

Transcript analysis

V-Spark 4.4.1-1

Medallia Voci

Contents

Analysis	3
Short-term analysis	4
Long-term analysis	12
Dashboard views	17
Summary	21
Files / Audio Records	23
Agents	28
File details	39
Application Scores	44
Tags	48
Search	51
Search Fields and Default Values	55
Plain Text Search.....	56
Time-based Search & Limitations	60

Regular Expression Search	62
Bookmark Searches	66
Filter Searches	68
Exporting results	73
Tags	79
Reports	85
Calls per Hour Table	87
Emotion Tables.....	90
Call Averages Tables	91
Subscribing to Email Reports.....	93

Analysis

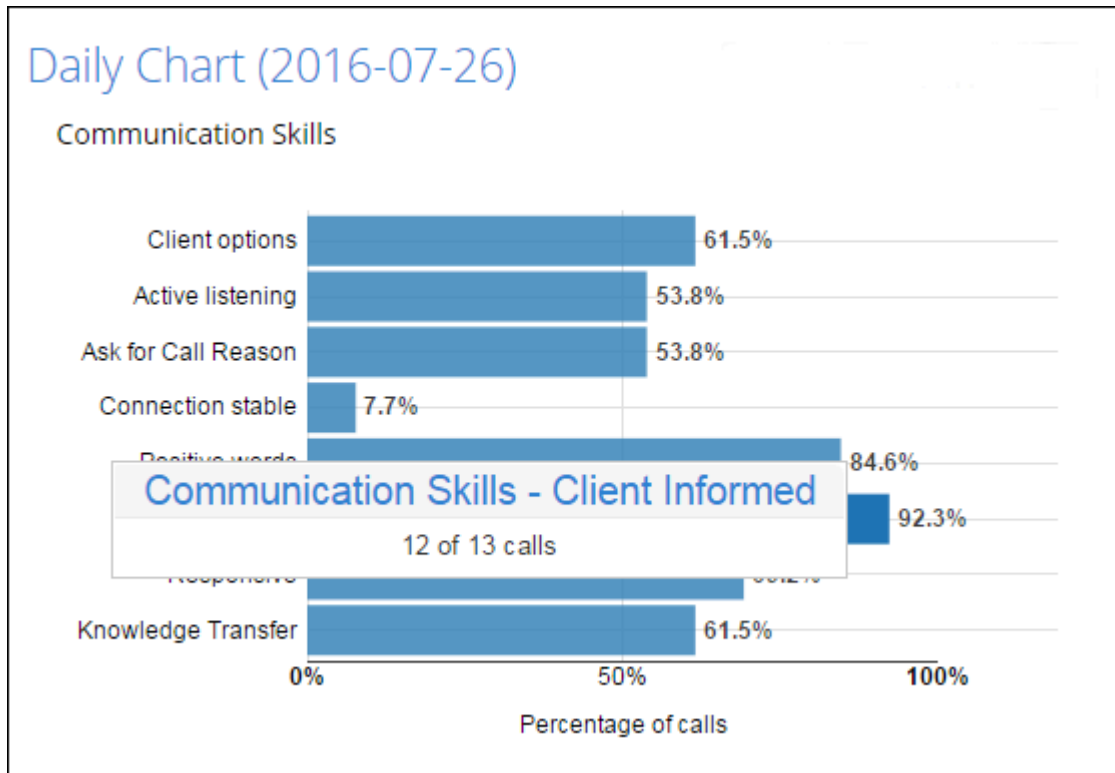
V-Spark enables you to monitor your incoming calls and gives you both textual and visual analysis of your audio data. This section will show you the different mechanisms for demonstrating current patterns and forming predictions.

Short-term analysis

V-Spark's Daily Chart focuses on showing the scores for each lower-level category of a selected category. (Categories are selected by clicking a bar in the Overview Graph.)

