Skylar One Operational Insights (OPIN) – On-Premises

PowerPack version 106.0

ScienceLogic

Operational Insights (OPIN) - On-Premises v106 Release Notes

IMPORTANT: ScienceLogic strongly recommends that you review the installation and upgrade instructions , important upgrade notes, and known issues for this release before installing or upgrading to Operational Insights (OPIN) – On-Premises v106.

The Operational Insights – OPIN On-Premises release includes the following new features and enhancements:

- This release implements a new architecture for OPIN data collection
- New Classic and AP2 Dashboards provide more system information, and troubleshooting tools
- Enhanced automations, that provide optimized queries and more robust logging
- New Dynamic Applications that take advantage of the new data collection architecture

These release notes provide a comprehensive list of the features, enhancements, and addressed issues that are included in Operational Insights (OPIN) – On-Premises v106 release.

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This document covers the following topics:

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1. Revision History

Revision Number	Revision Date	Notes
106.0	December 4, 2025	Initial release

2. Before You Proceed

If you are planning to consume Operational Insights (OPIN) – On-Premises v106, be advised of the following:

If you are upgrading from OPIN v104 or an earlier version, please refer to Appendix A before continuing.

Skylar One Version Requirements

Pre-requisite item	Minimum required Version
Skylar One platform	12.3.2
AP2	Lokma (8.20.70-45)

Supported Skylar One Architecture

Architecture Type	Supported
All-in-On (AIO)	Yes
Single Database	Yes
Disaster Recovery (DR)	Yes
High Availability (HA)	Yes
High Availability + Disaster Recovery	Yes
RDS Implementation with Data Engines	Yes

All Python 2 functionality has been removed from the Operational Insights (OPIN) – On-Premises v106 PowerPack all code used in the PowerPack is Python 3-compatible.

3. New Features and Enhancements

Version 106.x introduces major improvements in performance, visibility, and maintainability across the Operational Insights PowerPack.
This release refines automation logic, improves query handling, and introduces better phase tracking and timeout control across all elements of the PowerPack.

New Architecture

- Updated the data collection mechanism.
- Eliminated the need for dedicated collectors to monitor system health.

Dashboards Updated

- 23 Classic and 20 AP2 dashboards
- Collector Performance and System Logs Summary Dashboard now include Automation Execution Time and Status summaries.

Automations

- New Data Validation Checks
  - Automations now log completion state (COMPLETED, IN PROGRESS, FAILED, or TIMEOUT) in custom tables.
- Collector Data Collection Automation
  - Executes in 4 optimized phases, each handling 25% of collectors.
  - Includes thread-based concurrency with built-in timeout control.
  - Automatically tracks phase completion times and stores detailed execution metrics in sl1_opin.collector_specs table.
- System Log Data Collection Automation
  - Improved resilience with controlled query timeout and automatic log count validation.
  - Adds enhanced error parsing for SIGTERM, PoolWorkers, and unhandled exceptions.

Dynamic Applications

- Added automatic "N/A" handling for null data to prevent dashboard errors.

Optimized Logging

- Each automation writes to a separate /dev/shm/...log file to minimize I/O load and ensure clarity during debug.
- Log files are overwritten each time the automations run, which prevents them from growing too large when Debug mode is enabled.

4. Introduction

The Skylar One: Operational Insights (OPIN) PowerPack provides a consolidated and automated health monitoring framework for Skylar One environments.
It includes a set of automations, dynamic applications, dashboards, and utilities that provide real-time visibility into Skylar One health.

