SL1 Operational Insights

PowerPack version 105.6.1

ScienceLogic

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1. Revision History

Revision Number	Revision Date	Notes
v105.6.1	April 6th 2025	On-Premises references removed
v105.6	March 25th 2025	Added support for Aurora3. Dynamic App Enhancements.
v104, v105	-	Skipped
v105.3	March 5th 2025	Bug Fixes
v105.2	March 5th 2025	Bug Fixes
v105.1	March 5th 2025	Bug Fixes
v105	April 13th 2023	Initial release

2. Introduction

This document provides installation steps and configuration details for the SL1: Operational Insights PowerPack. This PowerPack includes Dynamic Applications, Automations, Dashboards, and tools that enhance SL1 platform health visibility.

3. PowerPack Contents

Content Type	Count
Classic Dashboard Widgets	52
Classic Dashboards	21
Credentials	9
Device Groups	9
Device Templates	2
Dynamic Applications	22
Events Policies	8
Run Book Actions	2
Run Book Automations	2
SL1 AP2 Dashboards	12
SL1 Reports	2

4. PowerPack Installation

SL1 Version Pre-requisite

Pre-requisite item	Minimum required Version
SL1 platform	12.1.1

Consolidate PowerPacks – Only for upgrade from v104 or older.
If upgrading from v104 or higher skip to **Pre-Installation section**.

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:
   - ```
     UPDATE master.dynamic_app
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```
   - ```
     UPDATE master.policies_events
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```
   - ```
     UPDATE master_dev.template_common
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```
   - ```
     UPDATE master_custom.custom_dashboard_widgets
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```
   - ```
     UPDATE master_biz.dashboards
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```
   - ```
     UPDATE master.system_credentials
     SET ppguid = 'E1046F7A8A7D685495C6A3AA6785B618'
     WHERE ppguid IN ('AB49206E7D721C09B27BFD211A66B497',
     '0FC56B44C2123F415FC00F3527855692');
     ```

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.

Pre-Installation (Applicable for systems upgrading from v104 or higher)

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

1. Delete Dynamic App SL1: Adoption CDB Config from the system.
    1. Navigate to System > Manage > Dynamic Applications.
    2. Search for "SL1: Adoption CDB Config".
    3. Select the row.
    4. Select "DELETE Application" from the menu (Bottom right) and click Go.
2. Perform step1 to delete the following Dynamic Applications:
    1. SL1: Database Stats

       NOTE: Removing the following three apps will cause **# SL1: Run Book Performance** Dashboard to not show any data. This is expected and will be updated in v106 of Operational Insights PowerPack.
    2. SL1: Adoption CDB Stats
    3. SL1: Adoption ServiceNow MTTR
    4. SL1: Automations Cost Savings
    5. SL1: Database Config
    6. SL1: DB Collection State
    7. SL1: DNS/Timeservers Auditing
    8. SL1: Table Count
    9. SL1: Rows Behind
    10. SL1: VMware: ComponentCount Performance
3. Make sure the "Enable Selective PowerPack Field Protection" Field is Unchecked - Under System > Settings > Behavior.
4. Navigate to Devices > Templates.
5. Search for template name "SL1 Database - On Premise".
6. Select the row
7. Select Delete Templates from the menu (bottom right) and click Go.

