



Cisco BroadCloud for Carriers Service Assurance Dashboard Guide

Version: 1.0

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Table of Contents

Feature Overview and Usage Guide

Launching the Service Assurance Dashboard

Dashboard

Calling Metrics

Troubleshooting Examples

A single user reports poor media quality

A single site shows bad media quality in CAP

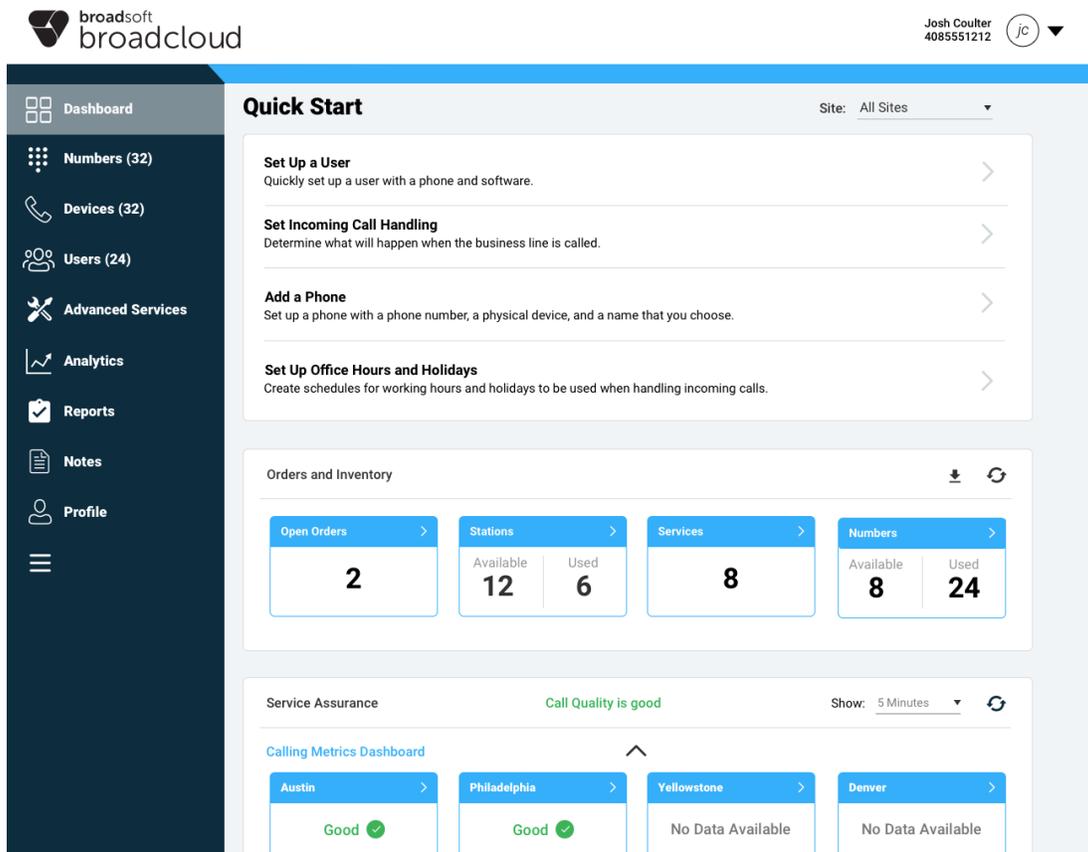
An entire customer reports bad media quality



Feature Overview and Usage Guide

Launching the Service Assurance Dashboard

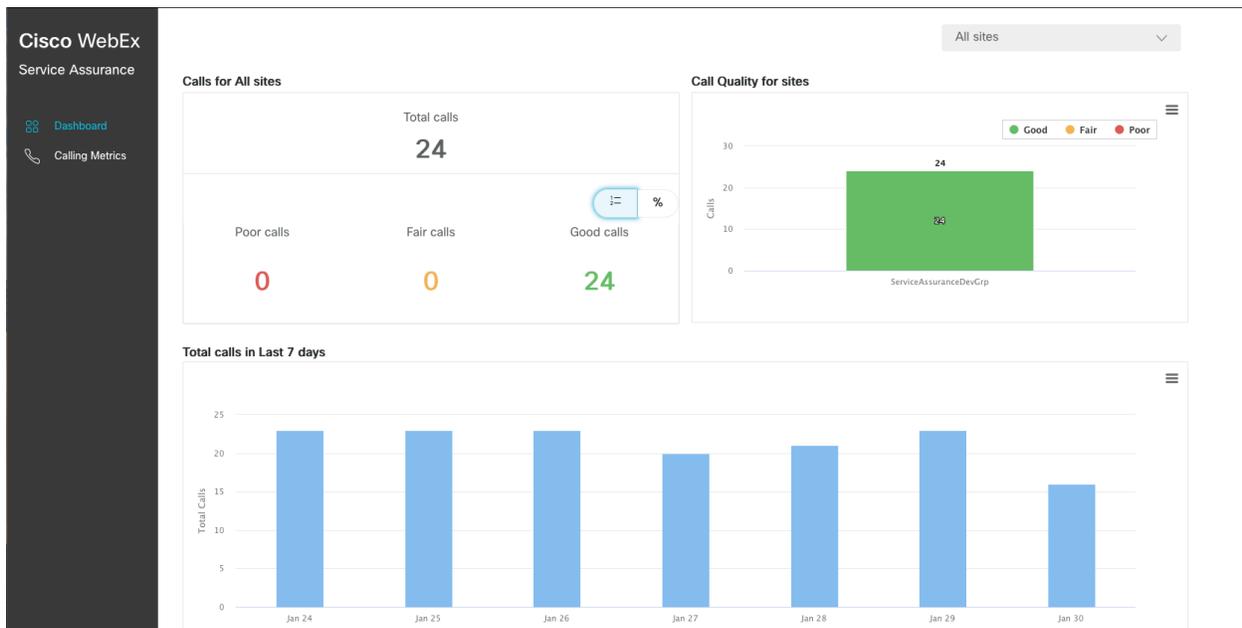
To launch the dashboard, simply access the Calling Admin Portal (CAP) and select the “Calling Metrics Dashboard” from the Service Assurance panel on the main page. Clicking the link will launch a new browser tab.



