Guidelines for Managing Zones in Cisco CMX

For more information about managing zones, see Managing Perimeters and Zones on Location Maps.

Common issues related to map import:

Case 1: Clients not detected, Heatmap generation failed

Initial Observations

A customer is using the 10.3.0-19 build and CMX is not detecting Clients / Tags. After debugging it was found that there are no heatmaps generated on CMX and the location computations are failing. Matlab-engine logs show a message 'No floors present in model info, heatmaps will not be computed'.

What went wrong?

While exporting maps from Prime Infrastructure, Calibration model information was not included in the exported map file.

How to fix it?

Calibration model information is a vital piece of data linked to a floor-map on CMX. Client detection, Location computation and heatmap generation depends on Calibration model information.

When we export Maps from Cisco Prime Infrastructure, there is an option **Include Calibration Information** which is selected by default. While exporting maps, We want to make sure that this option is checked all the time.

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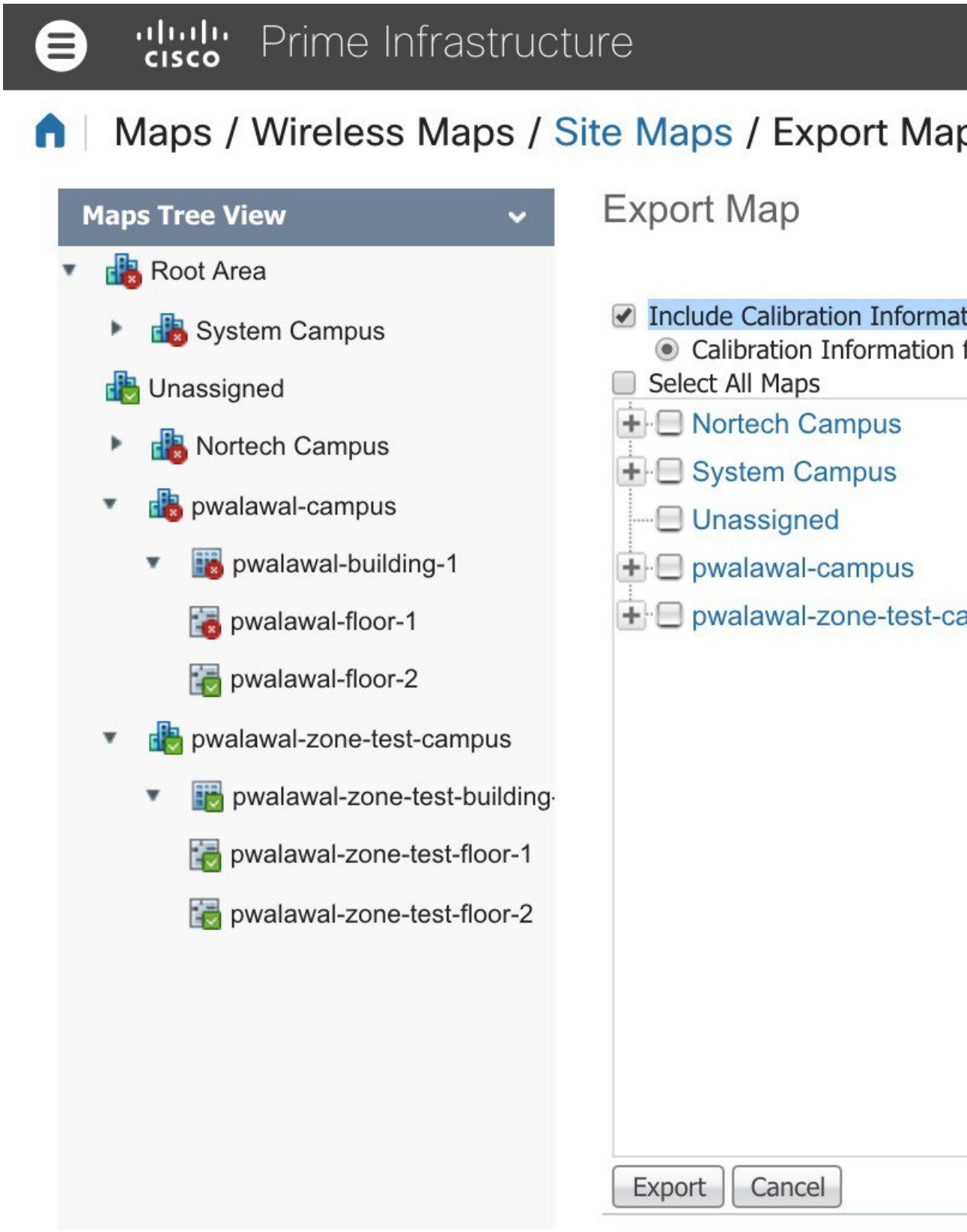