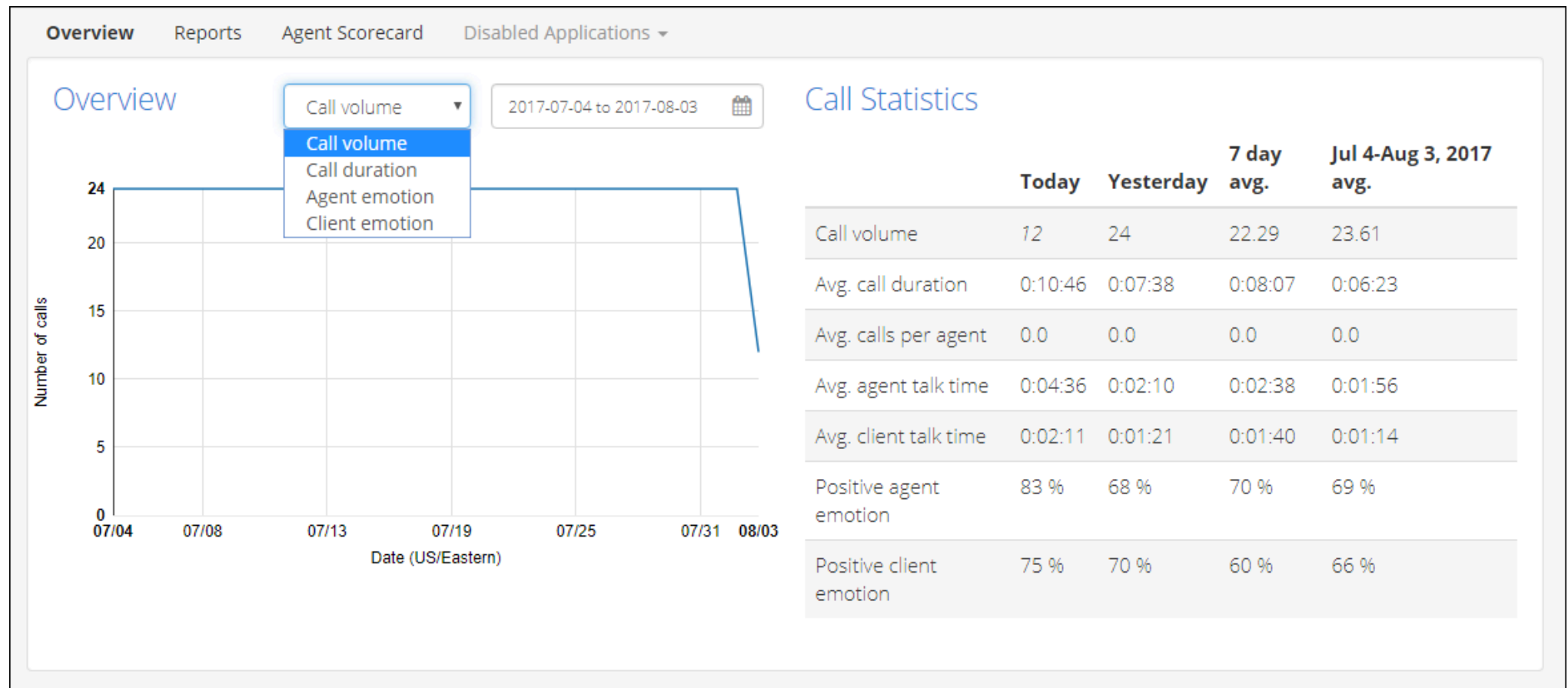
The graph is clickable, and each category can be analyzed on a per-call level. The file list below adjusts to display calls that fall within the current category. If the View is currently set to "Files", selecting a leaf-level category in the Daily Chart navigates down to the file list. Phrases that represent that category will be highlighted in the search results. The number of calls scored for each lower-level category can be seen by hovering over the corresponding portion of the graph.

As you navigate down through lower-level categories, the percentages displayed are calculated from the number of calls that passed through the immediate upper-level category and not the total number of calls uploaded for that day.



Depending on the Overview drop-down option selected, either a **Call Statistics** or **Daily Charts** section is shown to the right of the Overview chart.

Call volume statistics



=

Call Statistics shows the stats over the last month across several metrics related to call volume. These include:

- **Call volume**
- **Avg. call duration**

- Avg. calls per agent
- Avg. agent talk time
- Avg. client talk time
- percentage of **Positive agent emotion**
- percentage of **Positive client emotion**

The default view displays information for the following time periods: **Today**, **Yesterday**, **7 day avg.**, and **last month**. For the last month average, the date range is displayed. If a specific calendar month is selected, then selected month and year are displayed.

Clicking a different point on the graph changes **Today** to the date selected, and **Yesterday** changes to **Previous Day**.

7 day average is calculated based on the last 7 days, including the selected date. **Month average** is calculated to include all days in the selected date range.

