



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

# Workbench User's Guide

CM - Reports

4/12/2025

---

## Contents

- 1 CM - Reports
  - 1.1 CM Reports Content
  - 1.2 Call Metrics Report
  - 1.3 Stage Results Report
  - 1.4 Call Results Report
  - 1.5 Call Details Report

## CM - Reports

The Channel Monitoring Reports page provides historical insights into the Call Flow tests, their specific behaviour and results.

Please use the following steps to use CM Reports:

1. Select **Channel Monitoring > Reports** from the Workbench top navigation bar.
  1. The CM Report page is presented
2. Select a **Call Flow** from the Call Flow Name drop-down list
  1. The CM Report is generated and data is displayed for a time-range of the current day (i.e. "Today")
3. If needed, from the Time Range drop-down, select a different timescale (i.e. "This Week" or "This Month" or "Last 15 Minutes")
  1. If/when the Time Range is changed, click the **Refresh** button to update the data

## CM Reports Content

CM Reports contains 4 tabs:

- **Call Metrics**
- **Stage Results**
- **Call Results**
- **Call Details**

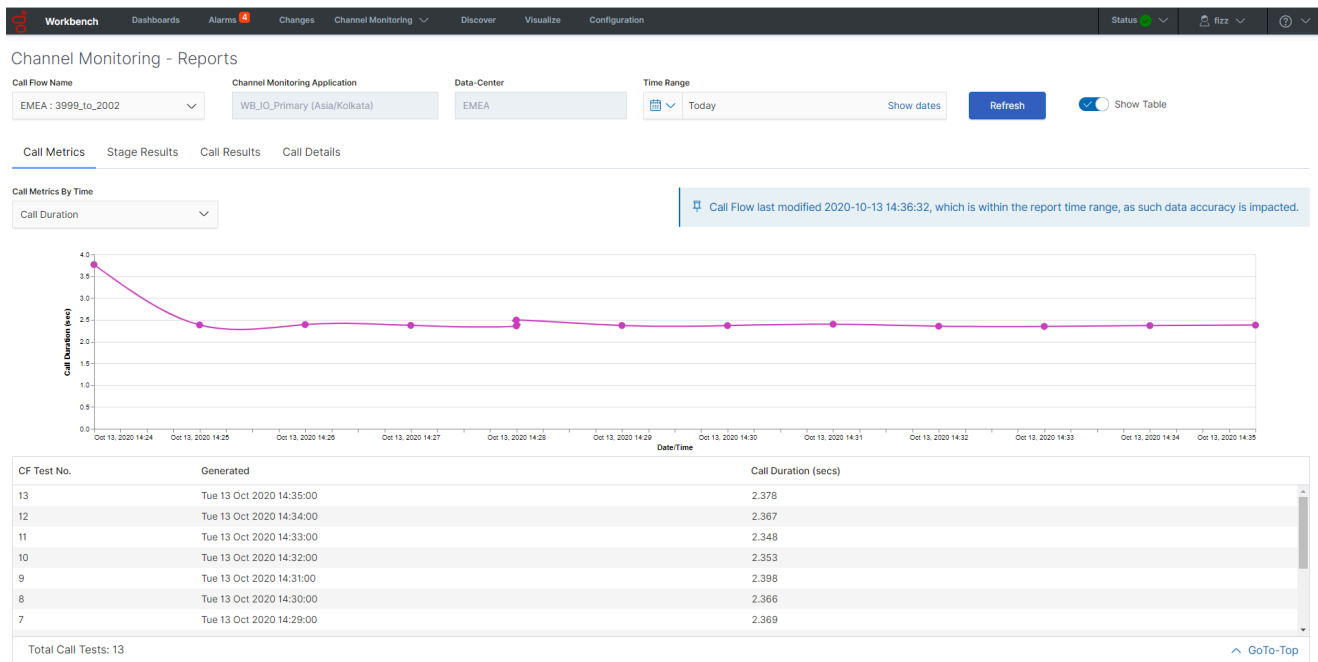
Each in the CM Reports section provides a different view of the available data on the selected Call Flow.

