Call Data API - Method Overview:

The getCallData method is only really useful for tabulated data or a single CDR view. getCallMetrics is the more powerful of the two current Analytics functions as it can perform calculations on the data, such as averages, and allows grouping of fields.

A full overview of all Analytics API functionality can be found in our Calls Interface page. This document covers 4 of the many ways in which the Analytics API can be used.

- <u>Example 1 – Tabulated Call Data including Recording Playback</u>
- <u>Example 2 – Metrics Panel</u>
- <u>Example 3 – Metrics by Dimension Table</u>
- <u>Example 4 – Metrics by Dimension Graph</u>
- <u>Example 5 – Line Graph of Calls</u>

See our API Libraries section for example classes written in PHP of how to interface with our API. You should be able to plug the following examples into those libraries to return the data. Following that just add any library such as JQPlot or similar to achieve graphs and tables on your site.

Example 1 – Tabulated Call Data with Recording Playback

User Interface:

	Node/Link	Date/Time ↓	Call From	VoxNumber	Forwarded To	Call Result	Duration
1.	153 Westbourne Grove - Leaflet 1	2010-07-15 20:05:28	442077271000	442033182040	442077233210	📊 ANSWERED	00:00:03
2.	153 Westbourne Grove - Newspaper A	2010-07-15 20:01:51	442077271001	442033182043	442077233210	📊 ANSWERED	00:00:04
3.	154 Westbourne Grove - Leaflet 1	2010-07-15 18:42:25	442077271002	442033182040	442077233210	📊 ANSWERED	00:00:04
4.	154 Westbourne Grove - Newspaper B	2010-07-15 18:37:14	442077271004	442033182042	442077233210	📊 ANSWERED	00:00:03
5.	153 Westbourne Grove - Leaflet 2	2010-07-15 18:32:19	442077271005	442033182041	442077233210	📊 ANSWERED	00:00:04

Notes:

The data table would be returned using a single API call for the specified date range. This data can determine whether or not a call has a recording by using the has_recording parameter. Functionality can then be added to present the user with a playback button where applicable. An API call can then retrieve the MP3 call recording for playback/download.

2 API calls:

Call Data Table:

The following request will produce the call data for the table above:

https://sandboxapi.voxanalytics.com:444/Calls?v=3&method=getCallData&req_fields=id,nname,lname,cs,co,vn,cd,has_rec,call_res,dur&page=1&limit=10

Wiki page: http://docs.iovox.com/display/RA/getCallData

Play Call Recording (MP3):

Using "id" returned in the above API request you can then retrieve an MP3 recording if a call was recorded:

https://sandboxapi.voxanalytics.com:444/Calls?v=3&method=getCallRecording&id=1234 – where 1234 is the id element returned by the above API request

Wiki page: http://docs.iovox.com/display/RA/getCallRecording

Example 2 – Metrics Panel

User Interface:

Total Calls	Avg. Calls Per Day	Total Duration	Avg. Call Duration	Unique Callers
112	3.61	01:37:36	00:01:13	2
Previous: 0 (0.0%)	Previous: 0.00 (0.0%)	Previous: 00:00:00 (0.0%)	Previous: 00:00:00 (0.0%)	Previous: 0 (0.0%)

Notes:

The panel in this example shows a selection of metrics for the current date range and the previous date range below that, together with the percentage increase from previous to current. As durations here are formatted it is best to return the "seconds" version of this data in the result set also. For example, "ad" will return the average duration as a HMS timestamp (00:01:13), but to calculate the percentage increase the result set will also need to include "ads", which will return the same value but in seconds (73).

2 API calls:

Current Metrics Data:
https://sandboxapi.voxanalytics.com:444/Calls?v=2&method=getCallMetrics&req_fields=tc,acpd,td,ad,tuc
Previous Metrics Data, i.e. the month before the current month:
https://sandboxapi.voxanalytics.com:444/Calls?v=2&method=getCallMetrics&req_fields=tc,acpd,td,ad,tuc&sdt=2010-03-22&edt=2010-04-21

For percentage calculations you would need to return seconds instead of timestamp for both Total Duration and Avg. Call Duration by adding tds (total duration seconds) and ads (average duration seconds) to the req_fields parameter of the querystring, and then compare both current and previous sets of data to calculate the percentage increase.

Wiki page: http://docs.iovox.com/display/RA/getCallMetrics

Example 3 – Metrics by Dimension Table

User Interface:

Call Result	Total Calls ▼ ↓
ANSWERED	80
HANGUP-WHISPER-CALLED	26
HANGUP	6

Notes:

The following dimension (Call Result) is grouped by the metric Total Calls.

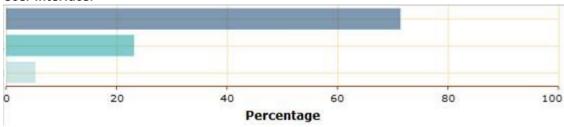**1 API call:**

Metrics by Dimension Data:
https://sandboxapi.voxanalytics.com:444/Calls?v=2&method=getCallMetrics&req_fields=tc&group_fields=call_res
(get a breakdown of total calls. This example uses call result as the group field/dimension)

The group field = call result and the required field = total calls is an example, there are many more options for both parameters listed in the Querystring Parameter List of http://docs.iovox.com/display/RA/getCallMetrics under req_fields and group_fields respectively.

Wiki page: http://docs.iovox.com/display/RA/getCallMetrics

Example 4 – Metrics by Dimension Graph

User Interface:

Notes:

Present a percentage based performance graph for a dimension. The following dimension (Call Result) is grouped by the metric Total Calls, but a total across all dimensions is needed to be able to calculate the percentage. Only raw data is returned here, we do not offer any graphics or graphs.

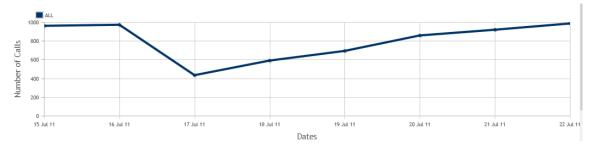**2 API calls:**

Metric broken down by Dimension:
https://sandboxapi.voxanalytics.com:444/Calls?v=2&method=getCallMetrics&req_fields=tc&group_fields=call_res
(breakdown, same as "Metrics by Dimension Table" Example)

Overall total to be used for calculating percentages:
https://sandboxapi.voxanalytics.com:444/Calls?v=2&method=getCallMetrics&req_fields=tc

Wiki page: http://docs.iovox.com/display/RA/getCallMetrics

Example 5 – Line Graph of Calls

Notes:

Present a line graph of calls over a specified time frame and search criteria. To achieve multiple lines on the graph simple run multiple API hits – such as add "node_id=XYZ" to the querystring below to search on a Node level. Only raw data is returned here, we do not offer any graphics or graphs.

1 API call:

Metric broken down by Dimension:
https://sandboxapi.voxanalytics.com:444/Calls?v=3&method=getCallMetrics&req_fields=tc&group_fields=cdate

Overall total to be used for calculating percentages: