SL1 – Devices section

Version 1.0

Prepared by: Andrés Felipe Vargas

Created: 07/24/2023

Last Updated: 07/27/2023

Status: In progress

1. Revision History

When?	Who?	What?

2. Table of Contents

3. Overview

3.1. Overview/Purpose

This document defines the testing plan for the SL1 – Devices section, classic and new UI. It will describe the scope of the tests, risk analysis, test methodology, test strategy, proposed milestones, the risks and contingencies, dependencies, and entrance/exit QE criteria.

This test plan is based on what was decided to be covered according to the QE tester criteria.

4. Approval Process

4.1. Approvers

- QE Manager – Dante Villarroel
- QE Lead – Carlos Rojas

4.2. Reviewers

- QE Team –

5. Test Objectives

5.1. Overview of the Product

The ScienceLogic SL1 product is a platform able to monitor network devices through different protocols and architectures retrieving information on real time about the state of each one of them. The section that is being under test with this test plan is the Devices section where devices can be discovered and aligned to the platform to be monitored.

Current version: 11.1.0

5.2. Definitions

5.3. Reference material

[Provide a complete list of all documents and other sources referenced in the test plan. Links to the actual location of these listed documents should be used here if applicable.]

- Sciencelogicdevice_mgmt_11-1-0 – Device Management

5.4. Bounds

5.4.1. Scope as it relates to the Project

This section defines the boundaries of the test plan. It is never possible to test all configurations or every feature in thorough detail. Nor can we anticipate all possible customer configurations. However, we will define the main features and configurations that we will test and their test priorities according to risk analysis performed for each feature.

5.4.1.1. Risk Analysis

Risk analysis helps us determinate the tests priorities for each feature using:

"Likelihood" is the probability of the feature to fail to operate correctly, these measures were gathered via a brainstorm meeting with all development team a long with Development manager.

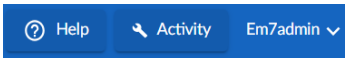
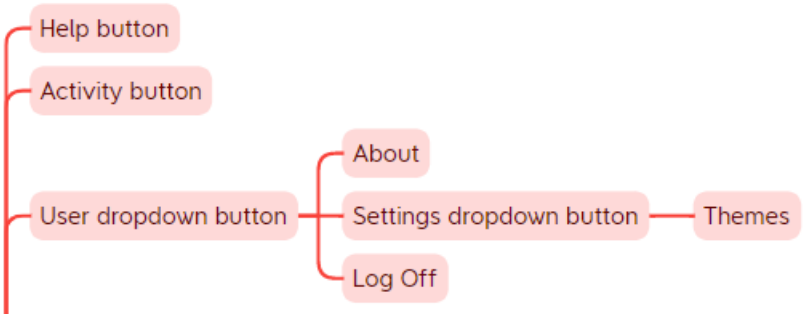
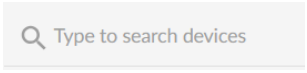
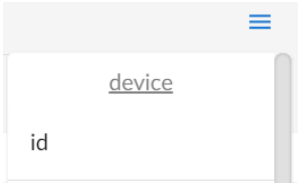
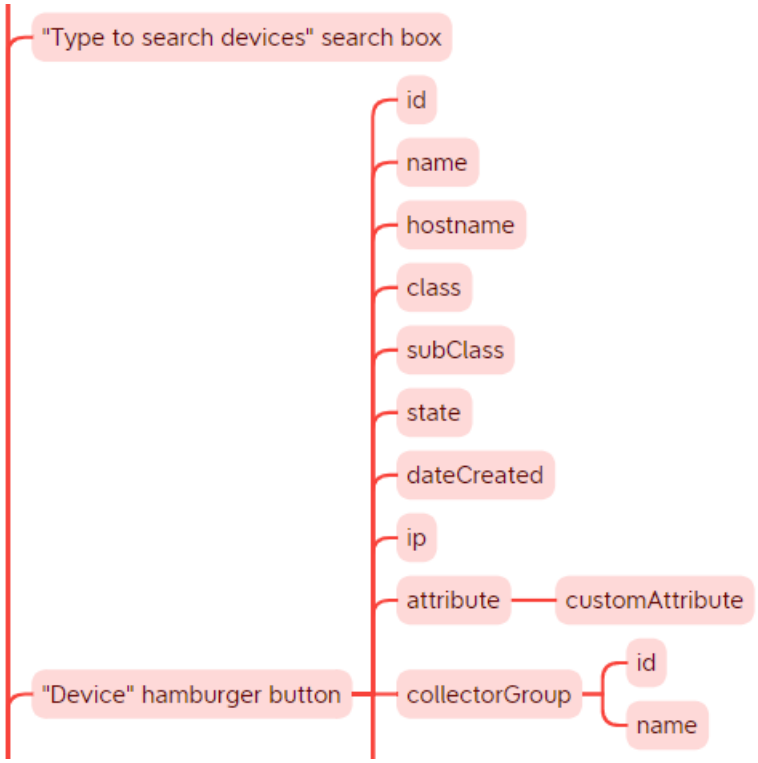
"Impact" is the impact on the user if this feature fails to operate correctly, these measures were gathered with the help of Marketing management.

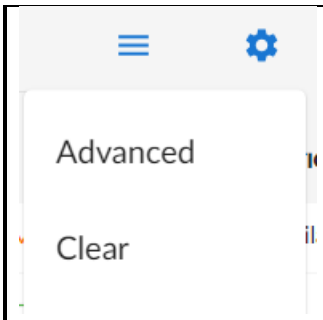
"Priority" is the priority that QE will give for testing the feature. (6 is the highest)

FEATURES	Attributes	Likelihood	Impact	Priority
Device page (New UI)		3	6	6
Device Manager (Classis UI)		3	6	6
Device Classes (New UI)		1	3	2
Device Categories (New UI)		1	3	3
Device Groups (Classic UI)		2	3	3
Hardware (Classic UI)		3	3	3
Templates (Classic UI)		3	3	3
Discovery sessions (New UI)		4	6	6
Device Components (Classic UI)		4	4	3
Vanished Device Manager (Classic UI)		4	1	1
Processes (Classic UI)		4	3	3

Testing will start with features with higher priorities and will descend accordingly.

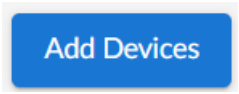
5.4.1.2. Features will be tested

Features	Test Approach
1. Device page (New UI)	Priority - High
1.1. Top buttons 	
1.2. Search devices options  	