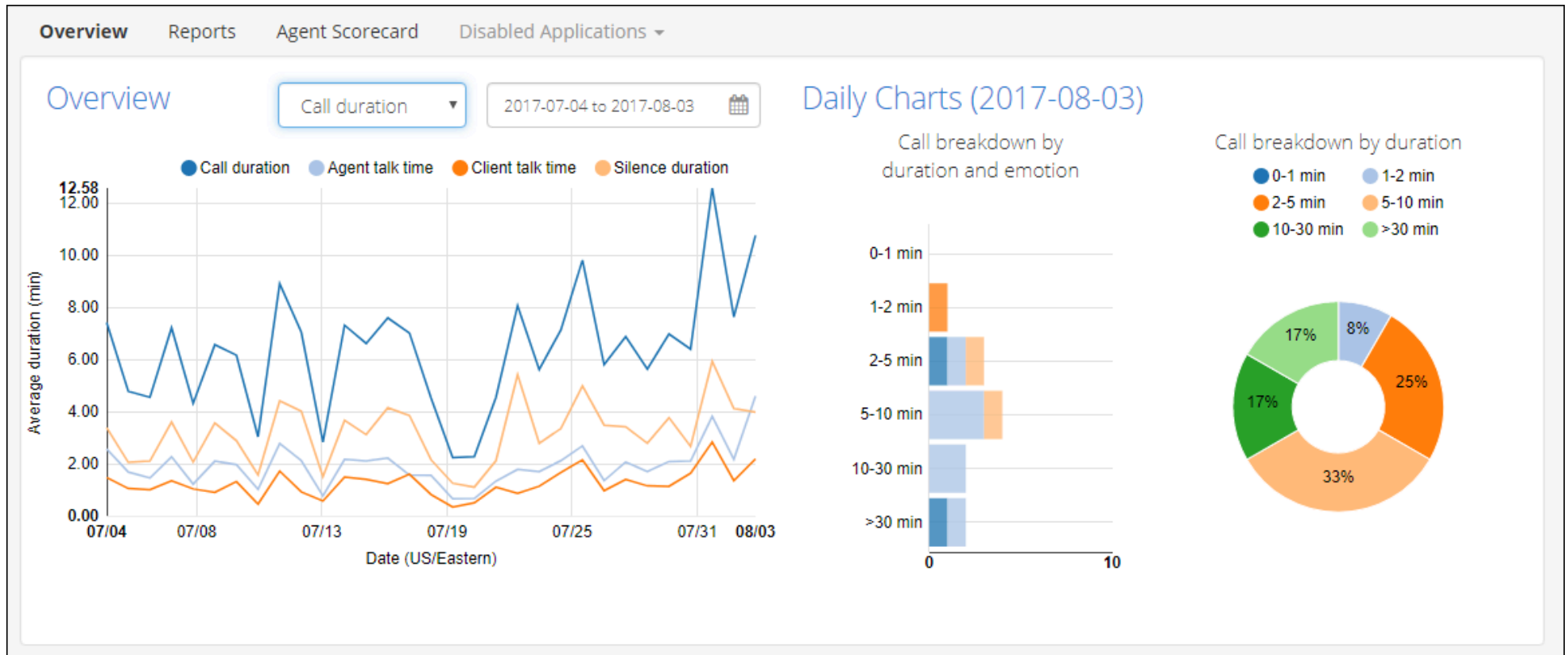
Default view after selecting a month

	Today	Yesterday	7 day avg.	Aug 2017 avg.
Call volume	--	--	--	23.61
Avg. call duration	--	--	--	0:06:23
Avg. calls per agent	--	--	--	2.0
Avg. agent talk time	--	--	--	0:01:56
Avg. client talk time	--	--	--	0:01:14
Positive agent emotion	--	--	--	69 %
Positive client emotion	--	--	--	66 %

After selecting a month via the date picker, only the month's average will be populated in the default view as seen above. The rest of the statistics will be populated when a date is selected by clicking a data point on the graph.