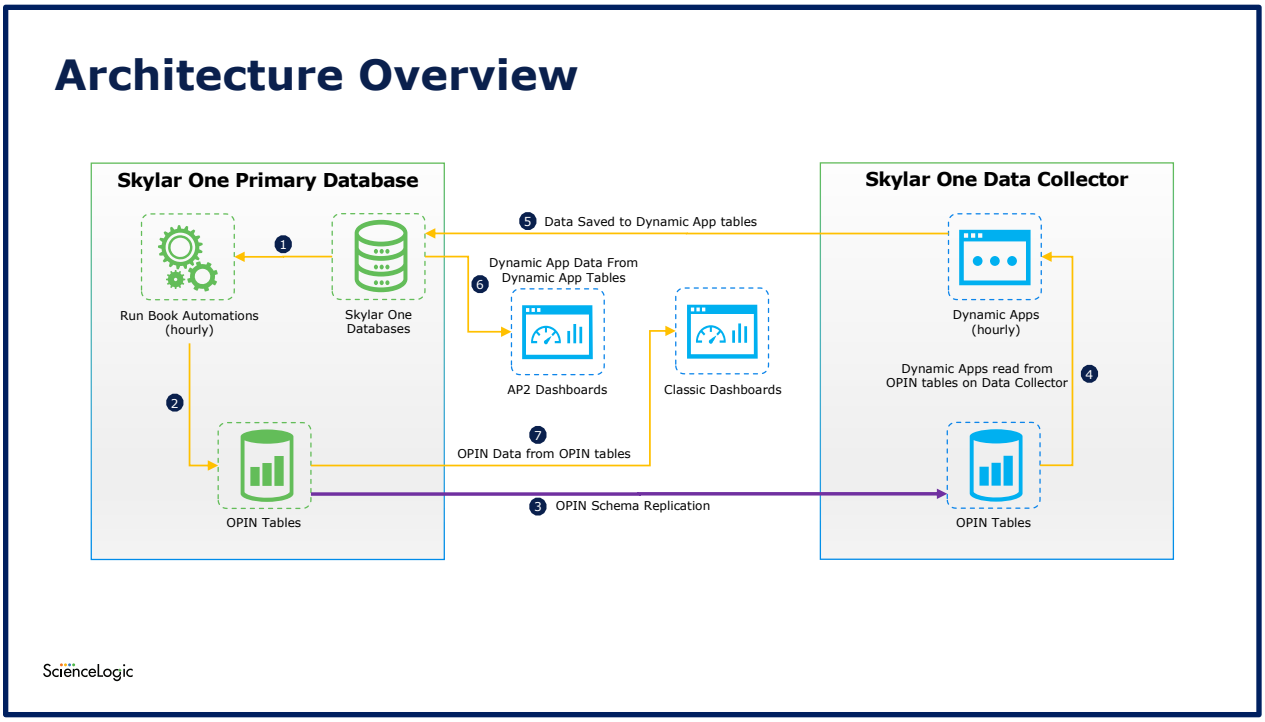
The PowerPack is designed for both operations teams and engineers:

- Operations teams gain dashboards that visualize overall platform health and trends.
- Engineers and administrators can use the underlying automations and tables to identify data delays, performance degradation, or misaligned configurations.

Version 106 builds on the foundation of earlier releases by improving scalability, ensuring consistent data capture, and standardizing how automation results are logged and displayed.

5. High-Level Architecture Overview

The Skylar One Operational Insights (OPIN) PowerPack integrates multiple functional layers to collect, store, and visualize operational metrics.



Workflow Summary:

1. Run Book Automations execute hourly to collect key system and collector data.
2. Data collected and stored into custom OPIN tables within the OPIN schema on the Primary Database
3. Data pushed to the collectors monitoring the Skylar One Databases
4. Dynamic Applications read the data from the OPIN Schema on the Skylar One Data Collector
5. Data collected by the Dynamic Applications saved to the primary database in the Dynamic Application specific tables
6. AP2 Dashboards read the data collected by the OPIN Dynamic Applications aligned to the Skylar One Databases
7. Classic Dashboards read directly from OPIN tables to display summarized health metrics

6. Issues Addressed

This section describes the issues that were addressed in Operational Insights (OPIN) – On-Premises v106.

Queries

- Resolved an issue that caused certain queries with the word "function" to not execute in environments with RDS

Classic Dashboard Widgets

- Resolved an issue that prevented the DRBD sync status to not display correctly on the Database Dashboard
- Resolved an issue that caused the incorrect Pruner status to show on the Pruner Status – 7 Day Summary widget on the Database Dashboard
- Resolved an issue that caused the top 10 logs to not show in the correct order on the System Log Dashboard
- Resolved an issue that caused the Backup Status Dashboard to show multiple entries of the backup entries from the system logs

7. PowerPack Contents

Content Type	Count
AP2 Dashboards	20
Classic Dashboard Widgets	61
Classic Dashboards	23
Credentials	2
Device Groups	9
Device Templates	3
Dynamic Applications	37
Events Policies	8
Run Book Actions	24
Run Book Action Types	1
Run Book Automations	6
Skylar One AP2 Dashboards	20
Skylar One Reports	2

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8. PowerPack Installation

Pre-Installation

Skip this section for new deployments.

Perform the following steps, before importing and installing the PowerPack:

1. Ensure all Skylar One Databases are discovered
    - Navigate to Devices > Device Manager.
    - Search for Class name: Skylar One Database.
    - Verify that all Databases are discovered.
    - If the Databases are not discovered, then they should be discovered at this time.

The device names of the Discovered Databases should match the corresponding Database Appliance name from the Appliance page.

2. Delete AP2 Dashboards:
    - In AP2 navigate to Dashboards
    - Select and delete the following dashboards

AP2 Dashboard Name
Global Device Health
Linux Server Health
SL1: Business Services, Dashboards, and Device Stats
SL1: Collector Statistics Dashboard
SL1: Config Push, Event Engine, and Vanished Devices
SL1: Daily Maintenance Performance
SL1: DataPull Performance
SL1: Dynamic App Tuning Candidates
SL1: Event Performance
SL1: Interface Summary
SL1: Run Book Performance
SL1: Subscription License Usage Summary - 2020
SL1: Subscription License Usage Summary - 2022
SL1: System Logs Summary
SL1: Adoption Advanced
SL1: Tuning Candidates
SL1: VMware - vCenter Inventory

Some Dashboards listed above, may not exist on the system; skip any that aren't present.

