and updated Polycom device dashboards.

- **EKB-12618: Reporter: auto adjust table 2 columns when custom adjust is not set.** Fixes issue with widgets configured with table 2 and width settings set to "Custom" will display properly if the columns are misaligned.

- **EKB-12577: Reporter: allow multiple dashboards with same name.** Enhancement to allow dashboards with the same names to exist in different folders. Dashboards with the same name still cannot exist in the same folder.

- **EKB-12573: Reporter: PEN testing security enhancements: access restrictions.** Security updates were made to address a specific issue found during pen testing. Changes were made to only allow authorized users to download any PDF, CSV, and Excel files.

- **EKB-12211: Multi lines in Dashboard Tabulator table header.** Enhancement to the Table 2 Widget. The header will now wrap versus the previous shortened version.

- **EKB-12059: Dashboard time range filtering for UTC lacks precision of seconds.** Fixes UTC query time when toggling between Local Time and UTC in the date range picker.

- **EKB-11735: Theme Management - Be able to resize login image in menu instead of uploading a different sized image.** Enhancement to the Theme Management screen to allow resizing of the login image.

- **EKB-11724: Widget file format downloads creates different names.** Enhancement to the filename produced by the dashboard product. The generated names are now more user friendly.

- **EKB-11561: System availability (Ping Probe).** New System Availability Dashboards (based off pings)

- **EKB-11486: WEB GUI passwords with certain special characters are allowed to be configured but cannot login with them.** On Reporter and Arbitrator, when adding new user or updating a new user, the password will be decoded with SHA-256.

- **EKB-11484: New feature to import/export field groupings.** Enhancement to exporting of dashboards. When user exports a dashboard and its widgets contains field groupings, then the field groupings will be exported as well. Importing of dashboards will also import field groupings.

2.1.5. Defects Fixed: Detail

- **EKB-12163: "Empty Group Text" Option not available for Pie Charts.** Adds Empty group option on Pie Chart.

2.2. Release Notes for Dashboard and Reporting (SP66)

2.2.1. UI Changes

- Minor UI changes for the new year. New icons and new fonts used throughout UI.

- Custom favicon can now be imported.

- Customizable login privacy text.

- More color options added for dashboards and widgets.

- More color options added for arbitrator.

- "EmptyGroup" text used in widgets can now be customized by user.

- New summary row option added to tables.

- Widget editor will now auto update its preview chart upon any field changes.

2.2.2. Data Definition Changes

- New data definitions added for VOSS Automate Msgraph, Msteams, and Spark objects.
    - `device/msgraph/MsolUser`
    - `device/msgraph/MsolAccountSku`
    - `device/msteamsonline/CsOnlineUser`
    - `device/msteamsonline/CsTeamsClientConfiguration`

- – `device/msteamsonline/CsAutoAttendant`
- – `device/msteamsonline/CsCallQueue`
- – `device/spark/User`
- – `device/spark/License`
- – `device/spark/Device`
- – `device/spark/Place`
- New data definitions added for Webex API data.

2.2.3. Dashboards

- New dashboards for VOSS Automate MSgraph, MS Teams, and Spark.
- New dashboards for Webex API data.

2.2.4. Other Changes

- Enhancement - sync by permission group support added to SSO users.
- Enhancement - improved the download times of larger CSV files.
- Enhancement - websockets library upgraded to support Firefox.
- Miscellaneous bug fixes.

2.3. Release Notes for Dashboard and Reporting (SP65)

2.3.1. New Features and Enhancements

- Show a chart and a table: a **Show Data Table** check box for the following charts:
- Line Area Chart in the VOSS Insights Dashboard and Reporting Administration Guide
- Column Bar Chart in the VOSS Insights Dashboard and Reporting Administration Guide
- Combo Chart in the VOSS Insights Dashboard and Reporting Administration Guide
- Theme Management enhancements:
  - Add a login background image
  - Change the widget header colour
  - Change the Widget background colour
  - Change the Burger menu colour
  - Change the title of the tabs
  - Change text colours for Widget header, login and burger menu to avoid colour clashes

These themes can also be applied to an arbitrator.

See:

Theme Management in the VOSS Insights Dashboard and Reporting Administration Guide

- Report Synchronization.

  Users generate scheduled reports and can add people to a receive a report.

  See the **Report Synchronization** tab under :

  Manage Dashboards in the VOSS Insights Dashboard and Reporting Administration Guide

- Widget data can be filtered before download.

  See:

 Managing a Widget in the VOSS Insights Dashboard and Reporting Administration Guide