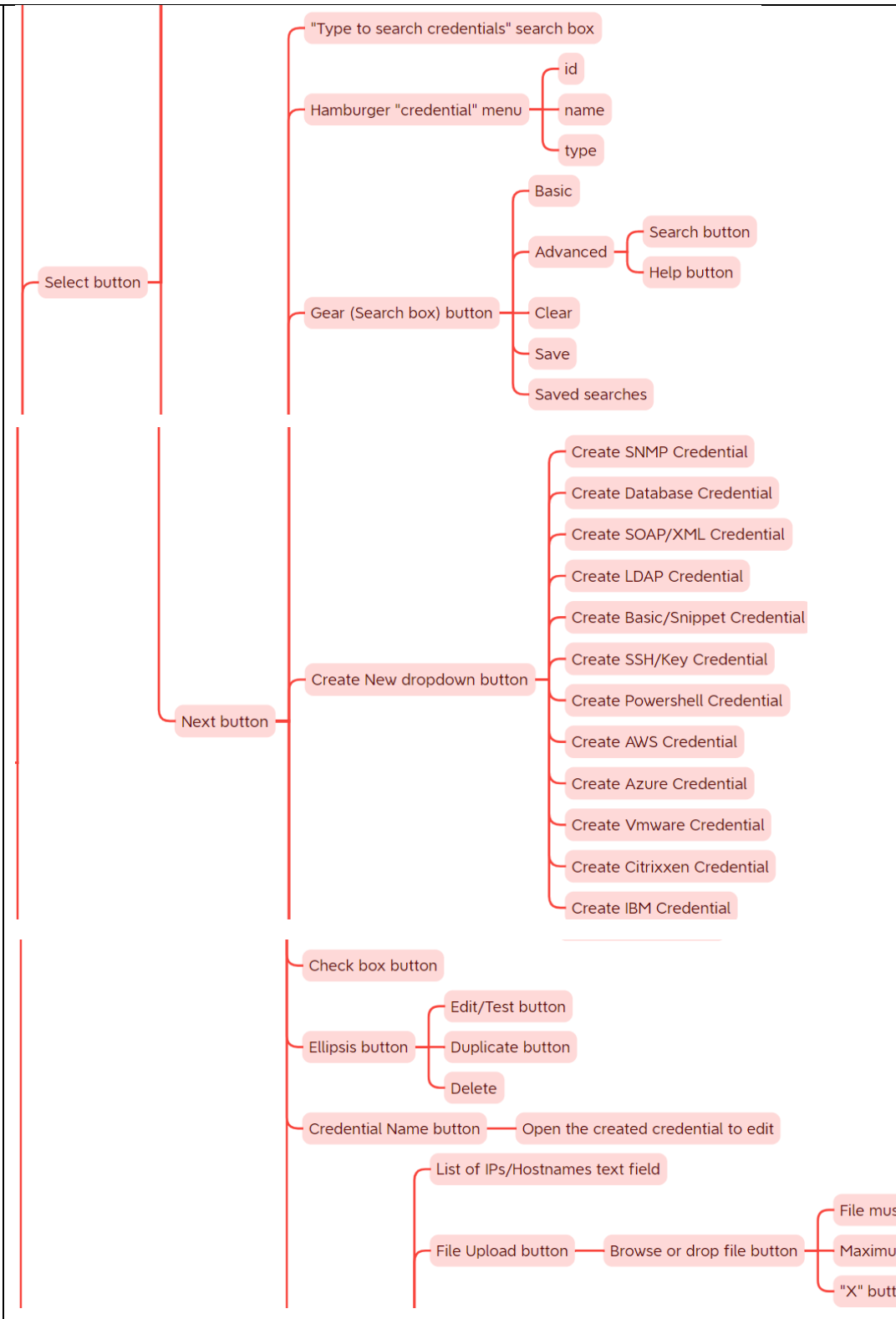


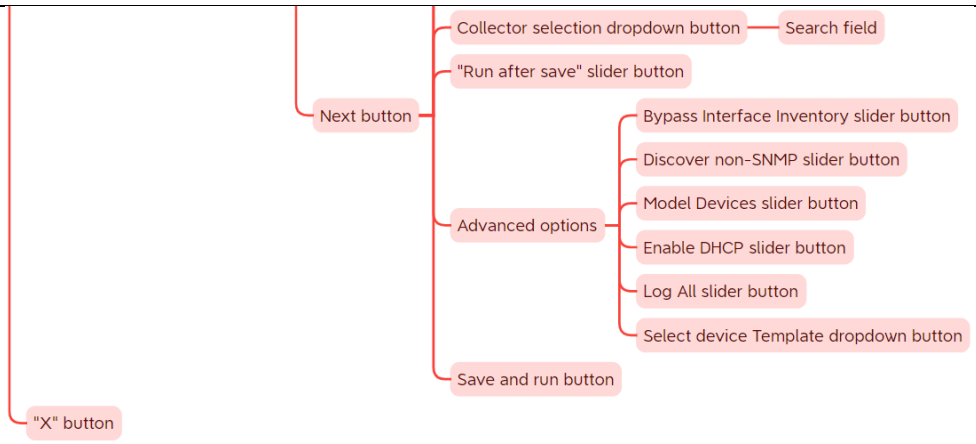
- Gear (Search box) button
  - Basic
  - Advanced
  - Clear
  - Save
  - Saved searches
  - deviceClass
    - name
    - description
    - virtualType
    - logicalName
  - deviceCategory
    - id
    - name
  - deviceGroup
    - id
    - name
  - organization
    - id
    - company

1.3. Add devices button

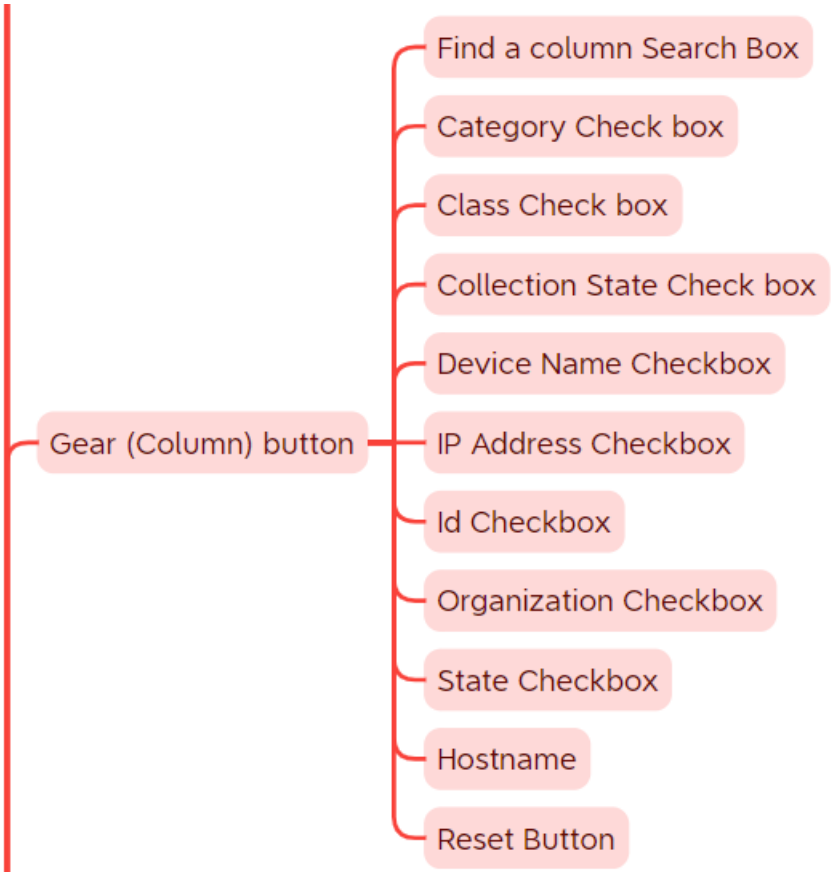


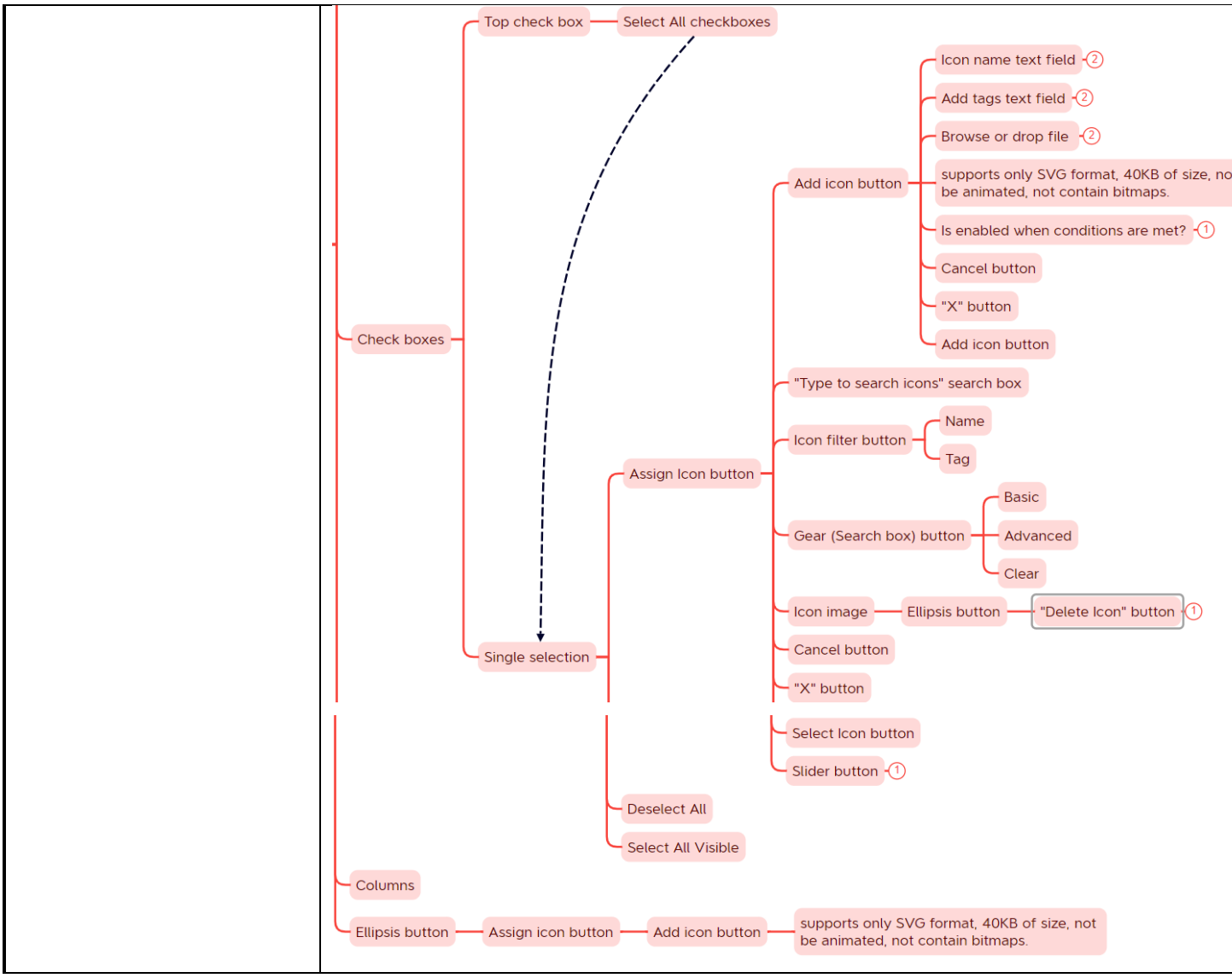
- Other ways to add devices
  - Discovery session name text field
  - Description text field
  - Select organization dropdown button
  - Back button


Select button
"Type to search credentials" search box
Hamburger "credential" menu
id
name
type
Gear (Search box) button
Basic
Advanced
Search button
Help button
Clear
Save
Saved searches
Next button
Create New dropdown button
Create SNMP Credential
Create Database Credential
Create SOAP/XML Credential
Create LDAP Credential
Create Basic/Snippet Credential
Create SSH/Key Credential
Create Powershell Credential
Create AWS Credential
Create Azure Credential
Create Vmware Credential
Create Citrixxen Credential
Create IBM Credential
Check box button
Ellipsis button
Edit/Test button
Duplicate button
Delete
Credential Name button
Open the created credential to edit
List of IPs/Hostnames text field
File Upload button
Browse or drop file button
File mus
Maximu
"X" butt