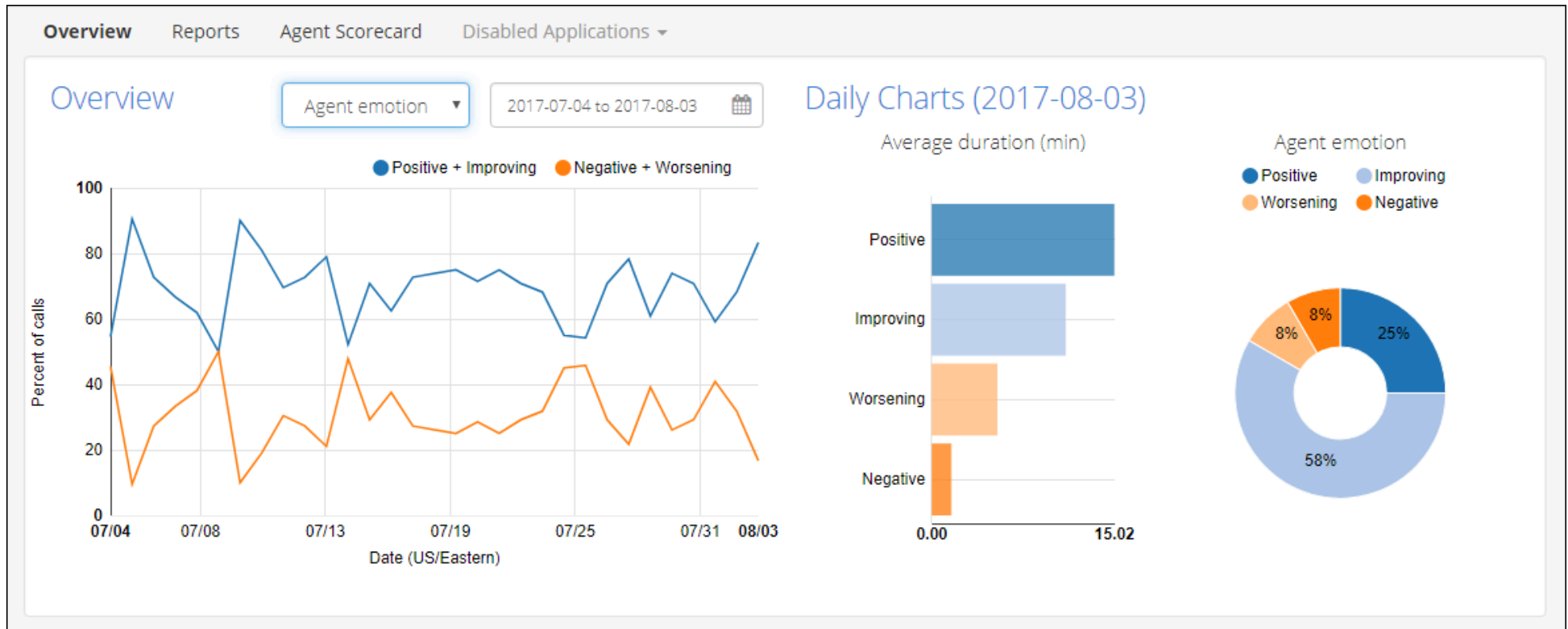
Daily charts

1. Call duration



The Overview chart can be clicked to display the daily call breakdown. Daily Charts include a histogram of calls by call duration and emotion and also duration by percentage of overall calls. Emotion is broken down into four groups: Positive, Improving, Negative, and Worsening. Each call falls into one emotion group. Clicking on the Daily Chart graphs will trigger a search in the Files view below.