2.4. Release Notes for Dashboard and Reporting (SP64)

2.4.1. Security Updates

- `sudo` package updated to v1.9.7.
- `curl` package updated to v7.76.1.
- `postgres` package updated to v12.7.
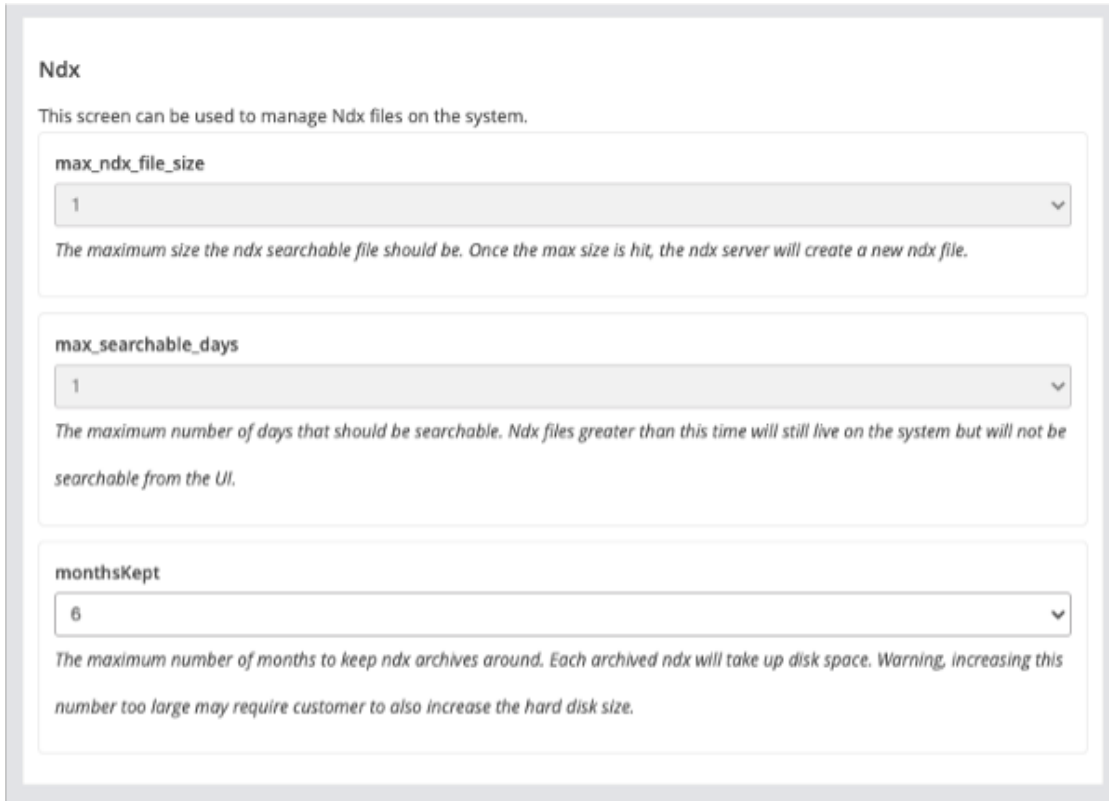- `kafka` package updated to v2.8.0.

2.4.2. New Features

- API support added to fetch and set product key.
- New Tree Table Renderer configuration screen. This will allow users to control how data is grouped per tree table. (Table 2 Widget Only)
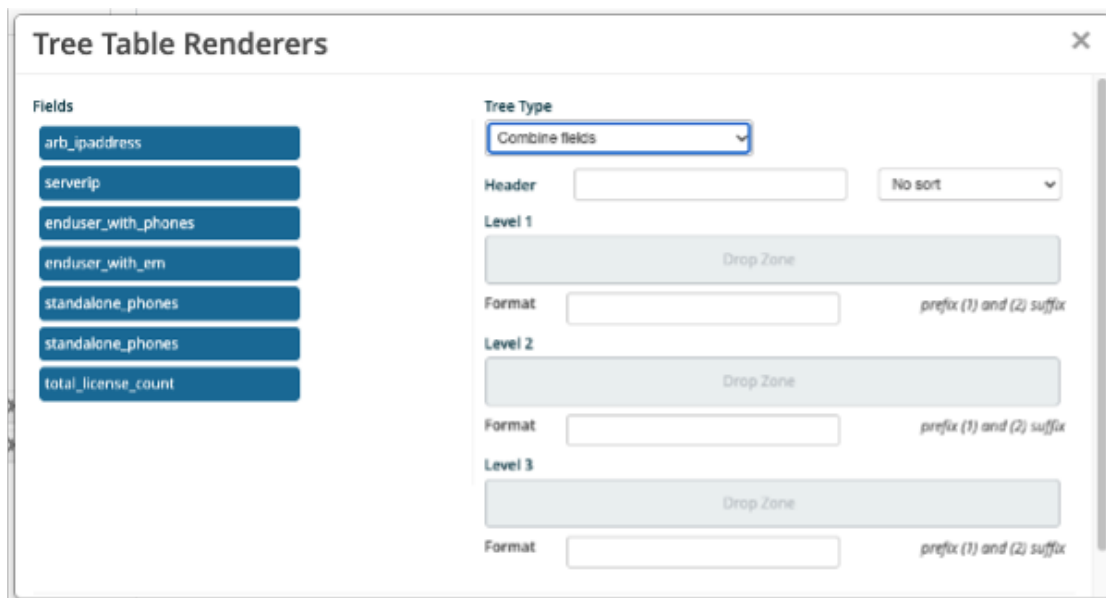
> **Warning:** Existing widgets using the table tree renderer require manual modification after the upgrade to SP64.

- New config screen added to allow customer ndx file retention times. Default is 6 months.
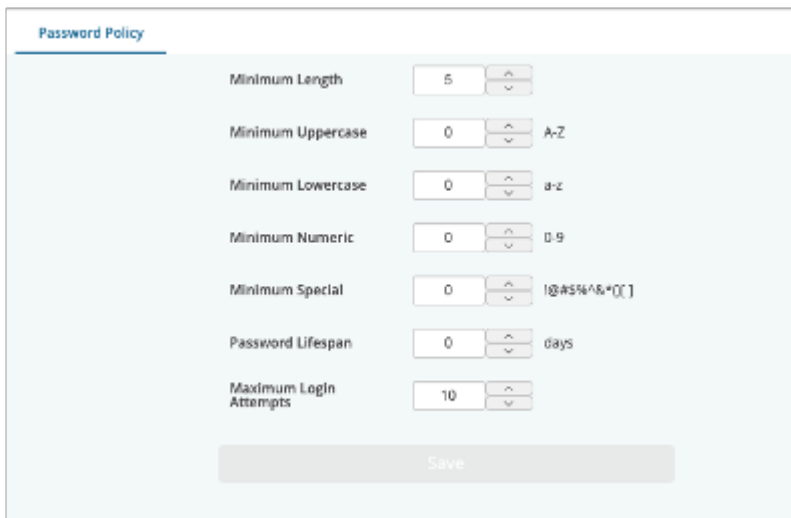
- New Password Policy screen that can be used to enforce UI user password policy.