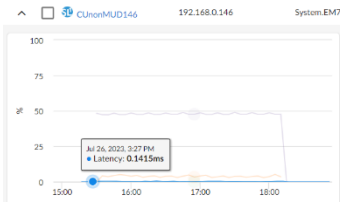


1.4. Columns buttons

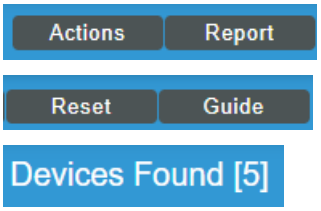
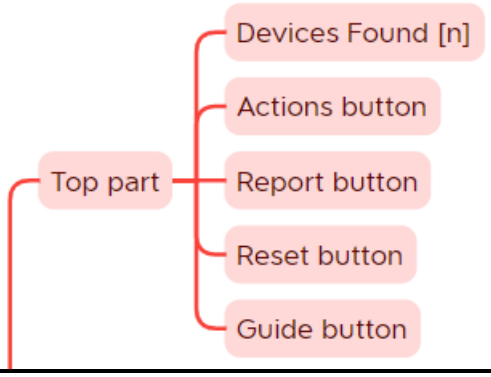
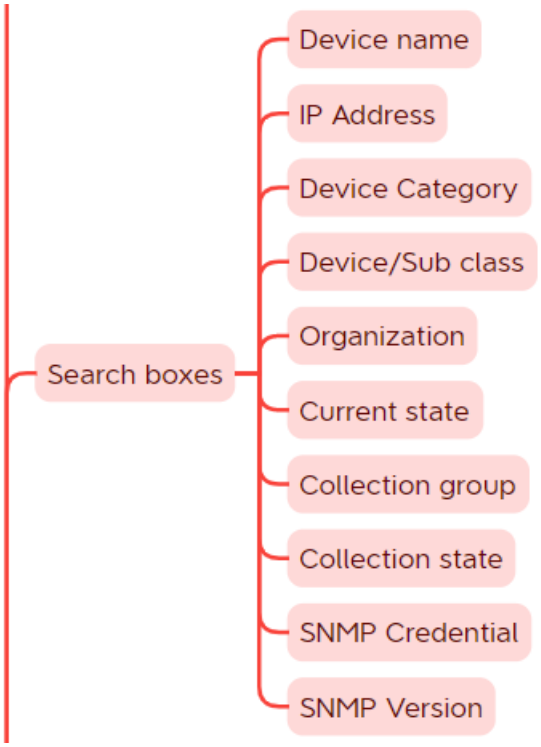


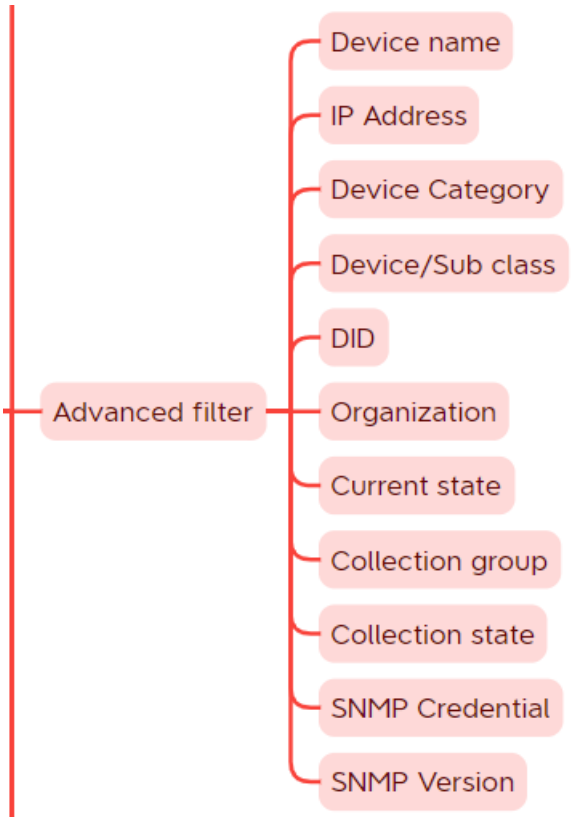
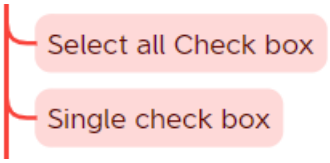

Check boxes
Top check box
Select All checkboxes
Single selection
Assign Icon button
Add icon button
Icon name text field
Add tags text field
Browse or drop file
supports only SVG format, 40KB of size, no
be animated, not contain bitmaps.
Is enabled when conditions are met?
Cancel button
"X" button
Add icon button
"Type to search icons" search box
Icon filter button
Name
Tag
Gear (Search box) button
Basic
Advanced
Clear
Icon image
Ellipsis button
"Delete Icon" button
Cancel button
"X" button
Select Icon button
Slider button
Deselect All
Select All Visible
Columns
Ellipsis button
Assign icon button
Add icon button
supports only SVG format, 40KB of size, not
be animated, not contain bitmaps.

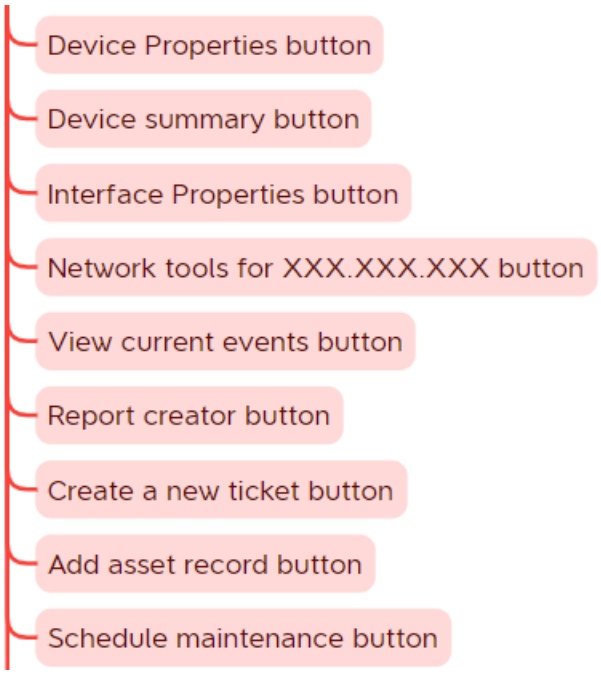
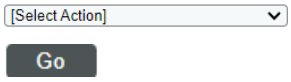
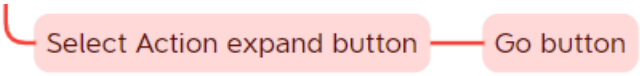
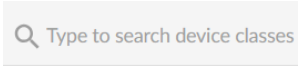
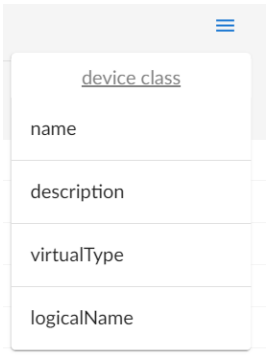
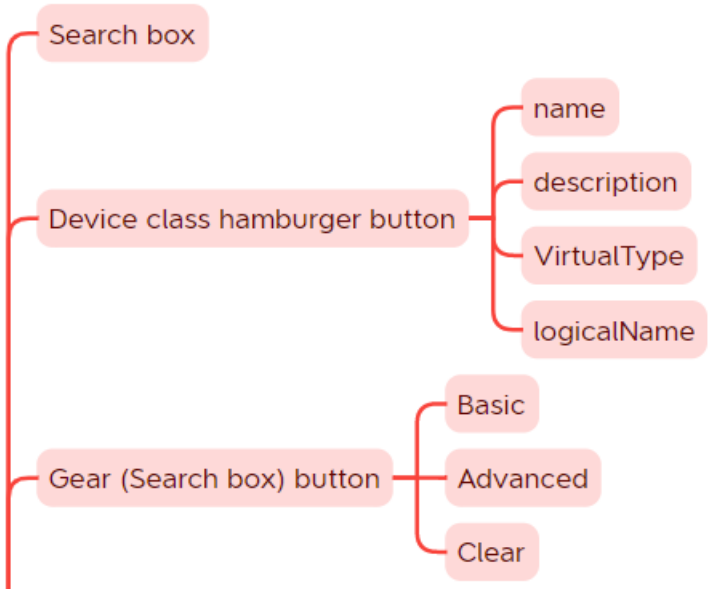
1.5. Device Drawer



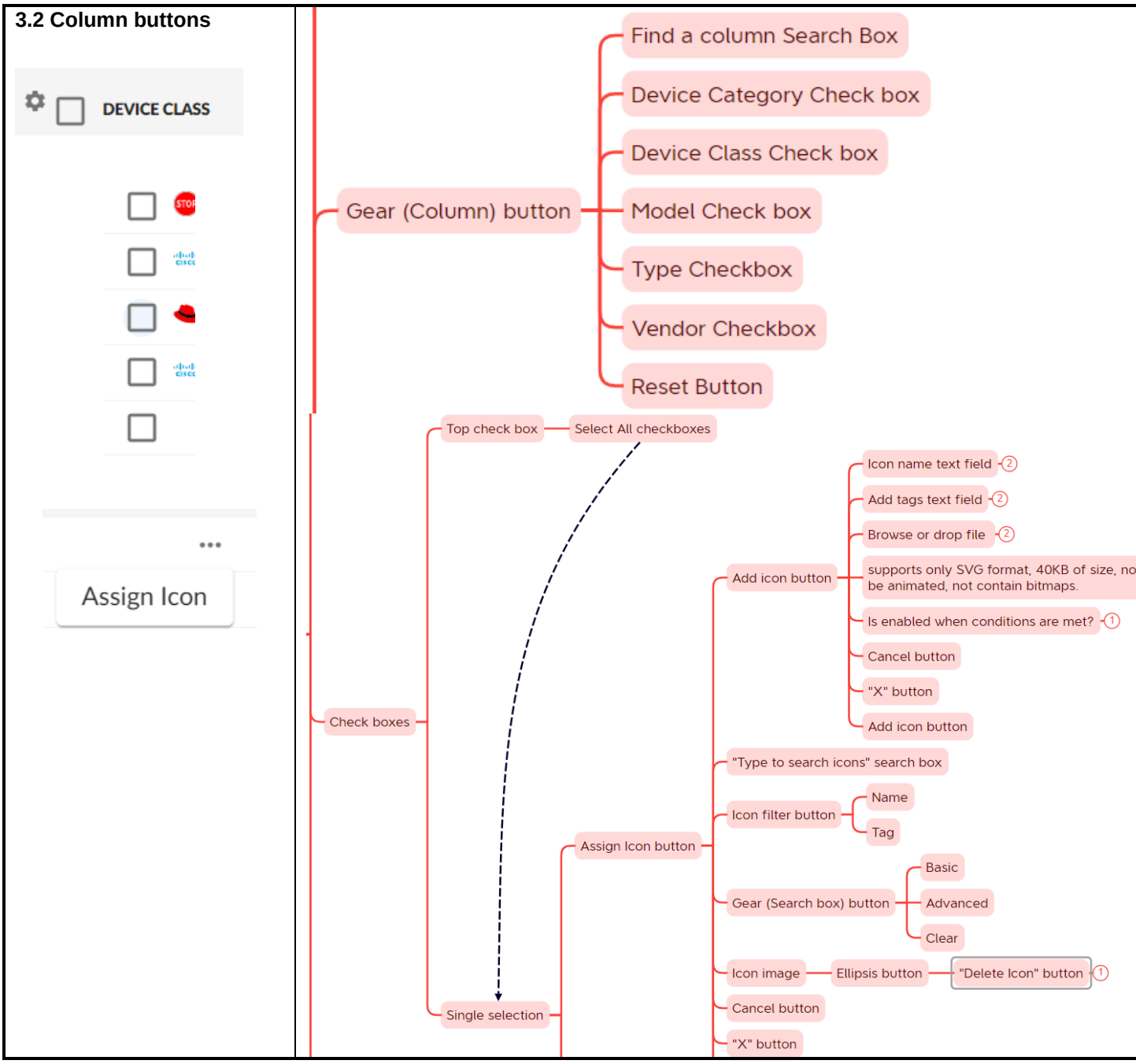
- Expand button
  - Device Drawer
    - Vital graphs
      - Zoom in
      - Reset Zoom
    - Tools pane
      - Tools search bar
        - Availability
        - Ping
        - Who Is
        - Port Scan
        - Deep Port Scan
        - ARP Lookup
        - ARP Ping
        - Trace Route
    - Logs pane
      - Device logs Search box
      - deviceLog filter button
        - id
        - message
        - datebefore
        - dateafter
        - severity
        - source
        - eventid
      - Gear (Search box) button
        - Basic
        - Advanced
        - Clear
      - Gear (Column) button
        - Find a column Search Bo
        - Date/Time Check box
        - Message Check box
        - Severity Check box
        - Reset Button