If you do not see the Service Assurance panel, please contact your account manager or service provider.



Dashboard



The main dashboard is intended to give an at a glance visualisation of the usage of the system and the media quality experienced by a customer.

The Poor Calls section shows the number of calls within your domain having MOS scores below 3.2 in the past 24hrs.

The Good Calls section shows the number of calls within your domain having MOS scores above 3.8 in the past 24hrs.

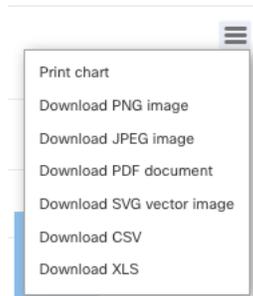
The Call Quality section identifies your top poor call sites in conjunction with a call quality breakdown. Our call quality is designated in 3 categories

- Good (MOS > 3.8)
- Fair (MOS 3.2 to 3.8)
- Poor (MOS < 3.2)



within the previous 24hrs for an individual site.

The graphs and visualisations presented on the dashboard are all exportable in a variety of formats for further analysis outside of the dashboard.



Calling Metrics

The Calling Metrics view displays a list of calls made during a given time period with complete call details. You can select a site and time period to view a list of calls and associated media quality information.

The “Additional Details” tab gives more details about that call, such as the SIP signalling call flow, SIP messages and call metrics.



Cisco WebEx
Service Assurance

ServiceAssuranceDevGrp | 1/31/2020 | 12:00 AM - 4:56 PM | View

Start Time	Duration (sec)	Calling Number	Caller	Called Number	Callee	Call Quality	Packet Loss (%)	Codec	Additional details
1/31/2020 6:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.13	PCMU	...
1/31/2020 3:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 8:25 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 2:25 PM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.1	PCMU	...
1/31/2020 10:25 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 1:27 AM	62	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 12:28 PM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.03	PCMU	...
1/31/2020 11:25 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.1	PCMU	...
1/31/2020 4:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 2:28 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 4:25 PM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 3:28 PM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 7:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.16	PCMU	...
1/31/2020 9:25 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.1	PCMU	...
1/31/2020 12:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0	PCMU	...
1/31/2020 5:27 AM	61	+17145560001	uesr3 sa	+17145560002	user4 sa	Good	0.1	PCMU	...

Columns can be sorted to display calls in order of whichever metric is pertinent to the problem that is being worked, and coming soon, enhanced searching and exporting tools will make the troubleshooting process even easier.

The SIP call flow section shows the requests and responses made by the caller and callee for the selected call.