3. Delete deprecated Classic SL1 Dashboards:
    - Navigate to System > Customize > Classic Dashboards
    - Select and delete the following Classic SL1 dashboards

AP2 Dashboard Name
SL1: Capacity Management - Licensing Usage Summary w/ Tiers
SL1: DNS &Timeserver Auditing
SL1: License Usage Summary
SLES - Device Collection Inspector
SLES - Dynamic App Collection Inspector

Some Dashboards listed above, may not exist on the system; skip any that aren't present.

4. Delete old and deprecated Dynamic Applications
    - Navigate to System > Manage > Dynamic Applications
    - Select and delete the following Dynamic Applications

Dynamic Application Name
SL1: Adoption CDB Config
SL1: Adoption CDB Stats
SL1: Adoption ServiceNow MTTR
SL1: Automations Cost Savings
SL1: Collector Active States
SL1: Collector Details
SL1: Database Config
SL1: Database Identifier
SL1: Database Stats
SL1: DB Collection State
SL1: DNS/Timeservers Auditing
SL1: Event Source Summary
SL1: Table Count
SL1: Rows Behind
SL1: VMware: ComponentCount Performance

Some Applications listed above, may not exist on the system; skip any that aren't present.

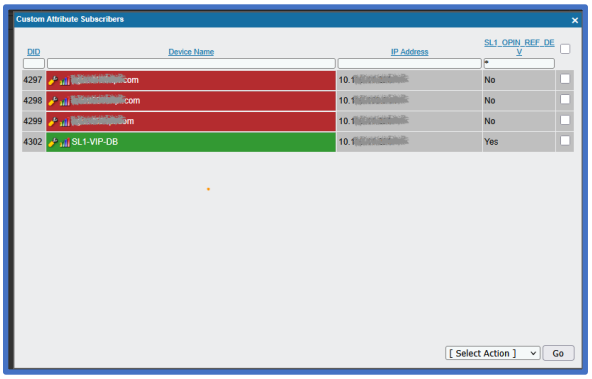
5. Delete old and deprecated PowerPacks
    - Navigate to System > Manage > PowerPacks
    - Select and delete the following Dynamic Applications

PowerPack Name
SL1 Adoption
SL1 Stack Visibility
SL1 OPIN – Dynamic App Collection Inspector

PowerPack Name
ScienceLogic Monitoring Adoption SL1

Some PowerPacks listed above, may not exist on the system; skip any that aren't present.

6. Delete deprecated Custom Attribute
    - Navigate to System > Manage > Custom Attributes
    - Search for Display Name " SL1_OPIN_REF_DEV", If no results are found then jump to step 7
    - Click on the subscribers for the attribute

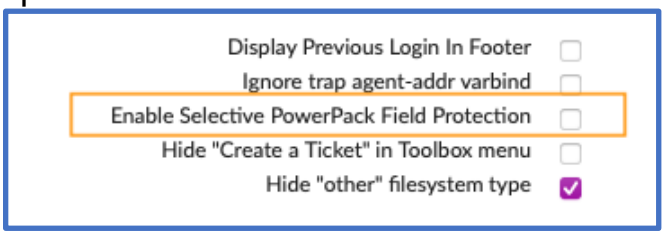


    - From the **Select Action** dropdown select **Unalign Attributes** and click Go
    - After unaligning the attribute, refresh the Custom Attribute page and confirm that there are no subscribers aligned to the **SL1_OPIN_REF_DEV** attribute.
    - Select the row with attribute name **SL1_OPIN_REF_DEV**
    - From the **Select Action** dropdown select **Delete Custom Attributes** and click Go
7. Delete deprecated Category
    - Navigate to System > Customize > Categories
    - Edit category called **SL1 Operational Insights**, if no results are found then jump to step 8
    - Select **No** from the three dropdowns (Dashboards, Reports, and Widgets) for the selected category
    - Click the save icon
    - Edit the same category again and click on the delete icon

8. Delete deprecated Classic SL1 Themes
    - In the Classic UI, Navigate to System > Customize > Themes
    - Search and delete the following classic SL1 themes, if no results are found then jump to step 8

- OPIN - Landing Page Images
- OPIN - Landing Page Images 2

9. Disable Selective PowerPack Protection
    - Navigate to System > Settings > Behavior
    - If checked, then uncheck the **Enable Selective PowerPack Field Protection** option



    - Click save

Installation

To install the new PowerPack:

1. Go to System > Manage > PowerPacks.
2. Select Actions > Import PowerPack.
3. Select the PowerPack file and import.
4. Once imported, click on the Install button.