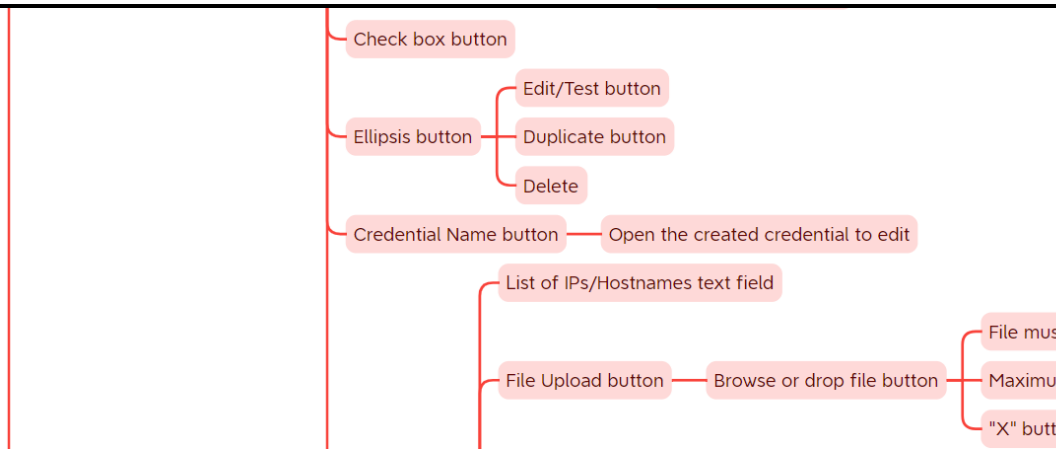
2. Device Manager (Classic UI)	Priority -High
2.1. Top part 	
2.2. Search boxes 	

2.3. Advanced filter  	
2.4. Check boxes  	

2.5. Device buttons    	
2.6. Action buttons  	
3. Device classes (New UI)	Priority - Low
3.1 Search devices options   	

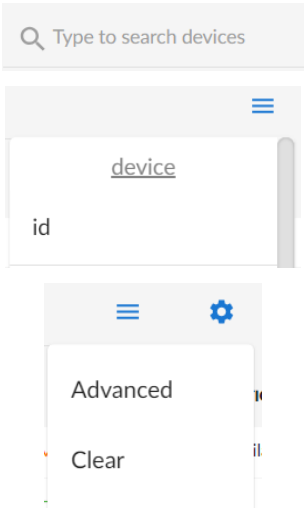
3.2 Column buttons

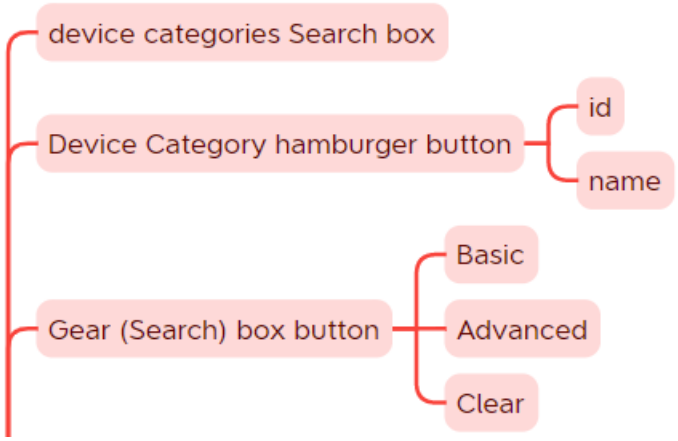




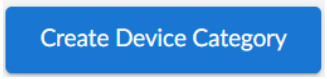
4. Device Categories (New UI)	Priority - Medium