- The remaining days on the License will now be displayed in UI upon login.
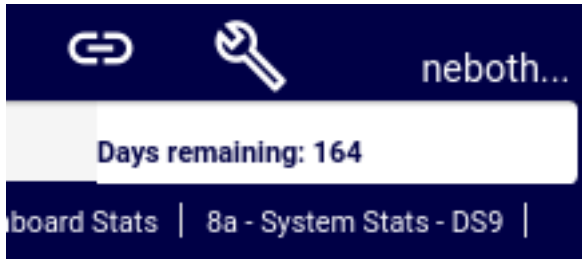
2.4.3. Enhancements

- Dashboard UTC / Local date toggle will update date picker times to reflect accordingly.
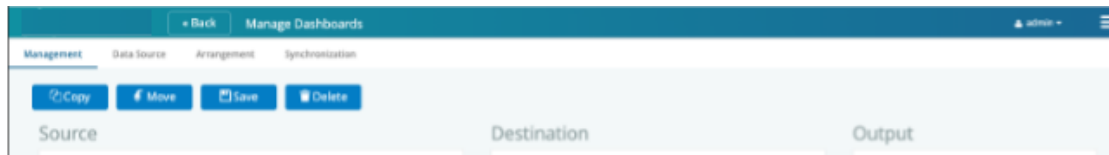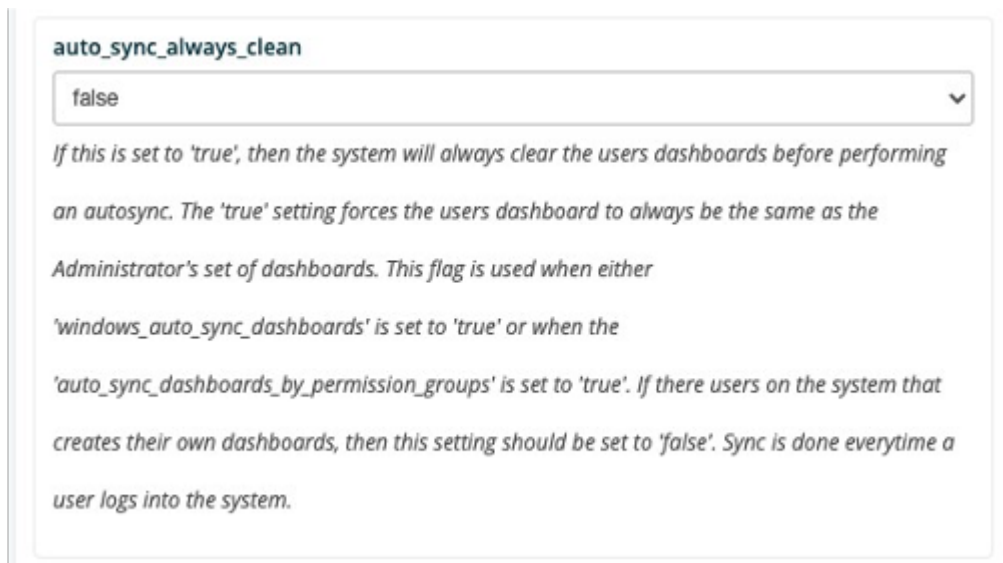
- Widget option to "Download all data" will now take into consideration the filter applied.

- New Manage Dashboards Screens. Supports better management of dashboards and folders. Easier way to change data sources across multiple dashboards along with a new way to arrange dashboard order in a folder.

- Added a new "always_clean" option to the ldap configuration screen.

- Experimental Settings has been moved to "User Settings".

Edit User Settings

Date Format   Month / Day / Year

Experimental Features

Enable widget cache

Disable Filter Trim
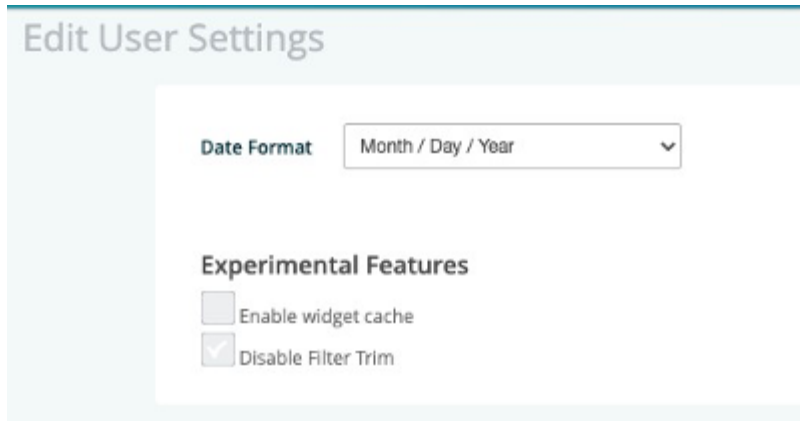
2.4.4.   Dashboards

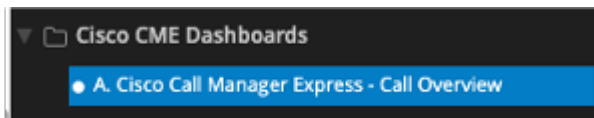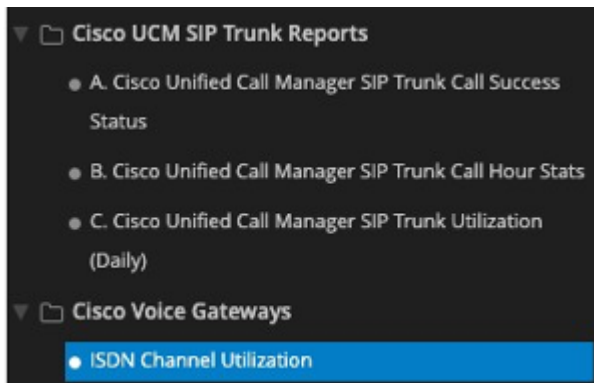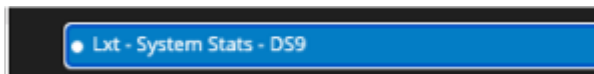- New Cisco CME Dashboard. Requires Arbitrator Release SP23.