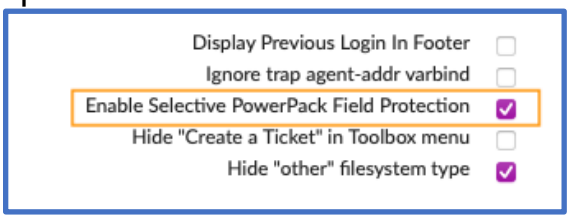
The PowerPack should now be installed on the system.

Post-Installation

Skip this section for new deployments.

Enable Selective PowerPack Protection

- Navigate to System > Settings > Behavior
- If unchecked, then check the **Enable Selective PowerPack Field Protection** option



- Click save

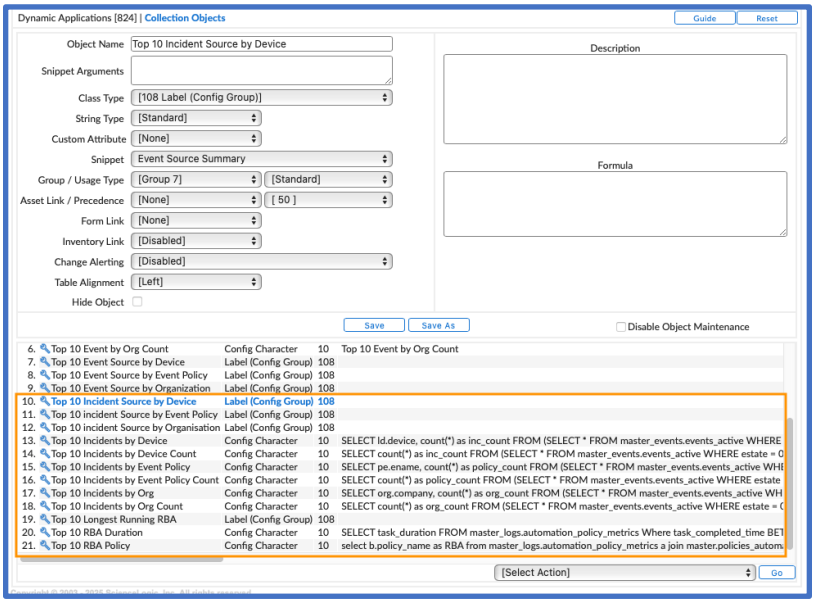
Delete deprecated collection objects

Skip this section for new deployments.

- Navigate to System > Manage > Applications
- Search for **OPIN – Event Source Summary**

- Edit the Application by clicking on the wrench (🔧)
- Navigate to the Collections tab and select the following 12 collection objects:

Object Name	Class Type
Top 10 Incident Source by Device	Label (Config Group)
Top 10 incident Source by Event Policy	Label (Config Group)
Top 10 incident Source by Organisation	Label (Config Group)
Top 10 Incidents by Device	Config Character
Top 10 Incidents by Device Count	Config Character
Top 10 Incidents by Event Policy	Config Character
Top 10 Incidents by Event Policy Count	Config Character
Top 10 Incidents by Org	Config Character
Top 10 Incidents by Org Count	Config Character
Top 10 Longest Running RBA	Label (Config Group)
Top 10 RBA Duration	Config Character
Top 10 RBA Policy	Config Character



- From Select Action dropdown, select **Delete Objects**
- Click Go save

Skylar One Database Credential

The templates in the PowerPack use the out of the box Skylar One Database credential.

1. Get the MariaDB Password for the clientdbuser.
2. Go to System > Manage > Credentials.
3. Search for Skylar One DB or EM7 DB or SL1 DB.

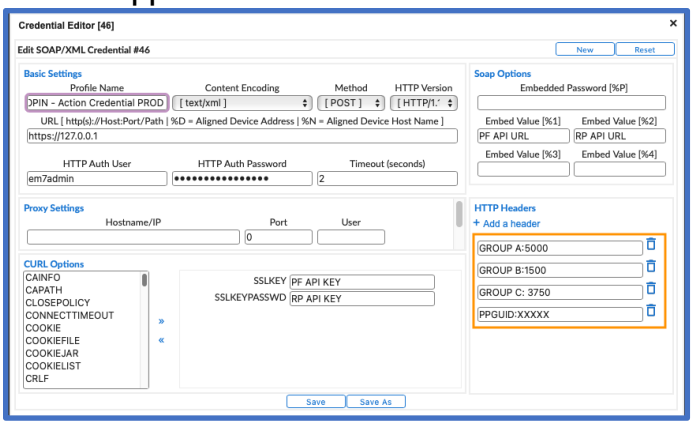
4. Update the Profile Name with a new credential name, ex: **Skylar One DB - OPIN**
5. Update the DB User field with MariaDB Username.
6. Update the Password field with the MariaDB Password.
7. Click Save As and exit.

If you don't click Save As, and the existing credential is overwritten the next time the PowerPack is updated.