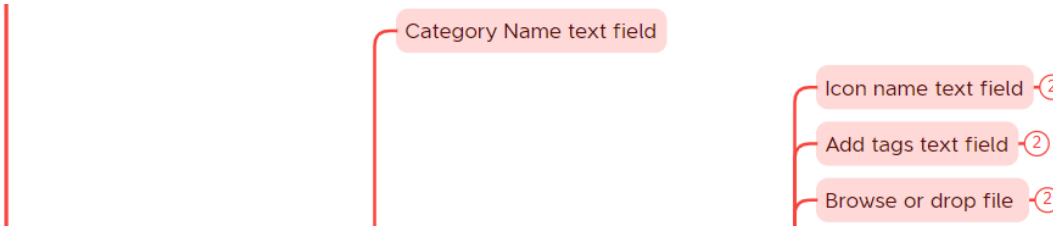
4.1 Search devices options

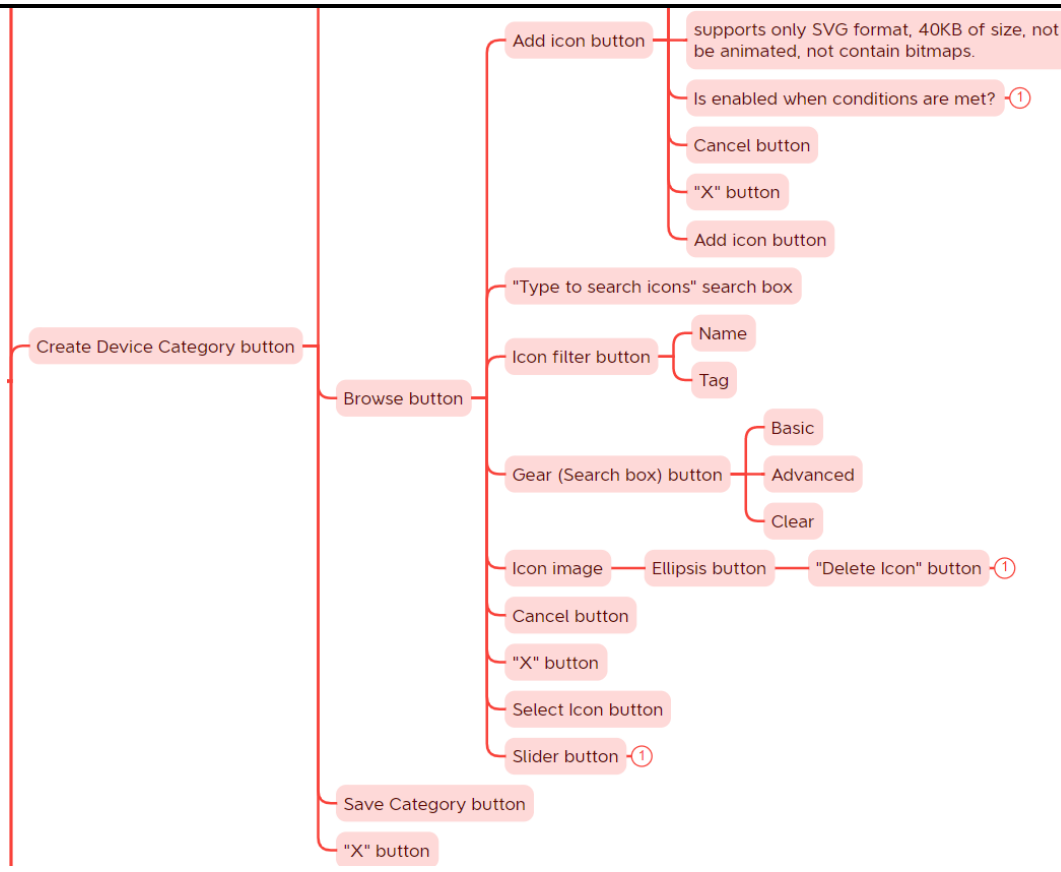




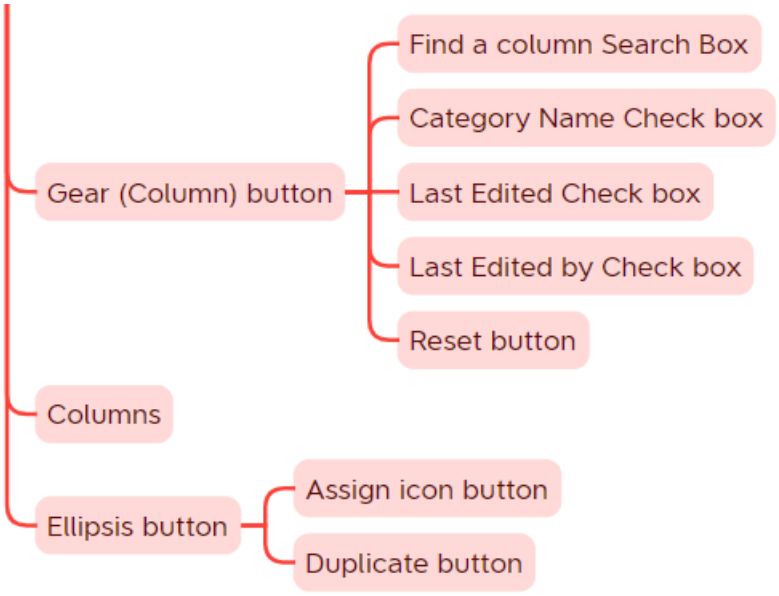
4.2 Create Device Category

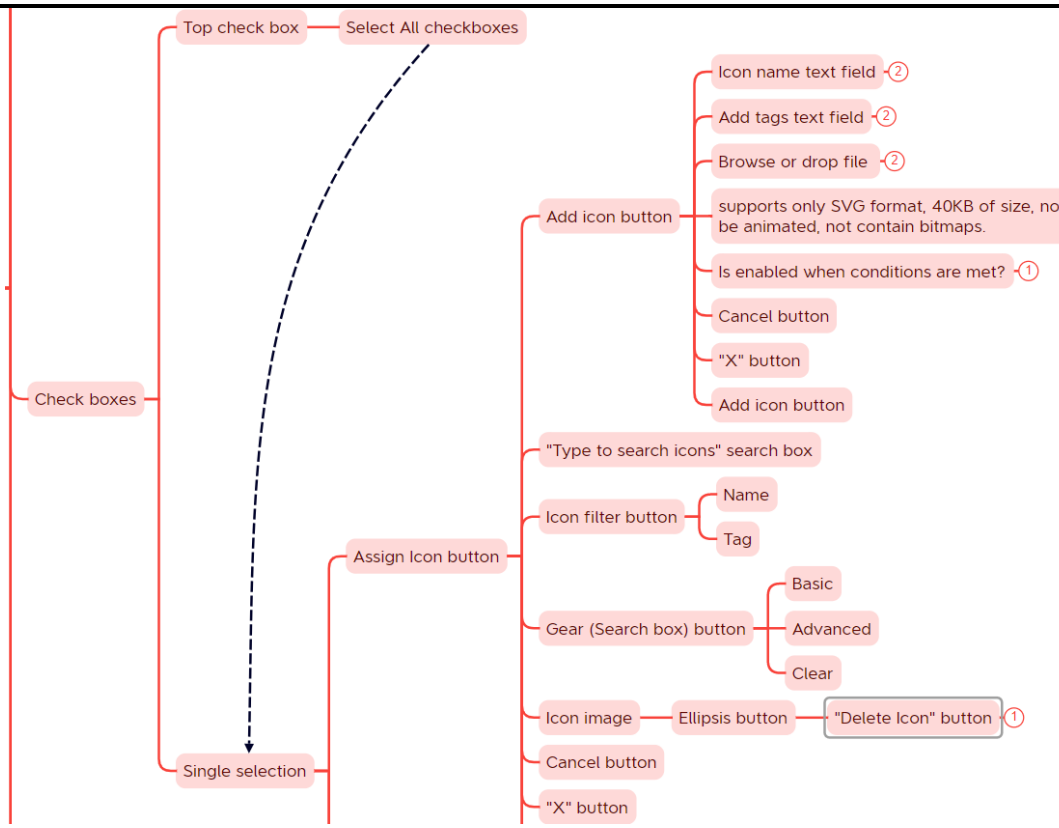






4.3 Column buttons

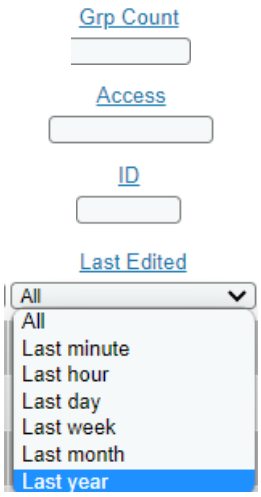


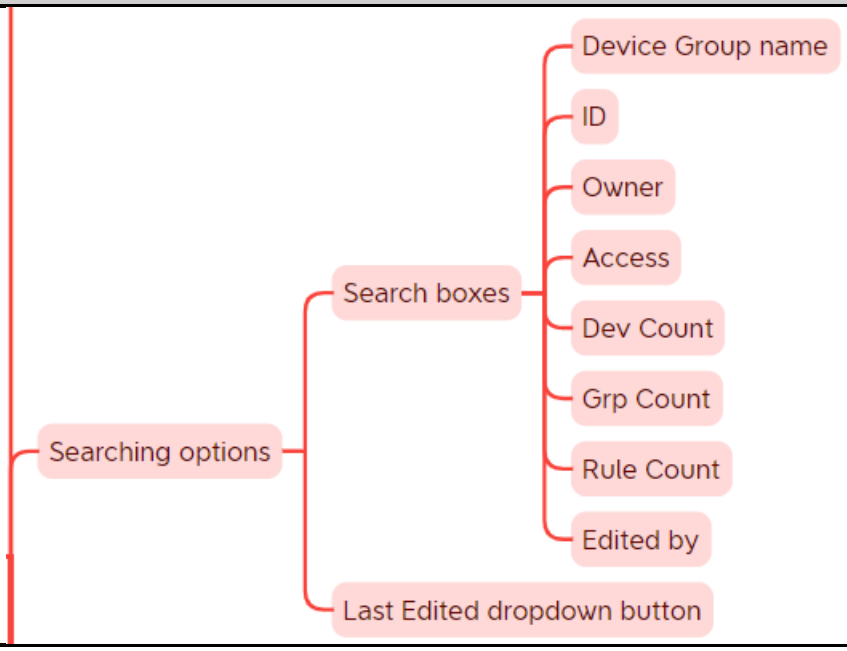


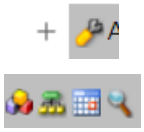
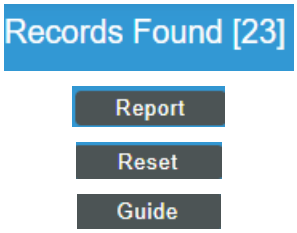
5. Device Groups (Classic UI)

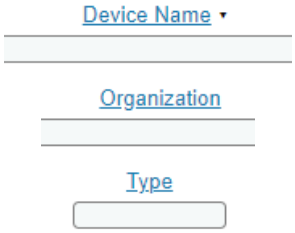
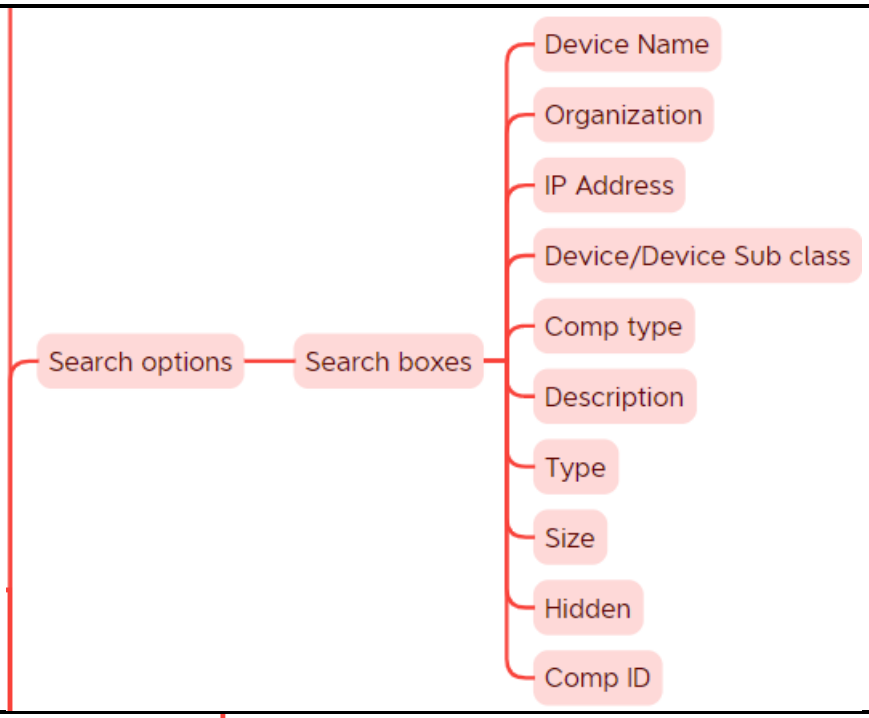
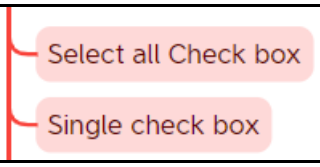
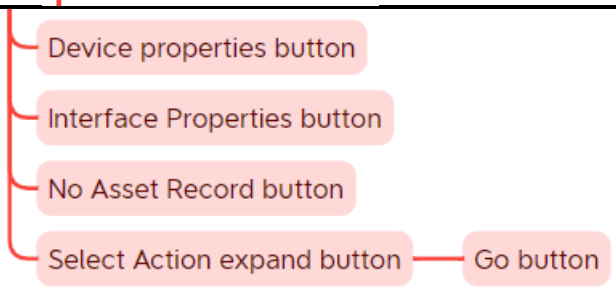
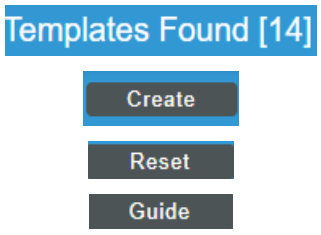
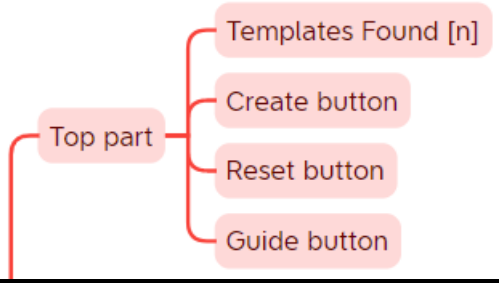
Priority - Medium