Call Details

Call Signalling Call Stream Metrics

INVITE sip:7145550001@broadcloudlab.org

100 Trying

401 Unauthorized

ACK sip:7145550001@broadcloudlab.org

INVITE sip:7145550001@broadcloudlab.org

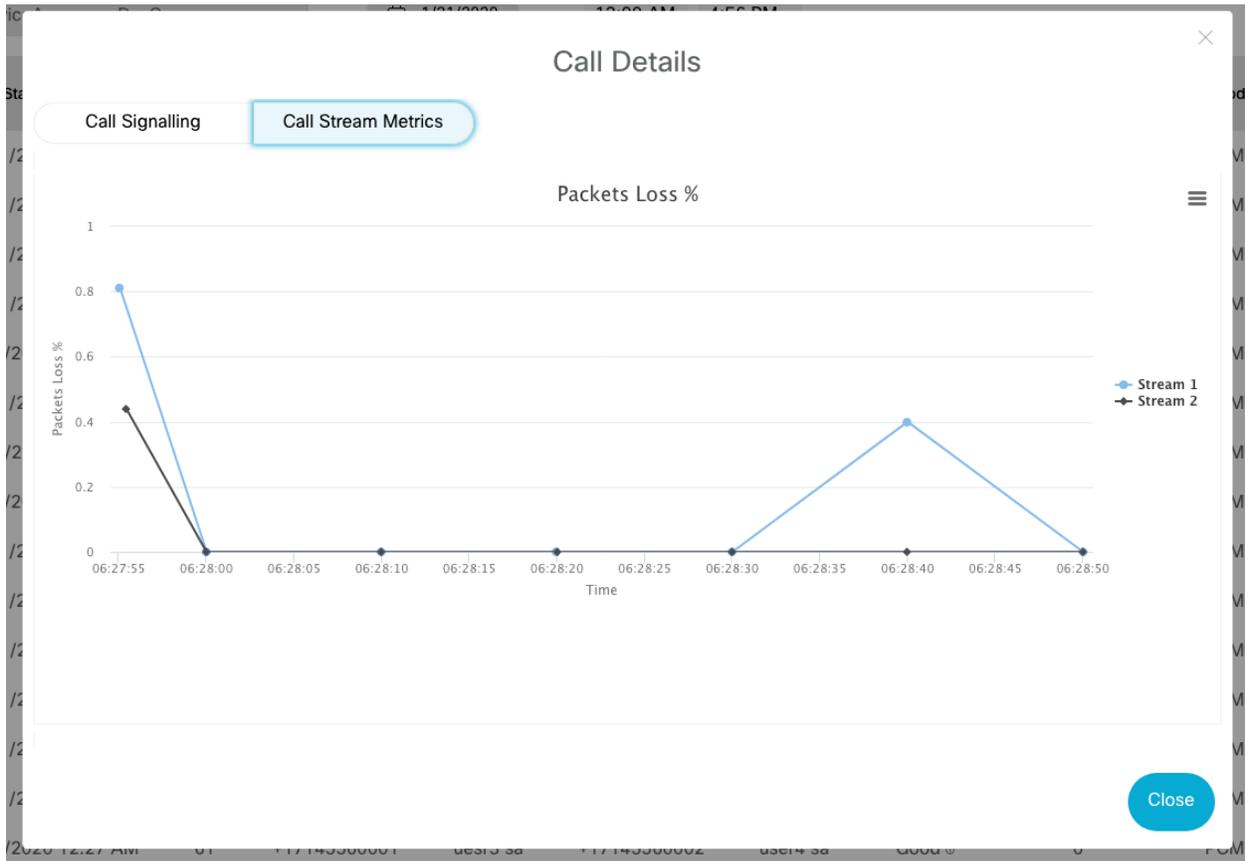
100 Trying

180 Ringing

```
INVITE sip:7145550001@broadcloudlab.org
SIP/2.0 Via: SIP/2.0/UDP
10.143.61.156:5060;branch=z9hG4bK-59dd14aa
From: "7145550002"
<sip:7145550002@broadcloudlab.org>;tag=52889b932
To: "7145550001"
<sip:7145550001@broadcloudlab.org> Call-ID:
21e3837e-c197e565@10.143.61.156 CSeq: 101
INVITE Max-Forwards: 70 Contact: "7145550002"
<sip:7145550002@10.143.61.156:5060> Expires:
240 User-Agent: Cisco-CP-8841-3PCC/11.3.1
Session-ID:
9481a62900105000a000002f5c7b468d;remote=00000000
Content-Length: 987 Allow: ACK, BYE, CANCEL,
INFO, INVITE, NOTIFY, OPTIONS, REFER, UPDATE
Supported: replaces, sec-agree Content-Type:
application/sdp v=0 o=- 23302201 23302201 IN
```

Close

The “Call Stream Metrics” column shows Packet Loss over time, if it’s available for a particular call.



Troubleshooting Examples

The goal of these examples is to provide some examples of common media quality issues and how you would investigate them using the new dashboard. Using the tips below, an engineer or admin should be quickly able to narrow down an issue.

A single user reports poor media quality

If a single user reports poor media quality, the dashboard can be quickly used to get to the bottom of this issue.

- Check the user's site on the dashboard, and by looking at individual call records, are all users experiencing problems?



- If other users are also seeing issues, use the filtering tools to view past calls to see when this issue began and troubleshoot the sites network connectivity, using Examinet or other tools.
- If other users are not seeing issues, filter/sort the calls to view that users calls only.
- From this list, it should be clear if there is a pattern to their calling issues;
 - o All calls from a particular device have issues, but calls from other devices are ok.
 - **Troubleshoot that single device**
 - o Only calls at busy periods are showing issues
 - **This points to bandwidth contention during busy periods**
 - o Other users using a particular device type are also having issues.
 - **These devices may be having issues on the customers network**

A single site shows bad media quality in CAP

- The Service Assurance Dashboard can be used to isolate a list of calls for a particular site by filtering on the "Call Details" page.
- From this list, problem calls can be sorted and the following patterns identified.
 - o Are the problem calls coming from the same user?
 - o Are the problem calls happening every day at the same time?
 - o Are the problem calls specific to a device type?
- All of the above can be used to isolate the problem.



An entire customer reports bad media quality

- Is the issue across a single site or multiple sites?
- If it is across a single site, there are no issues with the cloud service, and that sites connectivity should be investigated.
- If it is across multiple sites, are other customers also having issues? The [BroadCloud status page](#) should list any active issues with the overall service.

If there are no service issues, the site network connection should be investigated using Examinet or other tooling.