9. Credential Configuration

To configure the OPIN Credential:

1. Go to System > Manage > Credentials
2. Search for Skylar **OPIN**
3. Edit the credential named, **OPIN - Action Credential Example**
4. Update the following fields:
    a. Profile Name: Change the Profile name to **OPIN - Action Credential PROD** (or something similar that works for the environment)
    b. HTTP Auth User: Skylar One UI Admin username (example em7admin)
    c. HTTP Auth Password: Password for the Admin user
    d. Optional - Embed Value [%1]: Skylar Automation URL
    e. Optional - Embed Value [%2: Skylar Compliance URL
    f. Optional – SSLKEY: Skylar One API Key
    g. Optional – SSLKEYPASSWD: Skylar Compliance API Key
    h. Optional – HTTP Headers
        - Add new Headers for every contractual License Type, provide the License Type Name and the quantity, example: GROUP A:5000 See Appendix B for details
        - Add new Headers for every custom PowerPack that you want to include in the Automation Value, example: PPGUID:42GFFT812K See Appendix C for details



5. Click Save As and exit

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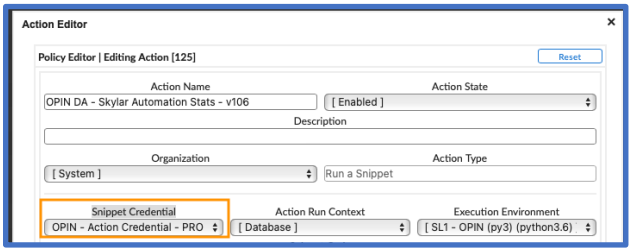
If you don't click Save As, and the existing credential is overwritten the next time the PowerPack is updated.

10. Run Book Action Configuration

Follow these steps to configure Run Book Action:

1. Go to Registry > Run Book > Actions
2. Search for **OPIN** to display all related actions
3. Edit **OPIN DA - Automation Value – v106**
4. In the Snippet Credential drop down, select the credential created in section 7 (for example **OPIN - Action Credential PROD)**
5. Click Save and exit

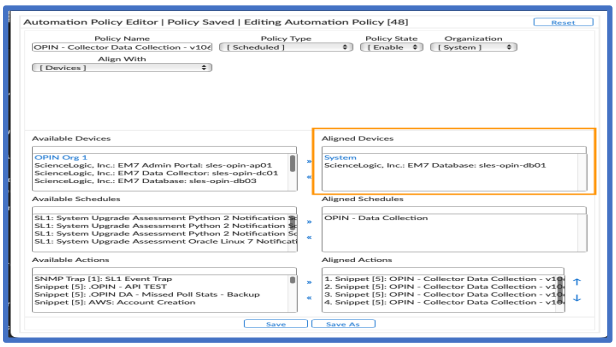


6. Repeat steps 3-5 for each of the following actions:
    a. OPIN DA - Skylar Automation Stats - v106
    b. OPIN DA - Skylar Compliance Stats - v106
    c. OPIN DA - Skylar One First Look - v106

11. Run Book Automation Configuration

Follow these steps to configure the Run Book Automations:

1. Go to Registry > Run Book > Automation
2. Search for **OPIN** to display all related automations
3. Edit **OPIN - Collector Data Collection - v106**
4. Align the primary Skylar One database device to the Automation:
    a. Search for the Primary Skylar One Database device
5. Move the device from 4.a Aligned Devices
6. Click Save and exit



7. Repeat steps 3-6 for each of the following actions:
    a. OPIN - DA Data Pruner - v106*
    b. OPIN - Dynamic App Data Collection Part A - v106
    c. OPIN - Dynamic App Data Collection Part B - v106
    d. OPIN - Missed Polls Overview - v106*
    e. OPIN - System Log Data Collection - v106

*Automation disabled by default, consult ScienceLogic Expert Services before enabling.

Optional: Manual Execution to speed up data collection

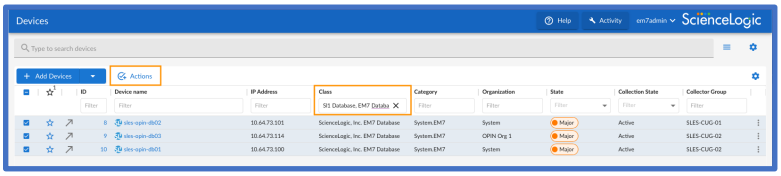
After configuring the Run Book Automations and Actions, run the following optional steps can be performed to speed up initial data collection:

1. Go to Registry > Run Book > Automation
2. Search for **OPIN** to display all related automations
3. Click the lightning bolt icon (⚡) for **OPIN - Collector Data Collection - v106** to execute the automation
4. Repeat steps 2-3 for each of the following actions:
    a. OPIN - Dynamic App Data Collection Part A - v106
    b. OPIN - Dynamic App Data Collection Part B - v106
    c. OPIN - System Log Data Collection - v106

