

Location Accuracy

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Location Accuracy

You can perform a location accuracy test for a single device with multiple location points. You can use the Location Accuracy Test tool to validate the placement and number of access points (APs), for a good location accuracy experience. The Location Accuracy tool provides you with the ability to quantify the location accuracy for a specific location. During the Location Accuracy test, the administrator uses a wireless client device to measure the difference between the actual and the calculated location of a device.

Restrictions for Location Accuracy

- The display refresh time is three seconds and cannot be reconfigured.
- You cannot run this location accuracy test on APs with external antennas. However, location detection is supported on these APs.
- You cannot reconfigure the display refresh time. The display refresh time is three seconds.
- The sample count displayed during a location accuracy test is a best-effort estimate of location values collected during back end processes. This sample count may differ from actual samples captured during an accuracy test.

Test Location Accuracy

This Cisco Spaces: Detect and Locate shows you how to run the location accuracy test.

Step 1 From the Detect and Locate dashboard, search for a device using a MAC address from the **Search MAC**, **IP**, **SSID**, **Manufacturer** text field.

Figure 1: Detect and Locate: Dashboard



- **Step 2** Ensure that the **Status** of the device is **ASSOCIATED** and the **Source** is **COMPUTE**.
- **Step 3** In the device details window, click **Accuracy Test** tab.

Figure 2: Detect and Locate; Initiate Accuracy Test

| ■ Cisco DNA Spaces | List of Devices | | × |
|---------------------------------------|--|---|---|
| All / Simulator-1-Campus0 / Building0 | Overview History | Accuracy Test Click to start | × |
| Clients T | MAC Address Status | bc:e6:3f:00:00:d9 (2) ASSOCIATED test | |
| | IP Address Coordinates Compute Type | 10.0.0.21 X: 357.06, Y: 159.14 RSSI | |
| | Last Seen Manufacturer | Dec 13th, 2019 03:39:32 PM Samsung Electronics Co.,Ltd | |
| | Connected AP Detecting Controller SSID | 10:00:01:01:00:00 nmsp-sim-1 ssid0 | |
| | Username Band | Clientbc:e6:3f:00:00:d9 2.4 GHz | |
| | Bytes Sent Bytes Received Source | 53.97 MB 53.97 MB COMPUTE | |
| | Device Location | Simulator-1-CampusO->BuildingO->Floor1 | |
| | | | |

Step 4 Enter a unique report name. Move the blue pointer to the client's real-time location or adjust the X and Y coordinates. To begin, click **Start Test**.

| Client : 6c:19:c0:e5:87:3a | | | | | | | | |
|---|-------------------|-----------|------------|--------------------------|------------|--|--|--|
| Overview History | Accuracy Test | | | | | | | |
| Report Name 6c:19:c0:e5:87:3a-12-03-2020 | | × 21.1 | Y 138.3 | Test time (minutes) 5 | | | | |
| Uni | ique test name | | | | Start Test | | | |
| Stops in Data Collection Data Points | 35:00 New 0 | | | | | | | |
| * - • • | | | | | | | | |

Figure 3: Detect and Locate Initiate Accuracy Test

You can observe that the number of samples begins to increase.

Note The display refresh time is three seconds.

Step 5 Wait for the number of samples to reach 20 and click **Stop Test**. Move the blue pointer representing the data point to a new location and click **Start Test** again.

Figure 4: Sample Size Must Reach 20



Step 6 Repeat for multiple locations for a more accurate understanding of location accuracy.

Figure 5: Repeat For Multiple Locations

| Verview | History | Accuracy Test | | | |
|-------------|-----------------|--|------------|---------------------------|--|
| Accuracy Re | port Generation | n Completed. | | | |
| RESULTS | | | | | |
| Report Name | | | Status | finish | |
| MAC Addres | s | 6c:19:c0:e5:87:3a | Start Time | Dec 3rd, 2020 07:20:21 PM | |
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Step 7 Repeat for multiple locations for a more accurate understanding of location accuracy.

Figure 6: Repeat For Multiple Locations

| Client : 6c:19:c0:e5:87:3a | | | | | | | | |
|----------------------------|-----------------|-------------------|----------------------|-------------------------------------|--|--|--|--|
| Overview | History | Accuracy Test | | | | | | |
| Accuracy Re | port Generation | n Completed. | | | | | | |
| RESULTS | | | | | | | | |
| Report Name MAC Address | s | 6c:19:c0:e5:87:3a | Status Start Time | finish Dec 3rd, 2020 07:20:21 PM | | | | |
| No report de | etails | | | | | | | |
| + - - - | | | | | | | | |

The accuracy reports are generated after the accuracy testing is done. You can also check it from the Detect and Locate left navigation bar under **Accuracy Report**.

Figure 7: Repeat For Multiple Locations

| ≡ disto Spaces | | | | | | | | | | | ଡ ନ |
|---|----------|-------|------------------------------|-------------------|---------------------------------|--|----------------------------|---------------|------------------|--------------|--------|
| Detect and Locate ∨ | | | | | | | | As of: Dec 17 | , 2023 8:20 PM 📿 |)Refresh 🖞 E | Export |
| | | 0 Sel | ected | | | | | ≣QFind | | | |
| Dashboard | | | Report Name | MAC Address | Status | Hierarchy | Start Time 👻 | AoA Percent | Fusion Percent | RSSI Percent | Post. |
| Deployment Information Configure | | | #:00:00:00:03:25-10-23-2023 | ff:00:00:00:03:25 | finish | Zhimin>Campus- 118APs>CiscoBuilding118>floor2 | Oct 23rd, 2023 03:31:43 PM | 0 | 0 | 100.00 | 0 |
| O Accuracy Report | | | 00:a2:ee:a2:d0:a0-05-24-2023 | 00:a2:ee:a2:d0:a0 | new | Zhimin>SJC>building20- test>Floor1 | May 24th, 2023 03:53:44 PM | | | | |
| Notifications Viser Management | >: >: | | 00:03:7f:12:a8:6f-05-24-2023 | 00:03:7f:12:a8:6f | finish- with- no- data | Zhimin>SJC>building20- test>Floor1 | May 24th, 2023 10:50:38 AM | | | | |
| CD Related Links | | | 00:03:7f:12:92:b7-04-13-2023 | 00:03:7f:12:92:b7 | finish- with- no- data | Zhimin>SJC>building20+ test>Floor1 | Apr 13th, 2023 01:13:05 PM | | | | |
| | | | 00.03:7f:12:92:07-04-13-2023 | 00:03:7f:12:92:b7 | stop | Zhimin>SJC>building20- test>Floor1 | Apr 13th, 2023 01:12:15 PM | | | | |
| | | | 00:77:8d:90:71:a8-02-28-2023 | 00:77:8d:90:71:a8 | finish- with- no- data | Zhimin>System Campus>SJC 14>D+R+C | Feb 28th, 2023 11:54:03 AM | | | | |
| | | | 00:77:8d:90:71:a8-02-28-2023 | 00:77:8d:90:71:a8 | finish- with- no- data | Zhimin>System Campus>SJC 14>D+R+C | Feb 28th, 2023 11:47:39 AM | | | - | |
| | | | 00:77:8d:90:60:1a-02-28-2023 | 00:77:8d:90:60:1a | new | Zhimin>System Campus>SJC 14>D-R-C | Feb 28th, 2023 11:20:04 AM | | | | 0 |