  ▽ 🗀 **Cisco CME Dashboards**
      ● A. Cisco Call Manager Express - Call Overview

- New Cisco PRI and SIP Trunk Dashboards. Requires Arbitrator Release SP23.

  ▽ 🗀 **Cisco UCM SIP Trunk Reports**
      ● A. Cisco Unified Call Manager SIP Trunk Call Success
        Status
      ● B. Cisco Unified Call Manager SIP Trunk Call Hour Stats
      ● C. Cisco Unified Call Manager SIP Trunk Utilization
        (Daily)
  ▽ 🗀 **Cisco Voice Gateways**
      ● ISDN Channel Utilization

- New DS9 Stats Dashboard. Requires DS9 SP7 which will be available at a later date.

  ● Lxt - System Stats - DS9

- Update to Lxt - License Summary Dashboard. Enduser widget updated to reflect Arbitrator changes. Requires Arbitrator Release SP23.

  ### Cisco CUCM License Summary

  CUCM License Totals

enduser_with_phones (Sum)	enduser_with_em (Sum)	standalone_phones (Sum)	total_license_count (Sum)
19	0	0	19

2.4.5. Misc

- Reporter backend switched to use kafka for better performance.
- Dashboard Driver enhancement added retries to be more resilient against high database usage.
- Various bug fixes.

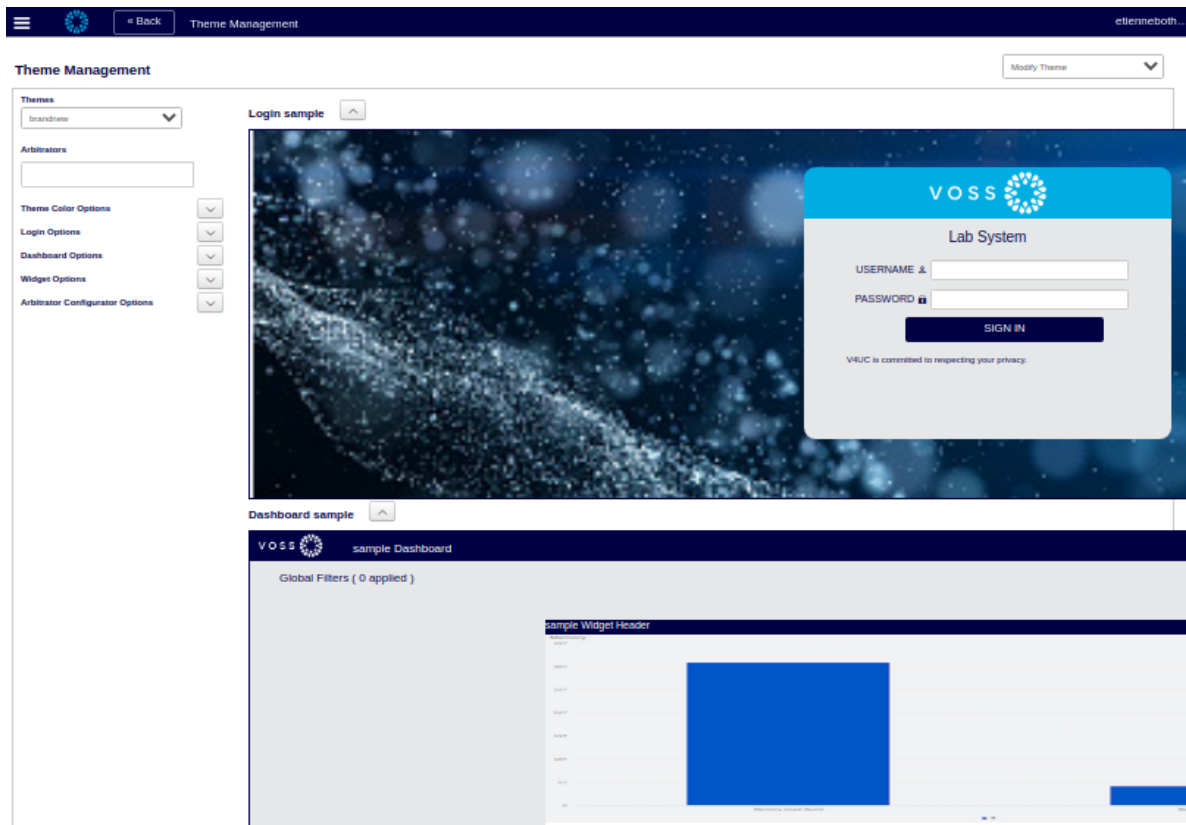## 2.5. Release Notes for Dashboard and Reporting (SP63)
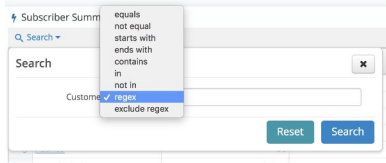
2.5.1. Security Updates

- CVE-2021-3156 - Upgraded sudo to resolve the vulnerability.
- Extra security measures enforced when using browser development tools.
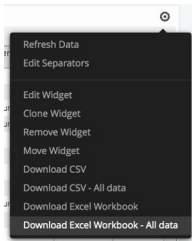
2.5.2. UI Changes

- New Feature - Ability to create new custom themes with the new Theme Management screen.