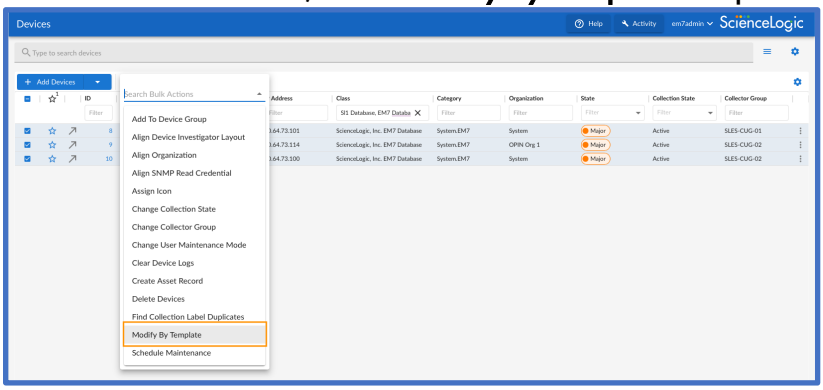
12. Device Configuration / Dynamic App Alignment

Follow these steps to configure the Skylar One Database devices:

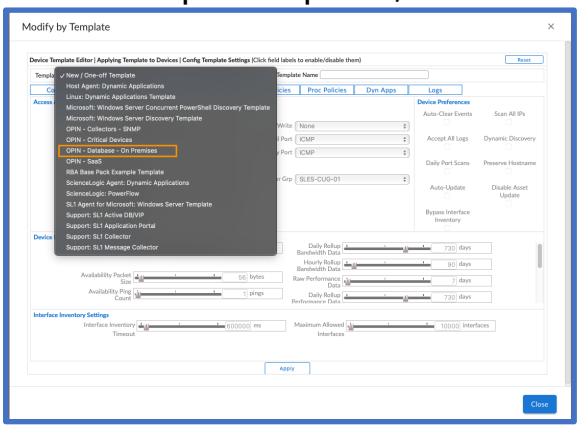
1. Go to Devices
2. Search for **SL1 Database, EM7 Database** in the Class column to display all Skylar One Databases
3. Select all Skylar One Database devices
4. Click the Action menu



5. From the Actions menu, select **Modify By Template** to open the Template modal



6. From the Template dropdown, select **OPIN – Database – On Premises** Template



7. Click Apply, followed by Confirm

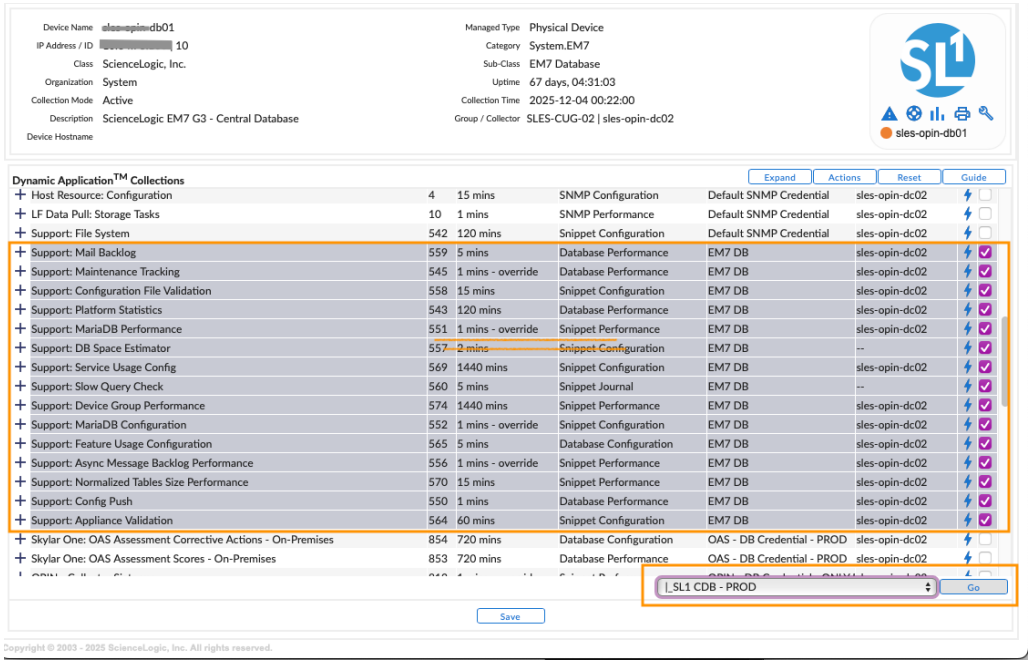
Post Template Alignment configuration

After the Template has been aligned, we need to ensure that the Support Dynamic Apps on all Skylar One Database devices are aligned to the correct credential