Case 2: The 'Access point' shows up on two floor-maps.

Initial Observations

The customer moved the Access points from Floor-X to Floor-Y on Prime Infrastructure and delete Floor-Y from Prime Infrastructure. Then they imported only 'Floor-X' on CMX. Now CMX shows same set of APs on both 'Floor-X' and 'Floor-Y'.

What went wrong?

When the APs were moved from Floor-X to Floor-Y and Floor-Y was deleted, A deleted operation for 'Floor-Y' was not executed on CMX. Unless user chooses the option 'Delete & replace existing maps & analytics data' while importing the maps, The entire map hierarchy will not be overwritten. If the option 'Delete & replace existing maps & analytics data' is not selected, CMX will only update the floors present in the uploaded map archive (i.e. Floor-X in this case).

How to fix it?

Before re-importing 'Floor-X', you want to make sure that 'Floor-Y' is deleted from CMX so that the APs linked to 'Floor-Y' are also deleted. This can be done via CMX CLI command as follows.

1. ssh to CMX as cmxadmin user.
2. List the floors and identify the floor from which the APs are moved.

```
[cmxadmin@cmx-prod opt]# cmxctl config maps floors
+-------------------------------------------+---------------------+--------------------+
| Floor Name | Location Floor ID | Analytics Floor ID |
+-------------------------------------------+---------------------+--------------------+
| Mall of America>Mall of America>Garage B2 | -60xxxxxxxxxxxxxxxx | 52 |
+-------------------------------------------+---------------------+--------------------+
| Mall of America>Mall of America>Level 1 | -604xxxxxxxxxxxxxxx | 53 |
+-------------------------------------------+---------------------+--------------------+
```

3. Execute delete floormap command for the identified floor so that The APs linked to that floor are deleted form CMX.

```
[cmxadmin@cmx-prod opt]# cmxctl config maps delete
Please enter the hierarchy to be deleted
(campus-name>building-name>floor-name): Mall of
America>Mall of America>Level 1
Confirm delete hierarchy:
Mall+of+America%3EMall+of+America%3ELevel+1 ? [y/N]: y
Hierarchy Mall+of+America%3EMall+of+America%3ELevel+1
deleted.
[cmxadmin@cmx-prod opt]#
```

4. Make sure that the floor is deleted by listing the floors.

```
[cmxadmin@cmx-prod opt]# cmxctl config maps floors
+-------------------------------------------+---------------------+--------------------+

| Floor Name | Location Floor ID | Analytics Floor ID |
+-------------------------------------------+---------------------+--------------------+

| Mall of America>Mall of America>Garage B2 |
-60xxxxxxxxxxxxxxxx | 52 |
+-------------------------------------------+---------------------+--------------------+
```

5. Export only 'Floor-X' from Prime Infrastructure and Import the maps file on CMX so that new APs are now added to 'Floor-X'.

6. Go to CMX GUI on 'Detect and Locate' page and observe the floor-maps. 'Floor-X' should have the new set of APs on it.