- Added support for Regex to the table "Search" capability.

- Enhancement. The "All data" option will take global filters into consideration.

- Enhancement. Special field groupings can be used as URL query parameters. This allows third party applications to drilldown into dashboards by simply passing the filter in the URL.
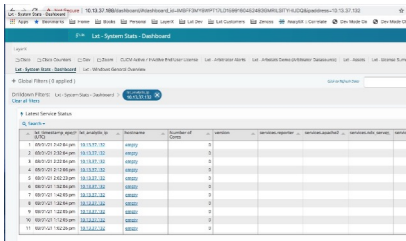
- User timeout no longer requires a browser refresh to login.

- Cell drilldown allowed when multiple fields are selected as drilldown fields.

2.5.3.   Resource Definitions

- Added to the out-of-box build Cisco Call Manager Express support. Requires Arbitrator Release SP22.

- All new Microsoft Teams Dashboards are now in the out-of-box build. The LayerX Teams Collector is required to collect the data.

2.5.4. Misc

- Removed local LDAP restriction from auto sync dashboards based on Permission Groups feature. If enabled, system will auto sync dashboards based on Permission Groups regardless of LDAP authentication configuration.
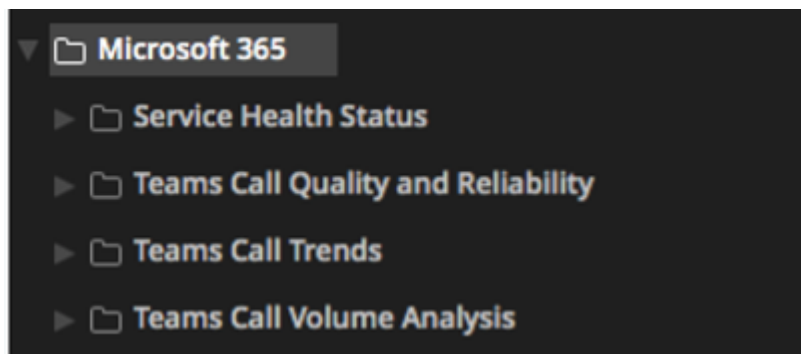
- Added support for API Basic Authentication in the out-of-box build.

- Various bug fixes.

2.6. Release Notes for Dashboard and Reporting (SP62)

2.6.1. Security Updates

- Apache upgraded to 2.4.46

- Stricter file access to reports directories.

- Additional checks to only allow image files to be uploaded in "Rich Text" Widget Editor.

- TLS 1.0 and 1.1 deprecated in product.

2.6.2. User Interface

- Scheduled Reports can now be scheduled to output Excel workbooks (XLS) creating a new tab for each widget inside a single excel workbook file.

- Map chart now has options to change map background and continent border color.

- Table 2 charts:

  - There is a new sorting option for tree-table. `Default` sorting is the current behavior where the user dictates sorting by clicking on the individual columns. `Additional Sorting` uses the fields from the `Additional Sorting` line to determine the sort for the tree-table. Note, these options only affect sorting when `tree-table` is enabled.

  - New options are available to adjust column size. `Default` is the current behavior where columns are evenly auto adjusted based on browser size. `Fit contents` is a new options that will auto expand the column to fit the contents of the data. This will usually produce a horizontal scroll bar. `Custom` is also a new option that allows the user to specify the size of each column manually.

  - The renderer is updated to better support Kilobytes to Human Readable disk size. (M for Megs, G for Gigs). `Factor` can be manipulated if the base number is not in bytes. For example, the **df** command displays it's results in 1K blocks.

- New drilldown filtering option added. The current default behavior for drilldown filtering is the `IN` option. The `IN` option requires a perfect match in order for results to be returned. The `Regex` option will return data if the database contains the value that was selected.

- Added support for filtering and drilldown on empty values. Simply leave the filter value blank. For drilldown, user can click on an empty cell to trigger an empty filter drilldown.

2.6.3. Resource Definitions

- `cucm_headsetinventory`: New `cucm_headsetinventory` resource. Requires Arbitrator Release sp21 and `axlGetHeadset_creds` probe.

- `arbitrator_ciscocdr` and `arbitrator_ciscomr`: Both `arbitrator_ciscocdr` and `arbitrator_ciscocmr` resource updated to include new Cisco CMR Metric's Field.

- Zoom definitions updated, new Zoom QoS definitions and dashboards.

2.6.4. Miscellaneous

- New configuration screen for DS9. Requires DS9 Release SP5.

2.7. Release Notes for Dashboard and Reporting (SP61)

2.7.1. Security Update

- Apache configuration updated to enforce `SameSite=None`.

2.7.2. UI Features

- New Feature - Added new reports screen to show available scheduled reports.
- New Feature - Added new "Fixed placement columns" option for column and bar charts.
- New Feature - Added new "95th Percentile" option to be displayed in charts.
- New Feature - Added new "Local Time / UTC" time toggle that drives date range picker time reference.
- New Feature - Added support for hyperlinks in Rich Text widget.
- Enhancement - Removed "thunderbolt" drilldown animation.
- Enhancement - More unit formatting added to tooltips.
- Enhancement - Launch Third Party URL drill-down now supports dashboard start-time and end-time as valid parameters.
- Enhancement - Donut charts option added to allow aggregation by dimension.
- Enhancement - Performance update to "Manage Dashboards" so that less data is transferred during the use of this screen.
- Enhancement - Access Controls updated to add new "Toggle Datasource" permission.
- Enhancement - Access Controls updated to add new "Toggle UTC/Local Time" permission.

2.7.3. Dashboards and Resource Definitions Updates

- New "Lxt License Summary" - Dashboard that shows license information from all connected arbitrators and reporters. No configuration needed.