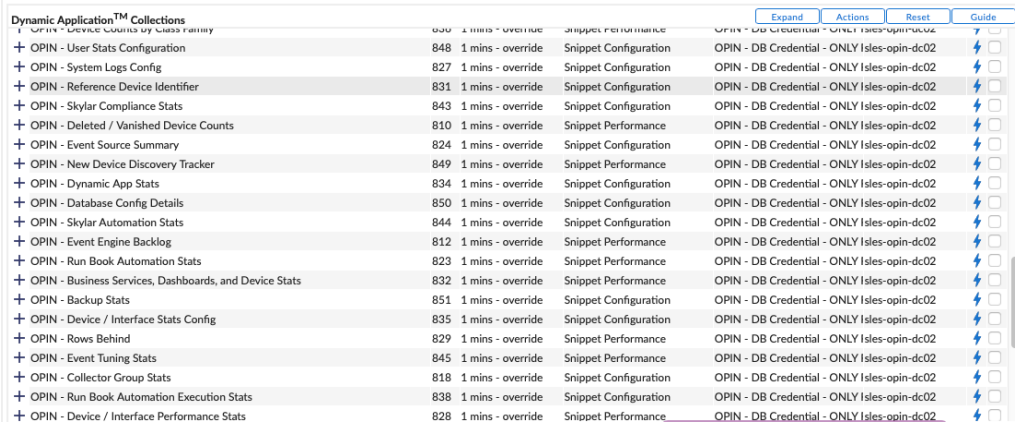
Follow these steps:

1. Go to Devices > Classic Devices

2. Search for **SL1 Database, EM7 Database** in the **Device Class | Sub-class** column to display all Skylar One Databases
3. Click 🔧 to edit the first Skylar One Database device
4. In the Device Properties window, go to **Collections** tab
5. Sort the Dynamic Application list by **Credential** column
6. Select all Dynamic Applications aligned to **EM7 DB** credential
7. From the **Select Action** dropdown, select the newly created credential from section 6 (Skylar One Database Credential)
8. Click Go
9. Repeat septs 3 – 7 for the remaining Skylar One Database devices



Credential named **OPIN - DB Credential - ONLY FOR OPIN APPS,** is automatically aligned to the OPIN Apps and should not be edited or unaligned from the OPIN Apps.

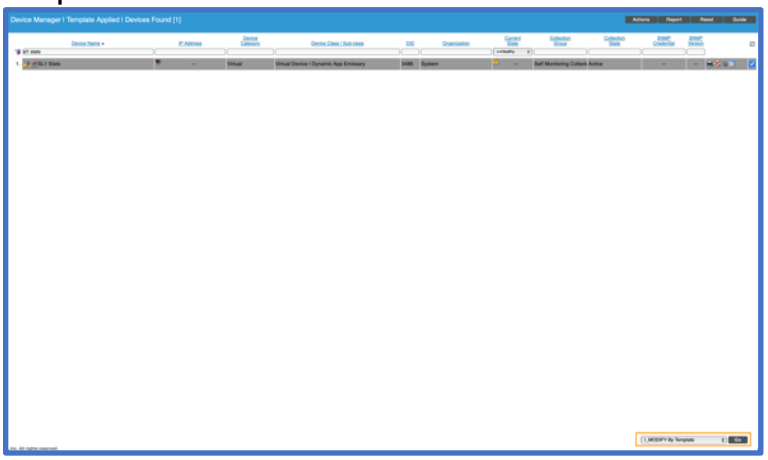


13. Dynamic Application Alignment

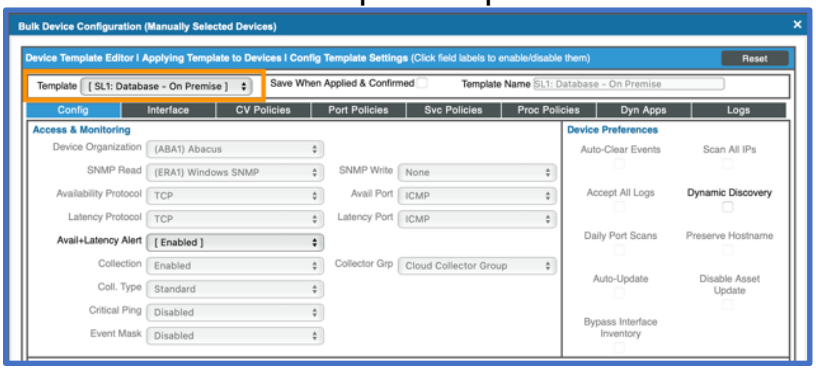
The steps in this section are only applicable for Skylar One systems that have already been deployed. Services Consultants should refer to the Implementation Playbook for deployment details.