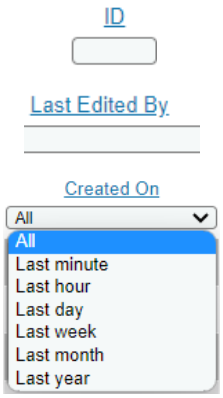
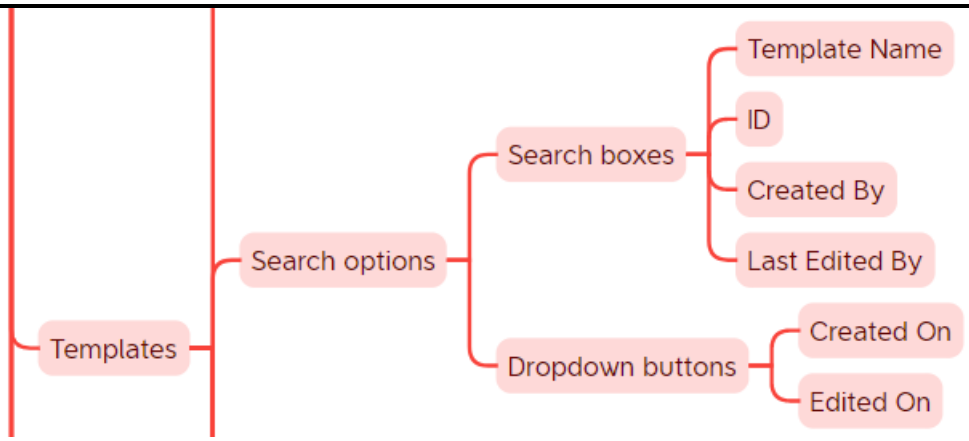
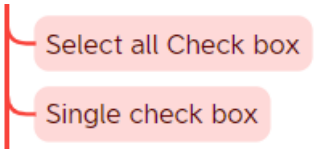
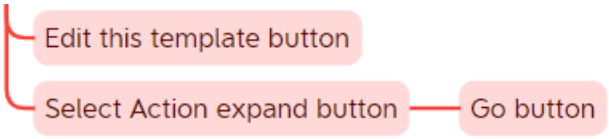
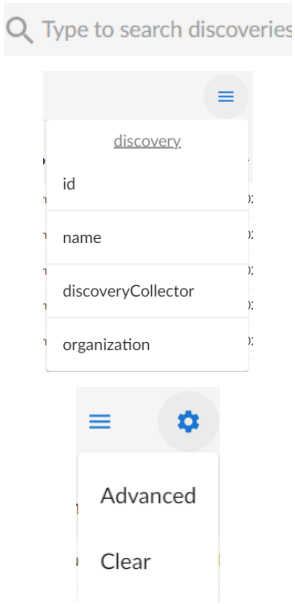
5.1 Search options



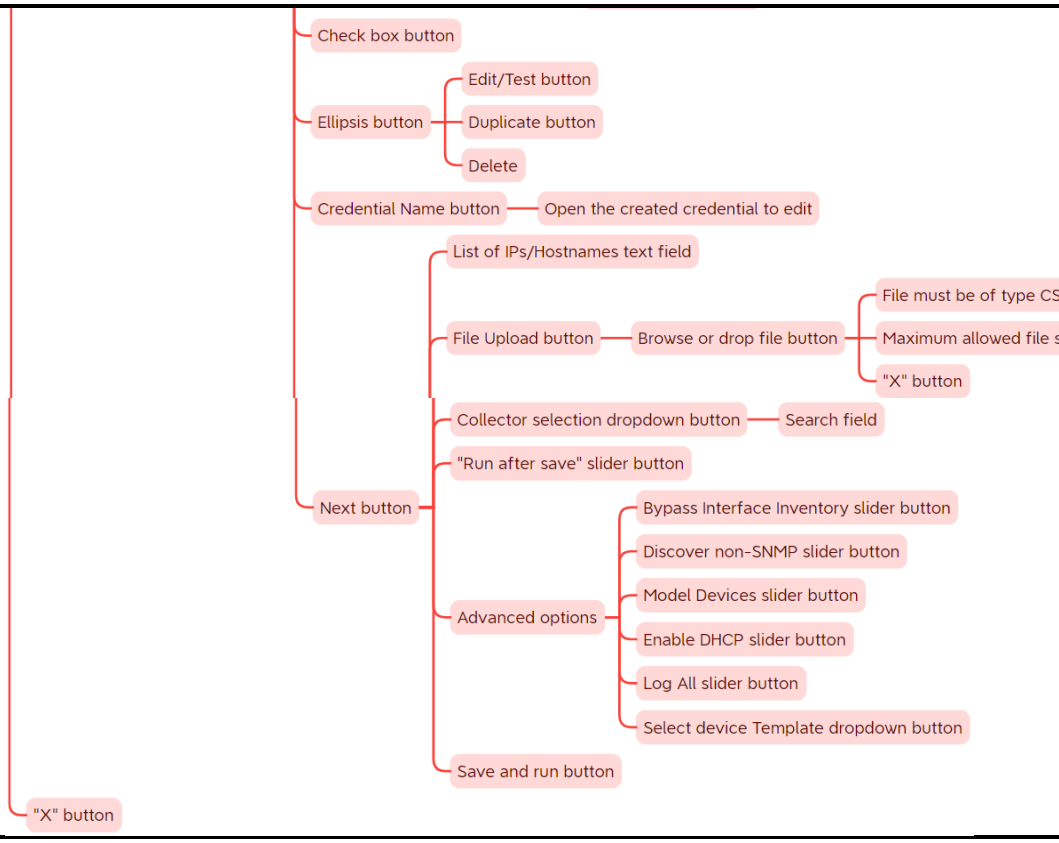


5.2 Checkboxes 	Select all Check box Single check box
5.3 Device group buttons 	View Device button Edit this device group button Bulk device configuration button Group Map View button Group Scheduling button List devices matching dynamic rules button Select Action expand button — Go button
6. Hardware (Classic UI)	Priority - Medium
6.1 Top part 	Top part Device Hardware Found [n] Report button Reset button Guide button

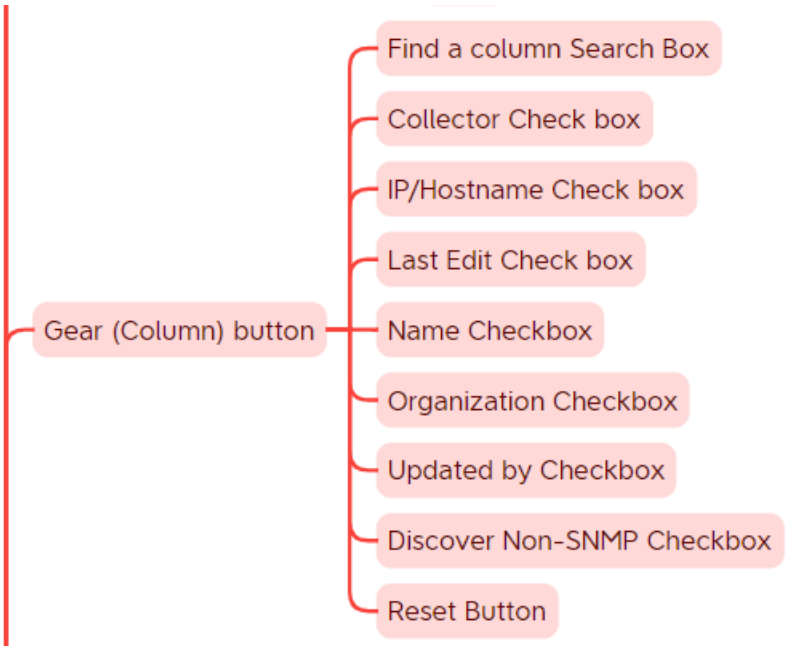
6.2 Search options 	
6.3 Checkboxes 	
6.4 Device group buttons	
7. Templates (Classic UI)	Priority - Medium
7.1 Top part 	

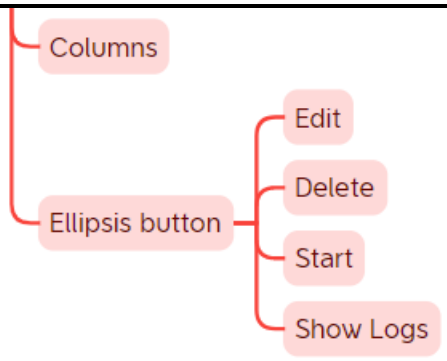
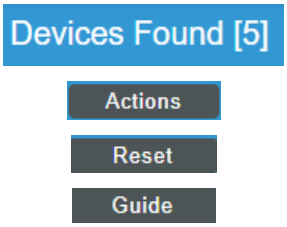
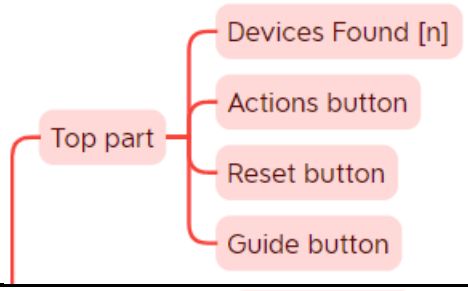
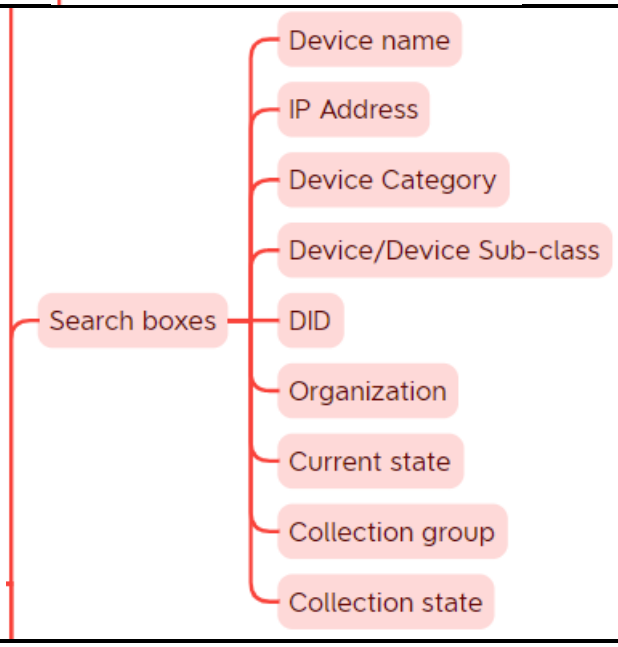
7.2 Search options 	
7.3 Checkboxes 	
7.4 Device group buttons 	
8. Discovery sessions (New UI)	Priority: High
8.1 Search options 	