- New "Lxt - System Stats - Arbitrator" - Dashboard that shows system stats for all connected arbitrators. No configuration needed.

- New "Lxt - System Stats - Dashboard" - Dashboard that shows system stats for all connected dashboard servers. No configuration needed.

- New "Cisco TMS" dashboards using new Arbitrator probe collection (requires Arbitrator sp21).

- New - NBAR definitions and mappings support (requires DS9 sp4).

- Enhancement - Zoom Plans Usage definition added (requires Arbitrator sp21).

2.7.4. Miscellaneous

- Various bug fixes.

3. Arbitrator Server

3.1. Release Notes for Arbitrator Hawaii 22.1

3.1.1. Download

Insights Arbitrator 22.1, Insights Dashboard 22.1 and Insights DS9 22.1 releases are now available from the Downloads section of the VOSS Customer Portal.

To ensure continuity, the release updates will still be available from the LayerX download site, allowing customers to either download files manually, or via the automated download mechanisms from that location.

- Insights Arbitrator 22.1
- Insights Dashboard 22.1
- Insights DS9 22.1

3.1.2. Highlights

- Arbitrator Imports/Exports

  New ability added to import and export Policies, Assets, and Asset Probe Groups via CSV. Single or multiple entries can be inserted, updated, or deleted. Probe groups can also be assigned to an asset using a CSV import.

- SNMP V3 version 5.8 support

  net-snmp upgraded to 5.8.0

- Support for One-Time-Password for root user access

  The root password will longer be set at ISO install time. The only way to access root is through the root one-time-password menu option. This requires admin access and also a Voss employee to provide the root access code.

Important: To ensure compatibility with older CUCM versions, refer to the **SSHD Config** steps in the *Override Default SSHD Keys for CUCM* section of the Platform Guide.

3.1.3. Features: Summary

- *EKB-11943*: Using Asset CSV Import to assign probe to an asset.
- *EKB-11665*: Create an Import log.
- *EKB-12298*: SNMP V3 version 5.8.
- *EKB-12054*: Add RR count support to help flag (ignore) an Avaya app error.
- *VOSS-934*: Arbitrator Export and Import function.
- *EKB-12535*: Support for One-Time-Password for root user access.
- *EKB-12351*: Remove apache access logs from log tarball.
- *EKB-11580*: Allow customer setting of sshd keys to support legacy CUCMs.
- *EKB-11541*: Update Arbitrator versioning scheme to 22.1.
- *EKB-12134*: Wrap up license script and merge into core codebase.
- *EKB-11621*: Create script to run CLI command and capture output from CUCM.
- *EKB-12353*: Using Roboto font on Arbitrator.
- *EKB-11663*: Implement import/export capability for Assets.
- *EKB-11662*: Implement import/export capability for Policies.
- *EKB-11661*: Create icons in Bootstrap for import/export buttons.

3.1.4. Features: Detail

- **EKB-11943: Using Asset CSV Import to assign probe to an asset.** Allow user to use CSV file to import, export, and delete profiles (Probe to Asset assignment).

- **EKB-11665: Create an Import log.** Framework added to track user actions in the system. The framework is currently being used to track import / export of Policies, Assets, and Probes.

  A new "insights_system_log" resource has been added to the Dashboard. This resource may be used to display on a dashboard the actions taken on the system.

- **EKB-12298: SNMP V3 version 5.8.** net-snmp upgraded to 5.8.0

- **EKB-12054: Add RR count support to help flag (ignore) an Avaya app error.** To aid detection and dismissal of phantom call packets from a software client, the rr_count is being included with the call data. rr_counts of zero will indicate phantom calls, which may be handled or ignored, at the customer's discretion.

- **VOSS-934: Arbitrator Export and Import function.** New features added to import and export of Policies, Assets, and Asset Probe Groups via CSV. Single or multiple entries can be inserted, updated, or deleted. Probe groups can be assigned to an asset using a CSV import.

- **EKB-12535: Support for One-Time-Password for root user access.** New NRS feature. The root password will no longer be set at ISO install time. The only way to access root is through the NRS menu option. This requires admin access and also a VOSS employee to provide the root access code.

- **EKB-12351: Remove apache access logs from log tarball.** Enhancement to the lxtlog debug files to exclude apache access logs.

- **EKB-11580: Allow customer setting of sshd keys to support legacy CUCMs.** Customer may now override the sshd_config entries with their own value(s). This will allow setting like KexAlgorithms required for older/legacy systems.

- **EKB-11541: Update Arbitrator versioning scheme to 22.1.** Release numbering of Legacy LayerX service packs(SP) will now follow VOSS harmonization style: 22.1

- **EKB-12134: Wrap up license script and merge into core codebase.** The following probe gathers Cisco Smart License data via Cisco Cloud Smart License API

  getCiscoSmartLicense

- **EKB-11621: Create script to run CLI command and capture output from CUCM.** The following probes gather general status / settings of Cisco CUCM via SSH Console

  - getCiscoCucmConfig - gathers data from (show status, show network eth0, show webapp session timeout, utils ntp status)

  - ciscoCucmServiceStatus - gathers data from (utils service list)

  - ciscoCucmDiagTest - gather data from (utils diagnose test)

  - ciscoCucmDbRep - gathers data from (utils dbreplication runtimestate)

  - ciscoCucmDisasterRecoverHistory - gathers data from (utils disaster_recovery history backup)

- **EKB-12353: Using Roboto font on Arbitrator.** Using Roboto font on Arbitrator

- **EKB-11663: Implement import/export capability for Assets.**

  1. Export:

     - User selects one or more or all assets.

     - When user clicks Asset export button, UI prompts to enter filename.