## Call Metrics Report

The Call Metrics report uses a graph and table to describe the behavior of a Call Flow in time.

The horizontal axis shows the date/time in which individual calls were executed.

The vertical axis can be modified on the dropdown list to change the metric (Call Duration, Jitter, Time Wait for Agent) used to analyze the call.



The **Jitter** and **Time Wait for Agent** metrics have three thresholds that can be configured in the Alarms section of the Call Flow configuration (see CM - Call Flow Alarms); the threshold for each severity (Critical, Major, Minor) is shown in the graph as a different horizontal line.

The available Call Metric Report *Metrics* are:

## Call Duration

The length of the call in seconds. The duration is measured from the moment Channel Monitoring starts the call (i.e., sends the first SIP invite message), until the call is finished because it either encounters an error or ends as expected.

## Wait Time for Agent

The amount of time in minutes between the start of the transfer to an agent, and the moment when the agent answers the call.

## Jitter

A measure of the quality of the call. In the context of Channel Monitoring, jitter is understood as “the variation of a signal with respect to some clock signal, where the arrival time of the signal is expected to coincide with the arrival of the clock signal.” In this case, the signal refers to the RTP packets downloaded to Channel Monitoring, and the clock signal is the RTP clock rate for the media stream. Jitter is measured in milliseconds.

The quoted jitter definition above is from Internet Engineering Task Force (IETF) RFC 3393: IP Packet Delay Variation Metric for IP Performance Metrics (IPPM), page 2, retrieved from <https://tools.ietf.org/html/rfc3393>.

## Stage Results Report

This section shows the different outcomes per Stage of a Call Flow.

The report aggregates all the Stage results across the different calls for the given Call Flow.

For example, if a call fails while sending audio because of an unexpected hang-up, this will increase the count for **Unexpected Hang-Ups** during that specific send media stage.

The screenshot shows the 'Channel Monitoring - Reports' interface. At the top, there is a navigation bar with 'Workbench' and various menu items like 'Dashboards', 'Alarms', 'Changes', 'Channel Monitoring', 'Discover', 'Visualize', and 'Configuration'. Below this, the report title 'Channel Monitoring - Reports' is displayed. The interface includes several filters: 'Call Flow Name' (EMEAs: 3999\_to\_2002), 'Channel Monitoring Application' (WB\_JO\_Primary (Asia/Kolkata)), 'Data-Center' (EMEA), and 'Time Range' (Today). There are also 'Show dates' and 'Refresh' buttons. Below the filters, there are tabs for 'Call Metrics', 'Stage Results', 'Call Results', and 'Call Details'. The 'Stage Results' tab is active, showing 'Stage Results By Time'. A warning message states: 'Call Flow last modified 2020-10-13 14:36:32, which is within the report time range, as such data accuracy is impacted.' The results are presented in three rows: 1. 'Start Call' with 'Call Started: 13' and 'Total - 13'. 2. 'Wait' with 'Wait Completed: 13' and 'Total - 13'. 3. 'Send DTMF Tone' with 'Call Ended: 13' and 'Total - 13'.

The available *Stage Results* are:

### Success

All stages were executed and their results were as expected.

### Pending Result

The call has finished and is being analyzed to determine if it failed at some point of its execution or if it's a success. Even though most results are determined in real-time during the execution of the call, some could be delayed to the end of the call (such as media analysis).

### Registrar Connection Failed

The SIP account used by Channel Monitoring to make calls could not connect to SIP Server. This would usually occur during the "Start Call" stage when Channel Monitoring tries to reach SIP Server. Possible causes include problems trying to resolve the domain name or IP address of SIP Server.

### Account Authentication Failed

The SIP account used by Channel Monitoring to make calls could not authenticate against SIP Server using the provided credentials. This would usually occur during the “Start Call” stage when Channel Monitoring tries to register the account in SIP Server.