Installation

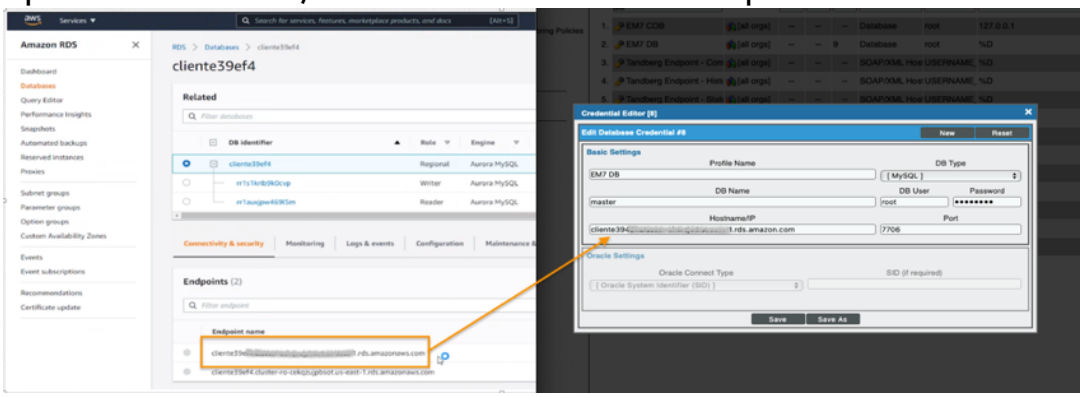
To install the new PowerPack:

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.

SL1 Database Credential

1. Get the RDS URL for the SL1 System:
    - ScienceLogic SRE can provide the correct RDS URL. Or
2. Get the RDS Username for the SL1 System (Default value is clientdbuser):
    - ScienceLogic SRE can provide the correct RDS Username. Or
3. Get the RDS Password for the SL1 System:
    - ScienceLogic SRE can provide the correct RDS Password. Or
4. Go to System > Manage > Credentials.
5. Search for SL1 CDB.
6. Update the Hostname / IP field has the correct RDS endpoint url



7. Update the DB User field with RDS Username.
8. Update the Password field with the RDS Password.
9. Click Save As and exit.

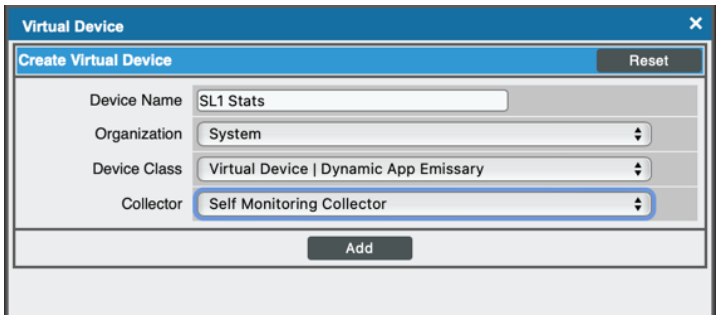
SL1 Stats Virtual Device

Ensure that 'SL1 Stats' Virtual Device is created in SL1.

1. Go to Devices > Device Manager.
2. Search for Device name: SL1 Stats.
3. If there are no results:
    a. From Actions select Create Virtual Device
    b. Enter the following values for the new Device:
        - Device Name: SL1 Stats
        - Organization: System
        - Device Class: Virtual Device | Dynamic App Emissary

- Collector: Self Monitoring Collector

c. Click Add and exit



5. Automation Configuration

To configure the Automations:

1. Go to Registry > Run Book > Automation.
2. Search for SL1: Collector Data Collection.
3. Edit the Automation.
4. Align the right device to the Automation: Search for 'SL1 Stats' in the Available Devices.
5. Move the device from 4 to 'Aligned Devices'.
6. Click Save and exit.
7. Go to Registry > Run Book > Automation.
8. Search for SL1: System Log Data Collection.
9. Edit the Automation.
10. Align the right device to the Automation: Search for 'SL1 Stats' in the Available Devices.
11. Move the device from step 10 to 'Aligned Devices'.
12. Click Save and exit.

Following Automations are provided with the PowerPack:

1. **SL1: Collector Data Collection:** This automation is responsible for collecting Collector Specific data that is used in the Collector Performance Dashboard.

   The Automation is configured to trigger once an hour and triggers the same Action (SL1: Collector Data Collection) 4 times.

   The Automation is responsible for identifying collectors that have been discovered and match the criteria for them to show up on the Collector Performance Dashboard.

   Collectors that meet the following criteria will appear on the Collector Performance Dashboard:

   1. Collectors should be discovered as Managed devices.
   2. The discovered Collector device name should match the name of the same collector from the Appliance Page.
   3. The collector should have the following two apps aligned:
      a. Support: File System
      b. Host Resource: Configuration
   4. The two apps, Support: File System and Host Resource: Configuration, should be collecting data successfully
   5. The Data Collectors should be in a Collector Group. This check does not apply to Message Collectors.

Once the Automation runs, it stores the data in a custom table called sl1_opin.collector_specs. The data stored in the table is read and displayed by the dashboard widget.

2. **SL1: System Log Data Collection:** This automation is responsible for collecting System Log Specific data that is used in the System Logs Summary Dashboard.

The Automation is configured to trigger once an hour and triggers the same Action (SL1: System Log Data Collection) 5 times.

The Automation is responsible for parsing the Top problem logs including SIGTERMs, PoolWorker logs, Unhandled Exceptions.

Once the Automation runs, it stores the data in a custom table called sl1_opin.system_log_summary. The data stored in the table is read and displayed by the dashboard widget.

If the total system log count is greater than 6 million, the Automation will not collect data, and the system logs summary dashboard will display a message stating that the log count is too high.

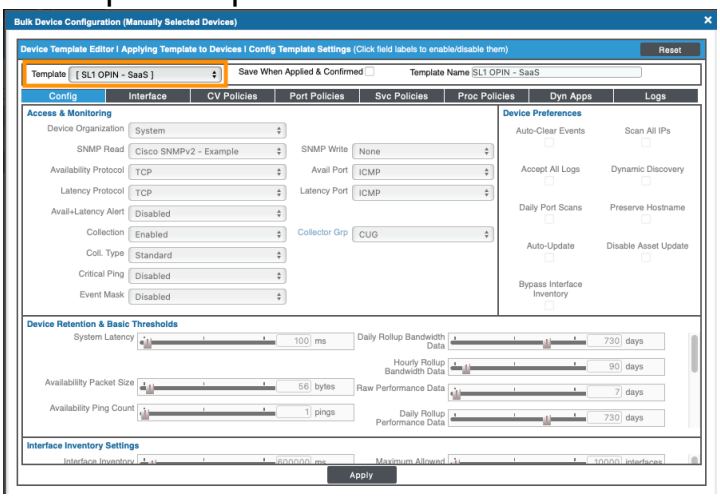
Old logs should be deleted so the total count is under 6 million, once the count is under 6 million then the automation will be able to collect and parse the system logs data.

6. Dynamic Application Alignment

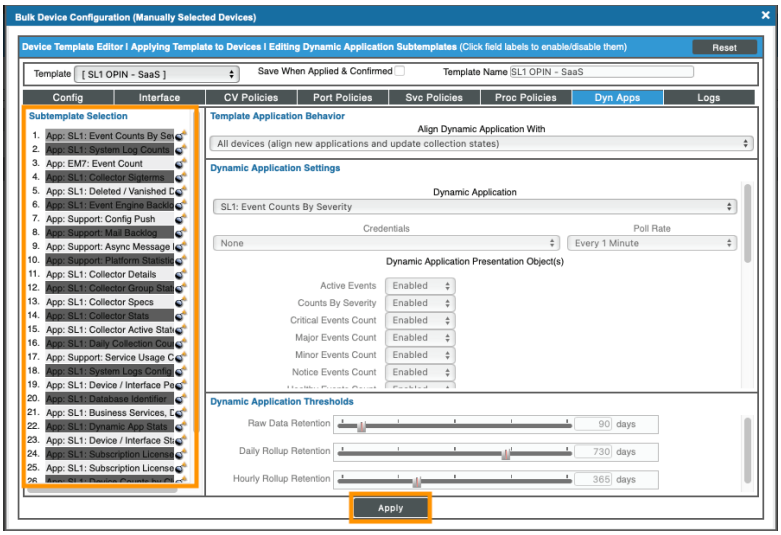
To align the dynamic Apps:

1. Go to Devices > Device Manager.
2. Search for Device Name: SL1 Stats.
3. Select the row with the Device SL1 Stats.
4. From the 'Select Action' dropdown (Bottom right of the page), select 'MODIFY by Template'.