     - Once export is done, UI prompts to open CSV file.

  2. Import:

     - New import feature - new column: "row action".

     - If the cell is marked with "Delete" during importing, that asset/interface will be deleted.

- **EKB-11662: Implement import/export capability for Policies.**

  1. Export:

     - User selects one or more or all policies.

     - When user clicks Policy export button, UI prompts to enter filename.

     - Once export is done, UI prompts to open CSV file.

  2. Import:

     - New import feature - new column: "row action".

     - If the cell is marked with "Delete" during importing, that policy will be deleted.

- **EKB-11661: Create icons in Bootstrap for import/export buttons.** New buttons for Policy import/export, new buttons for Asset import/export.

3.1.5. Defects Fixed: Detail

- **EKB-12531: Unable to pull down the policy modules.** Removing the list of parents from the policy_modules' return results. Since the policy_modules have a high re-use rate, their parent list can be quite large. This reduction will still allow policy_module, and down to be fetched in a timely manner, without hitting timeout or data size errors.

- **EKB-12750: Second+ controls may fail to run on "quiet" system.** When a "quiet" system has multiple controls set in a response procedure, then not all of the controls may execute. "Quiet" is relative to the timeout confirmation value set for the controls, and if another response procedure attempts to run during that timeout window.

- **EKB-11917: Expressway SNMP script not working.** The original SNMP v2 scripts cisco/expressway_cpu.php and cisco/expressyway_memory.php have been updated to use a longer timeout and a retry to handle long delays from the expressway response from an SNMP v2 query. Also two additional scripts have been added for SNMP v3 support cisco/expressway_cpu_v3.php and cisco/expressway_memory_v3.php

- **EKB-11869: Expressway script issues.** Updated expressway_api_systemunit.php to handle expressways that have more than 2 ethernet interfaces.

- **EKB-12329: voss4uc_phones_transaction is not providing correct data.** Parser updated to look for stale entries in the transaction table and update accordingly.

3.2. Release Notes for Arbitrator Correlation 5 (SP25)

3.2.1. UI Changes

- Minor UI changes for the new year. New icons and new fonts used throughout UI.
- More color options added for arbitrator (Requires Dashboard SP66 Release).

3.2.2. WebEx

Webex API support added (Requires Dashboard SP66 Release for visualization).

3.2.3. Polycom Phones

Support added to probe polycom phones API (Requires Dashboard SP66 Release for visualization).

3.2.4. Cisco Enhancements

- Cisco RISphone scripts to support CUCM 14.

- Cisco SNMP scripts to improve performance.

- [EKB-10945] New definitions added for Cisco PRI/Cisco SIP SNMP probes.

  See:

  The Enrichments section of Arbitrator Probes to Monitor Cisco PRI and SIP Performance Monitoring in the Arbitrator Probes to Monitor Cisco PRI and SIP Performance Monitoring document.

3.2.5. Other Changes

- sysadmin account updated to support curl.

- Misc bug fixes.

3.3. Release Notes for Arbitrator Correlation 5 (SP23)

3.3.1. Security Updates

- `sudo` package updated to v1.9.7.

- `curl` package updated to v7.76.1.

- `kafka` package updated to v2.8.0.

3.3.2. New Features

- API support added to fetch and set product key.

- API support to add customer and site information.

- New config screen added to allow customer ndx file retention times. Default is 6 months.

- New PRI and SIP Trunk probes for Cisco Voice Gateways. Please reference *Arbitrator Probes to Monitor Cisco PRI and SIP Performance Monitoring*.

3.3.3. Enhancements

- Arbitrator License remaining days will now be displayed in UI upon login.
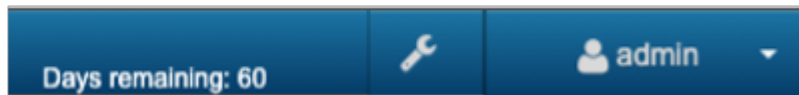
- Increased ping probe performance by allowing for parallel pings across assets.
- Enduser cisco probe modified to get license usage counts.
- Removal of arbitrator_threat ndx process.
- Allow duplicate NAT IPs across all Assets.
- Various bug fixes.

3.4. Release Notes for Arbitrator Correlation 5 (SP22)

3.4.1. Security Updates

- CVE-2021-3156 - Upgraded sudo to resolve the vulnerability.
- Extra security measures enforced when using browser development tools.

3.4.2. New Features

- Added to the out-of-box build Cisco Call Manager Express FTP support. Dashboard definitions requires Dashboard Release SP63.
- New ping probe that will allow ping on a hostname: icmp_echo_hostname.

3.4.3. Enhancements

- User timeout no longer requires a browser refresh to login.

- Enhanced performance of ICMP probe on successful pings.

- The "All data" option will take global filters into consideration.

- Arbitrator themes can be created using Dashboard server. Requires Dashboard Release SP63.

- An increase in throughput for the correlation engine.

- Fixed API `/v2/configs/policy_filters` to work properly.

- Various bug fixes.

3.5. Release Notes for Arbitrator Correlation 5 (SP21)

3.5.1. Security Updates

- Apache upgraded to 2.4.46

- Apache config updated to include SameSite=None

3.5.2. New Features

- Added support for a new ftp server.

- Added a new restricted shell that allows customers to run various commands to help aid in debugging.

- New CUCM headset inventory axl probe added

3.5.3. Enhancements

- Several ZOOM monitoring enhancements: enhanced QoS support including min/max/median and MOS calculations, Plans Usage, recordings optimization, next page token changes, Zoom databackup/restore, and more.

- If unconfigured, this release will default Cisco CDR datbase data to 6 months. This can be changed in **Configuration > Archive Management > Archive > Cisco SQL**.