To align the Dynamic Apps:

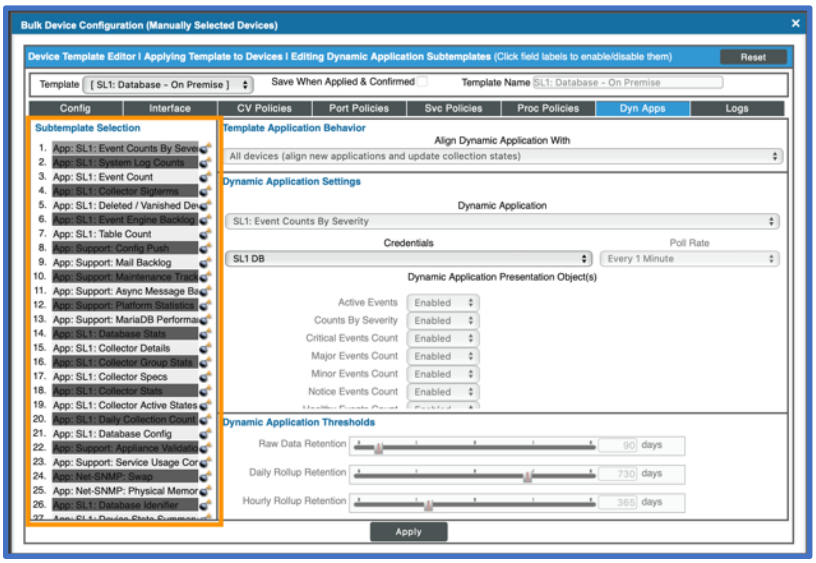
1. Go to Devices > Device Manager.
2. Search for Device Class: Skylar One Database.
3. Select the rows with the Skylar One Database Devices.
4. From the 'Select Action' dropdown (Bottom right of the page), select 'MODIFY by Template'.



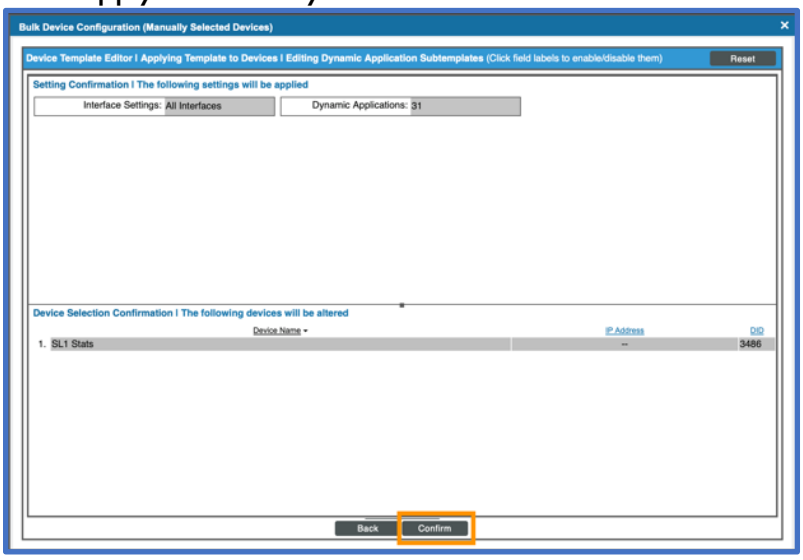
5. Click Go.
6. In the Bulk Device Configuration Modal window, select 'Skylar One: Database – On Premises' from the Template Dropdown.



7. Go to Dyn Apps tab.
8. Verify that a list of Dynamic Apps shows up under the 'Subtempalte Selection'.



9. Click Apply followed by Confirm



Once the Dynamic Applications are aligned it can take up to 15 mins for the data to start collecting.

14. Appendix A – Upgrading from OPIN version 104 or older

Consolidate PowerPacks – Only for upgrade from v104 or older.

If you are upgrading the Operational Insight PowerPack from v104 or older, confirm that you have the following PowerPacks on the system:

a. SL1 Operational Insights - Self Monitoring
b. SL1 Operational Insights - Platform Operations
c. SL1 Operational Insights - Capacity Management

As part of the upgrade procedure the three Operational Insights PowerPacks need to be consolidated into one.

1. Go to System > Tools > DB Tool.
2. Execute the following queries one at a time:

2.1.
```
UPDATE master.dynamic_app
SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
'0FC56B44C2123F415FC00F3527855692');
```

2.2.
```
UPDATE master.policies_events
SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
'0FC56B44C2123F415FC00F3527855692');
```

2.3.
```
UPDATE master_dev.template_common
SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
'0FC56B44C2123F415FC00F3527855692');
```

2.4.
```
UPDATE master_custom.custom_dashboard_widgets
SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
'0FC56B44C2123F415FC00F3527855692');
```

2.5.
```
UPDATE master_biz.dashboards
SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
'0FC56B44C2123F415FC00F3527855692');
        UPDATE master.system_credentials
        SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
        WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
        '0FC56B44C2123F415FC00F3527855692');
```

If you are copying the above queries, please ensure that there are no spaces in the ppguid values.

3. Go to the PowerPack Manager page (System > Manage > PowerPacks).
4. Search for Operational Insights.

5. Ensure that all columns show '–', indicating that the PowerPacks are empty.
6. Select SL1 Operational Insights - Capacity Management and SL1 Operational Insights - Platform Operations.
7. From the dropdown (bottom left of the page) select Delete PowerPack(s) and Click Go.

Once the PowerPacks are consolidated, follow the new install procedure starting from section 2 of this document.

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