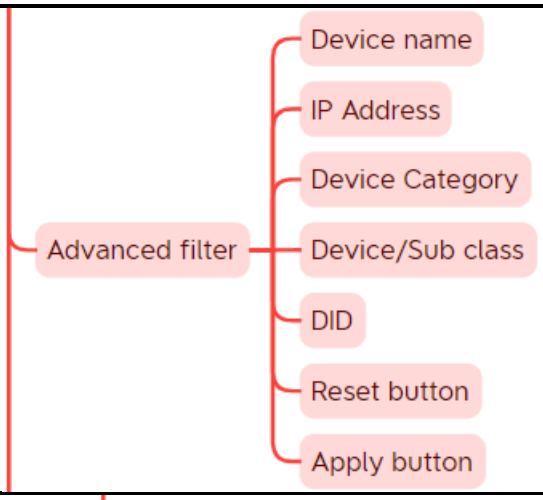
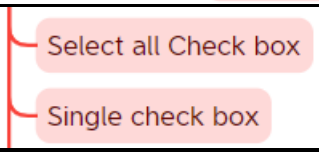
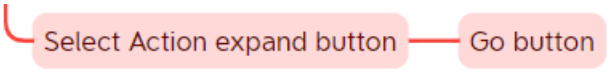
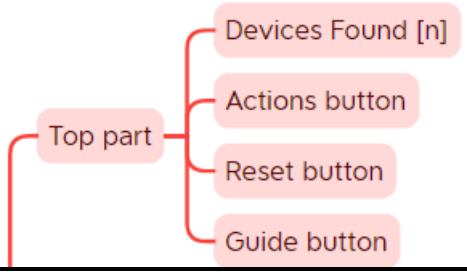
8.2 Add devices	

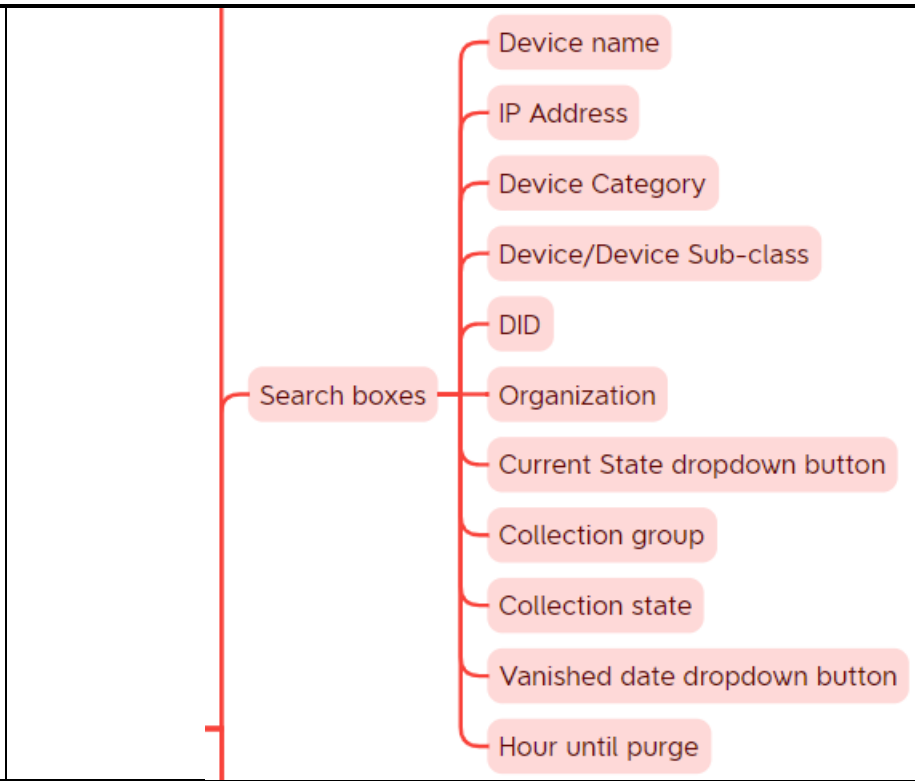
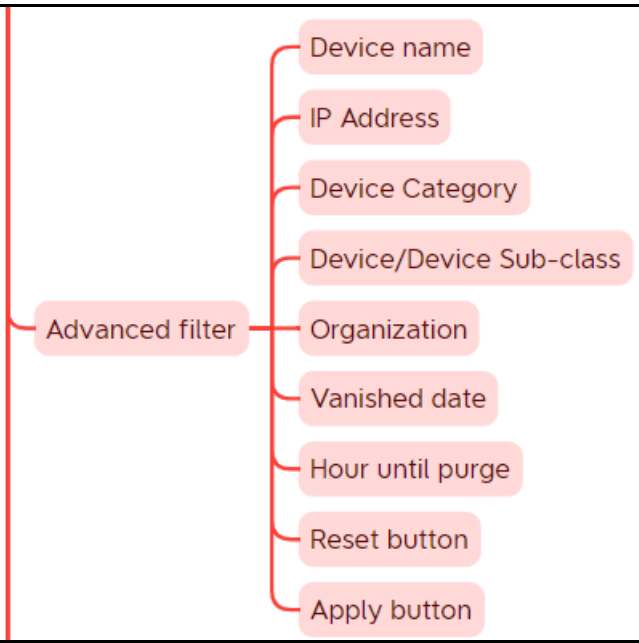
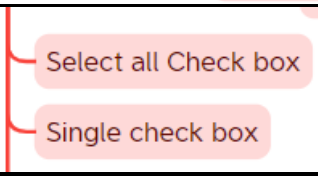
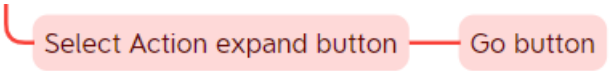


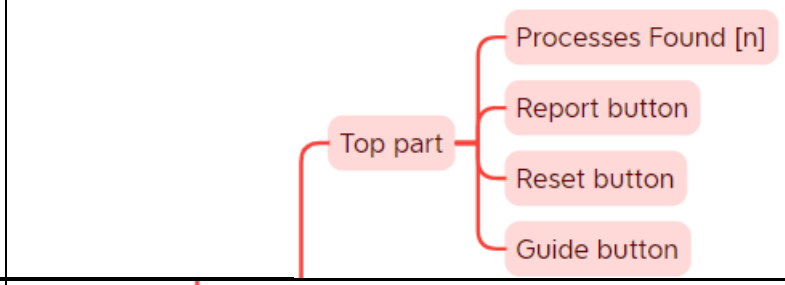
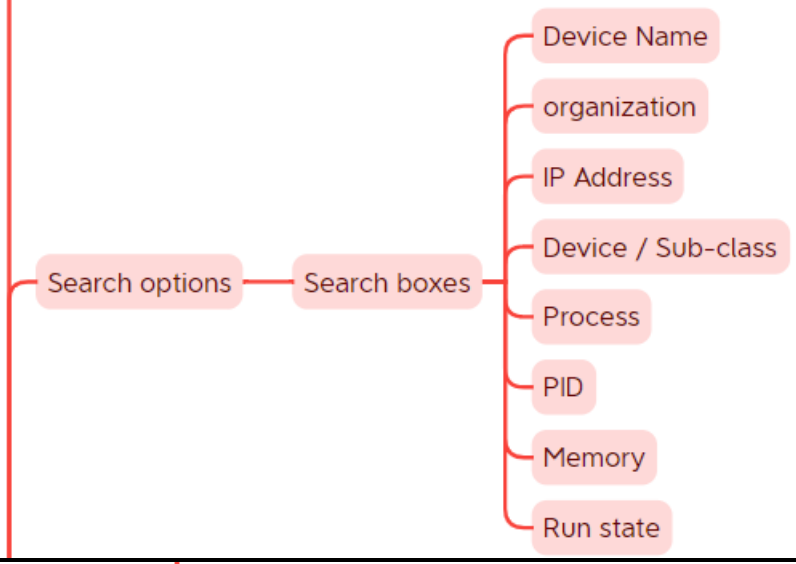
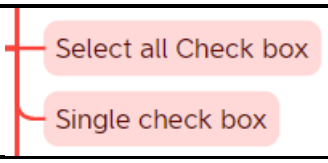
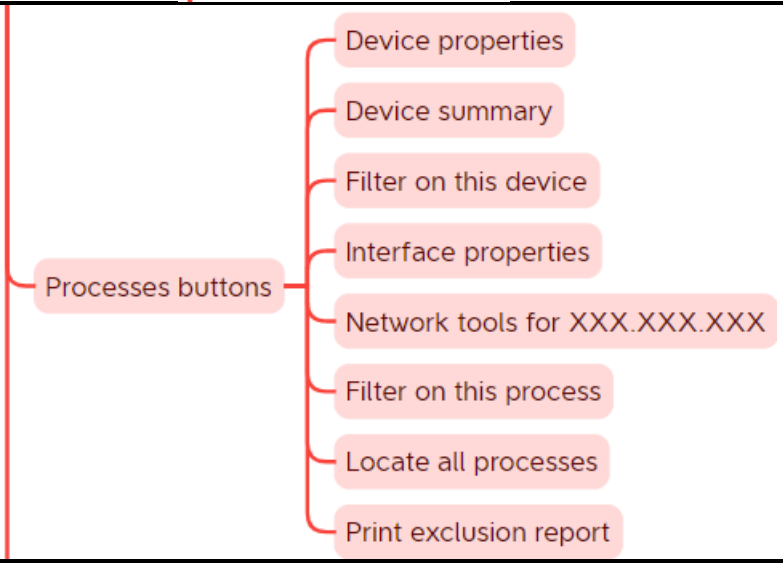
8.3 Column buttons

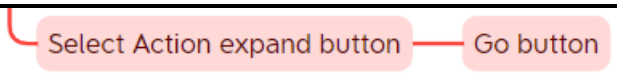


... ...	
9. Device components (Classic UI)	Priority -Mediujm
9.1 Top part 	
9.2 Search boxes	

9.3 Advanced filter	
9.4 Check boxes	
9.5 Action buttons	
10. Vanished Device Manager (Classic UI)	Priority - Low
10.1 Top part	

10.2 Search boxes	
10.3 Advanced filter	
10.4 Check boxes	
10.5 Action button	

11. Processes (Classic UI)	Priority - Medium
11.1 Top part	
11.2 Search options	
11.3 Check boxes	
11.4 Processes buttons	

11.5 Processes buttons	

5.4.1.3. Platforms will be tested

ScienceLogic SL1 – 11.1.0 – Devices section

The following are some scenarios to take into account in the test design.

Scenario 1

Devices are discovered in a SL1 All in one appliance

Scenario 2

Devices are discovered in a Distributed appliance

Scenario 3

Devices are discovered twice in a SL1 All in one appliance

Scenario 4

Devices are discovered twice in a Distributed appliance

Scenario 5

Two devices can be filtered at the same time in the Devices page

Scenario 6

More than one device can be discovered by IP

Scenario 7

A credential can be created while creating a discovery session

Scenario 8

A credential can be tested while creating a discovery session

5.4.1.4. Features will not be tested or will be tested less

Items	Reasons
3. Services	Requires additional time and it is limited.
4. Software	Requires additional time and it is limited.

5.4.1.5. Platforms will not be tested

5.4.1.6. Configurations will not be tested

Those required for enable configurations in Services and Software sub-sections.

5.4.2. Scope as it relates to the product.

Devices section. Devices discovery by most common network protocols using different versions.

5.4.2.1. Limits

Only is going to be tested the Devices sections and Services, Software sub-sections are going to be out of scope.

Devices to discover: Windows Server 2012 R2, Linux Ubuntu 22.04.2, AIO and Dist non-MUD appliances and virtual devices.

Browser to test: Google Chrome and Microsoft Edge

Platforms: Windows and Android

SNMP Versions: 2 and

5.4.3. Exploratory Testing

Exploratory tests are going to help to get familiar with the platform and functions that can be performed using it, as well as making some exploratory tours to be able to identify the inputs, data, configurations, fields, button functions and content.

5.4.4. Acceptance Testing

Is intended to verify if the user expectations and documentation lines are met as supposed. The product requirements must be accomplished.

- Test that devices from supported protocols can be discovered
- Test that the devices class and sub-class are proper aligned
- Test that a credential can be created
- Test that a discovery session can be created
- Test that a discovery session can be executed
- Test that a credential can be tested
- Test that the device information is displayed in the device manager
- Test that devices can be managed
- Test that a device can be searched using filters
- Test that devices logs are generated

5.4.5. Function Testing

Is intended to verify if processes can be performed using the available platform resources.

- Test that a device class can be selected using its check box
- That that an icon can be assigned to a device class
- Test that a discovery session can be deleted
- Test that the device drawer is displayed
- Test that devices that match dynamic rules are displayed
- Test that the device properties are displayed in other browser window by clicking the key icon
- Test that devices from a group are displayed

5.4.6. Negative testing

Is intended to verify how invalid data or inputs are supported and managed by the platform.

- Test that a 41 KB SVG icon can be added
- Test that a PDF file can be used to create an icon
- Test that a device without IP Address/Hostname can be discovered
- Test that a credential can be created with any empty mandatory field
- Test that a discovery session can be executed with no credential selection

5.4.7. Compatibility testing

Is intended to verify that the platform works well in different devices, browsers and platforms.

- Test that the product can work as expected using the Google Chrome desktop browser in Windows
- Test that the product can work as expected using the Microsoft Edge mobile browser in Android

5.4.8. Accessibility testing

Is intended to verify if the product can be effectively used by all individuals, including those with disabilities or special needs, if meets relevant accessibility standards and works with O.S accessibility features.

- Test that can make a Key-board navigation through the platform
- Test that the platform maintains usability and functionality when users zoom in or out of the interface
- Test that is a clear and visible focus indicator on interactive elements when navigating with the keyboard.
- Test that all interactive elements have appropriate descriptive labels
- Test that the colors used in the platform have sufficient contrast to facilitate reading and identification of elements
- Test that the platform is accessible and usable on mobile devices, accommodating users with disabilities using smartphones

5.4.9. API Testing

Is intended to verify if HTTP requests can be performed using an external tool or the API Browser to make operations that are inside the device section.

- Test that can be created a discovery session using a POST request
- Test that a device category can be seen using a GET request
- Test that the device class properties can be seen using a GET request
- Test that a device group can be deleted using a DELETE request
- Test that a virtual device can be created using a POST request

5.4.10. Hardware Specific

Host:

CPU: 11th Gen Intel(R) Core(TM) i7-1165G7
Storage: 256 GB SSD M.2 Nvme
RAM: 20.0 GB

AIO non-MUD Appliance:

CPU cores: 3
Storage: 80GB
RAM: 4G

Distributed non-MUD Appliances:

CPU cores: 3
Storage: 80GB, 60GB for Data collectors
RAM: 4G

5.4.11. Documentation

sciencelogic_device_mgmt_11-1-0 – SL1 Device Management 11.1.0
sciencelogic_api_8-14-0 – ScienceLogic API

6. Dependencies and Responsibility

6.1. Product Management

The Product Management team is in charge of gathering requirements from customers.

6.2. Product Development

The Product Development team reviews the requirements gathered by the Product Management team. Based on the requirements that are agreed between these teams, the Product Development team writes an Engineering Specification document, which includes the functional and internal specifications for each module.

6.3. Product Quality Engineering

The Quality Engineering team is in charge of reviewing all the specifications established in the PRD and Engineering Specifications documents. Based on these, the team will be responsible for testing the product to verify the requirements are satisfied.

This team will also be in charge of writing the Test Plan, create and execute test cases, report the bugs.

6.4. Lab or Tool Support

SL1 API Browser

Virtual Box

Postman

7. Testing Resources

7.1. Hardware

Storage: 500GB
RAM: 32GB
Processor: 11th Gen Intel(R) Core(TM) i7-1165G7
Machines: 5 at least

AIOnonMUD 0.140 [11.1.0-4672]
Storage: 100GB
RAM: 4G
Cores: 3
Network: Bridged Adapter

DBnonMUD 0.145 [10.1.0-4672]
Storage: 100GB
RAM: 4G
Cores: 3
Network: Bridged Adapter

CUnonMUD 0.146 [11.1.0-4672]
Storage: 80GB
RAM: 4G
Cores: 3
Network: Bridged Adapter

WS2012R2 0.28 [11.1.0-4672]
Storage: 80GB
RAM: 4G
Cores: 3
Network: NAT and Bridged Adapter

Ubuntu 22.04.2 0.29 [11.1.0-4672]
Storage: 80GB
RAM: 4G
Cores: 3
Network: NAT and Bridged Adapter

7.2. Software

Microsoft Office Excel and Word.
Google Chrome and Microsoft Edge browsers for desktop and mobile.

7.3. Tools

PuTTY, Postman, Browser Development tools.

7.4. Staffing

QE Manager: Dante Villarroel
QE Lead: Carlos Rojas
QE Tester: Andrés Vargas

7.5. Education

Read and understand the basic usage of the device section. Are listed the needed documentation to reach this goal.

8. Proposed Schedule of Milestones

Feature	QE(s)	Begins	Ends
Test Plan	Andrés Vargas	07/21/2023	07/27/2023
Test case design	Andrés Vargas	07/27/2023	08/03/2023
Test case execution	Andrés Vargas	08/03/2023	08/10/2023
Bug report and metrics	Andrés Vargas	08/10/2023	08/15/2023

9. Planning Risks

Planning risks are unscheduled events or late activities that may jeopardize the testing schedule.

9.1. Risks and Assumptions

Internet connection problems
Not enough time to perform QE works

Not clear QE scope, approach or plans
Not clear product/feature understanding

9.2. Staff availability

Blockers remains due to problems with staff availability and troubles/issues cannot be solved because of this.

10. Transitions

10.1. Preparation

These sections describe the process of QE preparation.

10.1.1. Test Plan

The test plan must be reviewed by project core team before testing starts.

10.1.2. Test Cases

Test cases will be developed by QE for each individual module based on Engineering Specifications. Each test case shall include the following sections:

- Title
- Description.
- Steps.
- Expected results.
- Actual results will be added for each failed test run.
- Attachments.

The test cases will be reviewed by core team and distributed to the product team before testing starts.

10.1.3. Test Case Cycles

For each phase, test cycles will be created which will include the test cases to be executed to cover each area.

10.2. Acceptance Testing

The following sections describe the criteria for entering and leaving the QE Acceptance Test phase.

10.2.1. Entrance Criteria

- Test environment ready to use.
- Test tools ready to use.
- Test cases ready for execution.

10.2.2. Stopping Criteria

- Failed Acceptance tests.
- Test environment issues.

10.2.3. Exit Criteria

- The whole Test Case Suite executed.
- All hunted bugs reported.
- All Acceptance tests executed and passed.
- 90% of High, Medium and Low priority test cases passed.
- All deliverables completed.

11. Test Execution

11.1. Test Case Management

Xray test management.

11.2. Bug Tracking

Xray test management.

11.3. Bug Format

Each test case shall include the following sections:

- Title
- Description.
- Attachments.
- Steps to reproduce
- Expected results.
- Actual results

- Severity
- Environment

11.4. Bug Classification

- Severity 1 (Critical) - Defects that result in a program crash or data loss.
- Severity 2 (High) - Defects that result in a clear problem with the software, but there was no loss of data or crash associated with the problem.
- Severity 3 (Medium) - Defects that result in an average problem with the software.
- Severity 4 (Low) - Defects that result in the observation of a minor error, such as a spelling error, unclear dialog, unclear/inconsistent documentation or enhancement.