- Cisco CMR parser updated to parse out the "Headset Metrics" fields. The Dashboard Release SP62 is needed to view the new metric fields. The resource is `arbitrator_ciscocdr`.
- Admin menu has new option "VPN group name" that allows customers to change SCDTSD VPN tunnel group name.
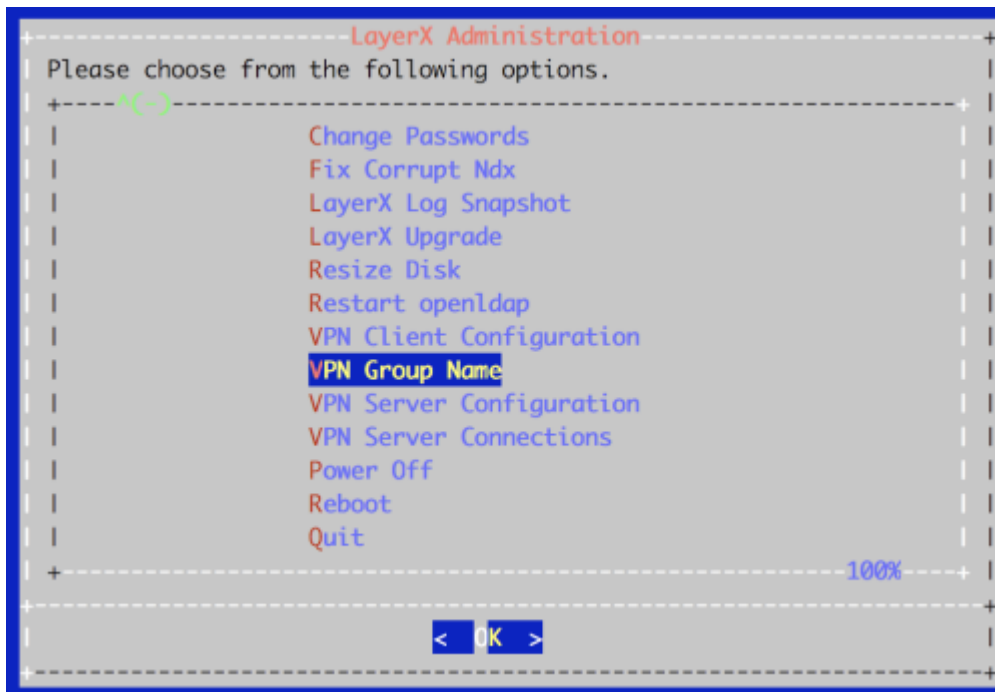
- CSV asset import now supports Customer and Site name.
- `vpnSyslogAlert` control script updated to include alert severity.
- Probe engine enhancements that ensure scripts timeout properly.
- Alert Reference IDs are limited to 32 characters.
- Cleanup of additional disk usage logs, reducing disk usage.
- Database upgrade.

- Various bug fixes.

3.6. Release Notes for Arbitrator Correlation 5 (SP20)

3.6.1. Highlights

1. New Feature: Zoom Analytics and Collection.

2. New Feature: Digital Experience Monitoring for Webex and Zoom.

3. New Feature: CUCM RIS probe that logs an event periodically showing phone status with Voss4UC customer location. (Voss Analytix required)

4. New Feature: Cisco CMR probe that logs an event periodically showing MOS quality by Voss4UC customer location. (Voss Analytix required)

5. New Feature: Zoom probe that logs an event periodically for each new entry in ZOOM_REPORT_TELEPHONE table.

6. New Feature: DB Aggregation feature added that enables custom database aggregations.

7. Improved Voss4UC integration. Added support for voss_device_cucm_line object. (Voss Analytix required)

8. Various bug fixes and security updates.

3.7. Release Notes for Arbitrator Correlation 5 (SP19)

- Added New Security Updates
    - Disable HTTP OPTIONS as Applicable
    - Removed ssl2
    - Upgraded Apache
    - Upgraded OpenLDAP
- Cisco UCCE
    - Added MIB Queries into the Platform
- Zenoss Cloud and Zenoss ZaaS updates
- Updated the Integration Scripts
- Improved Voss4UC integration
- Various DB Sync, Additional Fields and Filters
- Alerts restored Node ID
- Fixed SNMP* related issues
- Introducing Device REST API
- New Function to Allow Devices to be Populated Through the API
- Introducing Software Upgrade API

- Added a new "Menu" item to Allow Users to "GET" and Apply Upgrades

- Round robin probe execution to reduce database contention

- New Function as an Option Within the Probe Engine

- Increased RTCP throughput

- Added a New Calculated Field

- Increased ARB direct-connect count

- Allow SFTP archive backup

- Added SFTP in Addition to SCP

- Remove old archive files, per config setting

- Minor package upgrades

- Various additional security enhancements and bug fixes

4. DS9

4.1. Release Notes for DS9 (SP8)

Note: For VOSS Insights applications, this DS9 update is for existing DS9 customers

4.1.1. New features

- Configuration backup and restore

4.1.2. Enhancements

- Various bug fixes

4.2. Release Notes for DS9 5.0 (SP1)

Note: For VOSS Insights applications, this DS9 update is for new users of DS9.

First release.

4.3. Release Notes for DS9 (SP6)

Note: For VOSS Insights applications, this DS9 update has no new features that require an upgrade to it.

4.3.1. Security Updates

• CVE-2021-3156 - sudo upgraded

4.3.2. New features

• New enhancement added to allow the platform to load in AWS via an AMI
• Added alerting for various Flow summary data points
• Added support for Chronyd

4.3.3. Enhancements

• Added config and security enhancements to the API
• Added additional enhancements to sflow support
• Changed the Cisco CMR/CDR support to default as "off"
• Added menu support for SNMP v3 config
• Various bug fixes