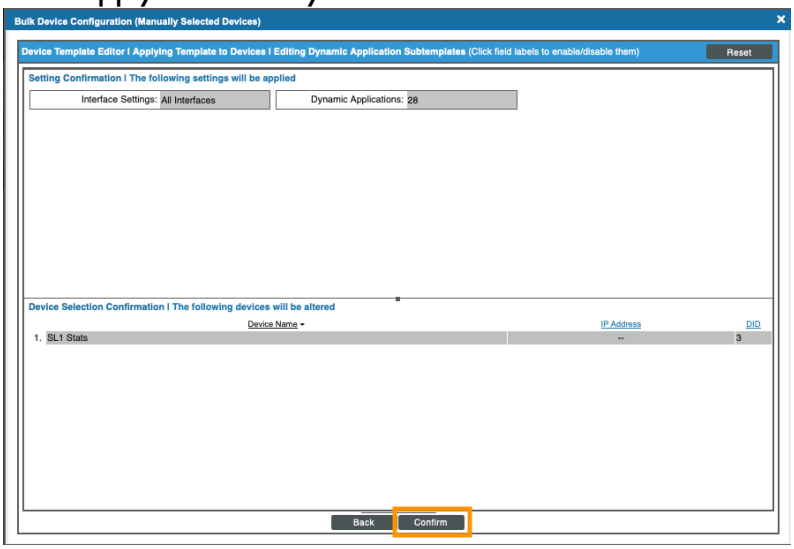
5. Click Go.
6. In the Bulk Device Configuration Modal window, select 'SL1: OPIN – SaaS' from the Template Dropdown.



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



10. Open Device Properties for 'SL1 Stats', by clicking on the wrench icon.
11. Go to 'Collections' tab.
12. Select All Dynamic Applications that have "Default SNMP Credential" listed under the Credential column.
13. From the Select Action Dropdown (bottom right) select the credential from section 4 Pre-requisites (SL1 Database Credential) and click Go.
14. Verify that all the dynamic apps are aligned to the credential that was edited above in section 4 Pre-requisites (SL1 Database Credential).

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

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7. Dynamic Application Configuration

With the upgrade to Aurora 3, the following Dynamic Application need to be updated (this Application is not part of the Operational Insights PowerPack):

1. Go to System > Manage > Dynamic Applications.
2. Search for **Support: Config Push**
3. Click on Collections Tab
4. Edit Object named Config Push Time
5. Change the SQL Query

   From:

   ```
   select if(timestampdiff(minute,start_time,end_time) is null,"-
   1",timestampdiff(minute,start_time,end_time)) td from
   master_logs.system_runs where sp_id = 79 and mod_id = (select
   id from master.system_settings_licenses where function = 2 and
   ha_status = 1) order by start_time desc limit 1,1
   ```

   To

   ```
   select if(timestampdiff(minute,start_time,end_time) is null,"-
   1",timestampdiff(minute,start_time,end_time)) td from
   master_logs.system_runs where sp_id = 79 and mod_id = (select
   id from master.system_settings_licenses where `function` = 2
   and ha_status = 1) order by start_time desc limit 1,1
   ```

   Notice the difference in the queries: the word function is in quotes `function`
6. Click Save and close the window.
7. Go to System > Manage > Dynamic Applications.
8. Search for **Support: Maintenance Tracking**
9. Click on Collections Tab
10. Edit Object named **Pruner Time Aggregate**
11. Change the SQL Query

    From:

    ```
    select timestampdiff(minute,start_time,end_time) tsd from
    master_logs.system_runs where mod_id = (select id from
    master.system_settings_licenses where function in (2,1) and
    ha_status = 1) and sp_id = 4 order by start_time desc limit 1,1
    ```

    To

    ```
    select timestampdiff(minute,start_time,end_time) tsd from
    master_logs.system_runs where mod_id = (select id from
    master.system_settings_licenses where `function` in (2,1) and
    ha_status = 1) and sp_id = 4 order by start_time desc limit 1,1
    ```