### Unexpected Hang-up

The call was being executed and it stopped in an unexpected moment. Calls should end (hang-up) during the “End Call” stage and the “Wait for Agent” stage when the initial call is replaced because of the transfer to the agent. If the call ends at any other stage, it will be considered an unexpected hang-up.

### No Answer

Channel Monitoring was not able to reach the target DN and complete the Start Call transaction after a given timeout. This could occur during the “Start Call” stage as Channel Monitoring tries to set up the call with the System Under Test.

### Media Analysis Failed

Media received during the call did not match the expected media. A call could have various “Receive Media” stages where audio is received and then analyzed to determine if it matches the expected audio. This comparison produces a percentage error that, when high enough, will produce this error.

### No Answer from Agent

A transfer to an agent was expected to occur but no provided DN answered the call before the given timeout. In this case, Channel Monitoring waits for the call to get transferred to one of the DN's provided during the call flow creation. The call might get transferred but it will only be successful if the target of the transfer is contained in the list of DN's set up by the user while configuring the “Wait for Agent” stage.

## Call Results Report

The Call Results report presents the overall outcome for the calls placed against the Call Flow and the number of times each outcome has occurred.

The possible Call Results are:

- Success
- Pending Result
- Account Authentication Failed
- Unexpected Hangup
- No Answer
- Other

## CM - Reports

- Media Analysis Failed
- Unknown
- No Answer From Agent

Workbench Dashboards Alarms Changes Channel Monitoring Discover Visualize Configuration Status fzz

### Channel Monitoring - Reports

Call Flow Name: EMEA : 3999\_to\_2002 Channel Monitoring Application: WB\_IO\_Primary (Asia/Kolkata) Data-Center: EMEA Time Range: Today Show dates Refresh

Call Metrics Stage Results **Call Results** Call Details

Call Results By Time

Call Flow last modified 2020-10-13 14:36:32, which is within the report time range, as such data accuracy is impacted.

Success - 13
Pending Result - 0
Account Authentication Failed - 0
Unexpected Hangup - 0
No Answer - 0
Other - 0
Media Analysis Failed - 0
Unknown - 0

## Call Details Report

This report uses a tabular view to present various properties of the test calls. Each row represents the execution of a single call from the respective Call Flow.

The possible execution results for a call are “Success” and “Fail”; if the call *Failed*, the table will show the Stage in which it failed and the reason for the error.

# CM - Reports

## Channel Monitoring - Reports

Call Flow Name: EMEA : 3999\_to\_2002 Channel Monitoring Application: WB\_IQ\_Primary (Asia/Kolkata) Data-Center: EMEA Time Range: Today Show dates Refresh

Call Metrics Stage Results Call Results **Call Details**

Call Details By Time

Call Flow last modified 2020-10-13 14:36:32, which is within the report time range, as such data accuracy is impacted.

Execution Time	Execution Result	Avg Jitter (ms)	Call Duration (s)	Stage Failed	Fail Reason
Tue 13 Oct 2020 14:55:00	Failed	0	30.042	Start Call	No Answer
Tue 13 Oct 2020 14:35:00	Success	0	2.378		
Tue 13 Oct 2020 14:34:00	Success	0	2.367		
Tue 13 Oct 2020 14:33:00	Success	0	2.348		
Tue 13 Oct 2020 14:32:00	Success	0	2.353		
Tue 13 Oct 2020 14:31:00	Success	0	2.398		
Tue 13 Oct 2020 14:30:00	Success	0	2.366		
Tue 13 Oct 2020 14:29:00	Success	0	2.369		
Tue 13 Oct 2020 14:28:13	Success	0	2.493		
Tue 13 Oct 2020 14:28:00	Success	0	2.359		
Tue 13 Oct 2020 14:27:00	Success	0	2.371		
Tue 13 Oct 2020 14:26:00	Success	0	2.39		
Tue 13 Oct 2020 14:25:00	Success	0	2.382		
Tue 13 Oct 2020 14:24:55	Success	0	3.766		

Total Call Details: 14

GoTo-Top