12. Click Save.
13. Edit Object named **Pruner Time Aggregate Percent**
14. Change the SQL Query

    From:

```
select timestampdiff(minute,start_time,end_time) /1440 * 100 as
tsd from master_logs.system_runs where mod_id = (select id from
master.system_settings_licenses where function in (2,1) and
ha_status = 1) and sp_id = 4 order by start_time desc limit
1,1;
```

    To

```
select timestampdiff(minute,start_time,end_time) /1440 * 100 as
tsd from master_logs.system_runs where mod_id = (select id from
master.system_settings_licenses where `function` in (2,1) and
ha_status = 1) and sp_id = 4 order by start_time desc limit
1,1;
```

15. Click Save.
16. Edit Object named **Pruner Time Label**
17. Change the SQL Query

    From:

```
select concat(b.name,' [',b.ret_id,']') tn,
if(timestampdiff(minute,a.date_start,a.date_end) is null,"-
1",timestampdiff(minute,a.date_start,a.date_end)) td from
master.system_settings_retention b left join
master_logs.pruner_log a on a.p_id = b.ret_id and a.date_start
>= (select start_time from master_logs.system_runs where mod_id
= (select id from master.system_settings_licenses where
function in (2,1) and ha_status = 1) and sp_id = 4 order by
start_time desc limit 1,1) and a.date_start < (select
start_time from master_logs.system_runs where mod_id = (select
id from master.system_settings_licenses where function in (2,1)
and ha_status = 1) and sp_id = 4 order by start_time desc limit
1) order by b.ret_id asc
```

    To

```
select concat(b.name,' [',b.ret_id,']') tn,
if(timestampdiff(minute,a.date_start,a.date_end) is null,"-
1",timestampdiff(minute,a.date_start,a.date_end)) td from
master.system_settings_retention b left join
master_logs.pruner_log a on a.p_id = b.ret_id and a.date_start
>= (select start_time from master_logs.system_runs where mod_id
= (select id from master.system_settings_licenses where
`function` in (2,1) and ha_status = 1) and sp_id = 4 order by
start_time desc limit 1,1) and a.date_start < (select
start_time from master_logs.system_runs where mod_id = (select
id from master.system_settings_licenses where `function` in
```

```
(2,1) and ha_status = 1) and sp_id = 4 order by start_time desc
limit 1) order by b.ret_id asc
```

18. Click Save.
19. Edit Object named **Pruner Times**
20. Change the SQL Query

    From:

```
select concat(b.name,' [',b.ret_id,']') tn,
if(timestampdiff(minute,a.date_start,a.date_end) is null,"-
1",timestampdiff(minute,a.date_start,a.date_end)) td from
master.system_settings_retention b left join
master_logs.pruner_log a on a.p_id = b.ret_id and a.date_start
>= (select start_time from master_logs.system_runs where mod_id
= (select id from master.system_settings_licenses where
function in (2,1) and ha_status = 1) and sp_id = 4 order by
start_time desc limit 1,1) and a.date_start < (select
start_time from master_logs.system_runs where mod_id = (select
id from master.system_settings_licenses where function in (2,1)
and ha_status = 1) and sp_id = 4 order by start_time desc limit
1) order by b.ret_id asc
```

    To

```
select concat(b.name,' [',b.ret_id,']') tn,
if(timestampdiff(minute,a.date_start,a.date_end) is null,"-
1",timestampdiff(minute,a.date_start,a.date_end)) td from
master.system_settings_retention b left join
master_logs.pruner_log a on a.p_id = b.ret_id and a.date_start
>= (select start_time from master_logs.system_runs where mod_id
= (select id from master.system_settings_licenses where
`function` in (2,1) and ha_status = 1) and sp_id = 4 order by
start_time desc limit 1,1) and a.date_start < (select
start_time from master_logs.system_runs where mod_id = (select
id from master.system_settings_licenses where `function` in
(2,1) and ha_status = 1) and sp_id = 4 order by start_time desc
limit 1) order by b.ret_id asc
```

21. Click Save.

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