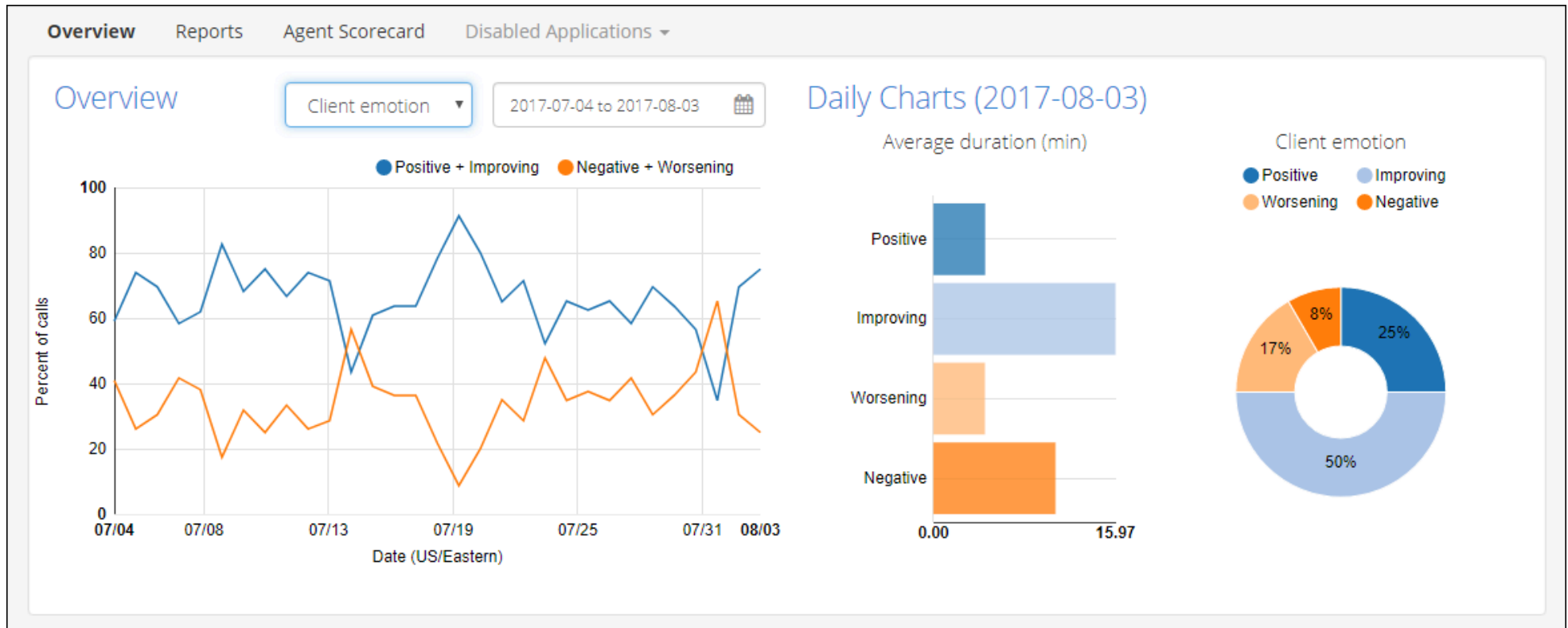
2. Agent emotion



The Overview chart can be clicked to display the daily agent emotional state. Daily Charts include average call duration by emotion and percentage of calls of a given emotion. Clicking on the Daily Chart graphs will trigger a search in the Files view below. Emotion values include:

- percentage of calls with **Positive and Improving agent emotion**
- percentage of calls with **Negative and Worsening agent emotion**

3. Client emotion



The Overview chart can be clicked to display the daily client emotional state. Daily Charts include average call duration by emotion and percentage of calls of a given emotion. Clicking on the Daily Chart graphs will trigger a search in the Files view below. Emotion values include:

- percentage of calls with **Positive and Improving** client emotion
- percentage of calls with **Negative and Worsening** client emotion

Long-term analysis

Use charts on the  **Dashboard** overview to view call and application information over time to look for data patterns.

Call statistics charts

On the **Dashboard**, choose **Overview** from the submenu to view a graph of call information over time, and determine patterns in your call data.

V-Spark provides several ways to examine data that has already processed.

V-Spark Dashboard Overview

The screenshot shows the V-Spark dashboard interface. At the top right, there are navigation links for 'Dashboard', 'Settings', 'Help', and a user profile 'a.username'. Below this, the breadcrumb path is 'Company: Technologies / Organization: Demos / Folder: All'. A green box labeled 'Submenu' points to the 'Overview' tab in the main navigation bar. The 'Overview' section is active, displaying a line chart of 'Number of calls' over time (Date US/Eastern) from 06/17 to 07/17. A dropdown menu is open over the chart, listing 'Call volume', 'Call duration', 'Agent emotion', and 'Client emotion'. A red box labeled 'Select Overview Option' points to this dropdown. To the right of the chart, a date range selector shows '2017-06-17 to 2017-07-17'. A red box labeled 'Select Month or 31 Day Overview' points to this selector. Further right, a 'Call Statistics' table is displayed with columns for 'Today', 'Yesterday', '7 day avg.', and 'Jun 18-Jul 17, 2017 avg.'. The table contains data for 'Call volume', 'Avg. call duration', 'Avg. calls per agent', 'Avg. agent talk time', 'Avg. client talk time', 'Positive agent emotion', and 'Positive client emotion'.

	Today	Yesterday	7 day avg.	Jun 18-Jul 17, 2017 avg.
Call volume	39	53	51.14	52.87
Avg. call duration	0:08:17	0:08:33	0:09:06	0:08:42
Avg. calls per agent	0.5	0.6	0.5	0.5
Avg. agent talk time	0:04:00	0:03:33	0:03:51	0:03:47
Avg. client talk time	0:04:32	0:04:53	0:05:03	0:04:50
Positive agent emotion	67 %	64 %	54 %	44 %
Positive client emotion	81 %	64 %	68 %	66 %

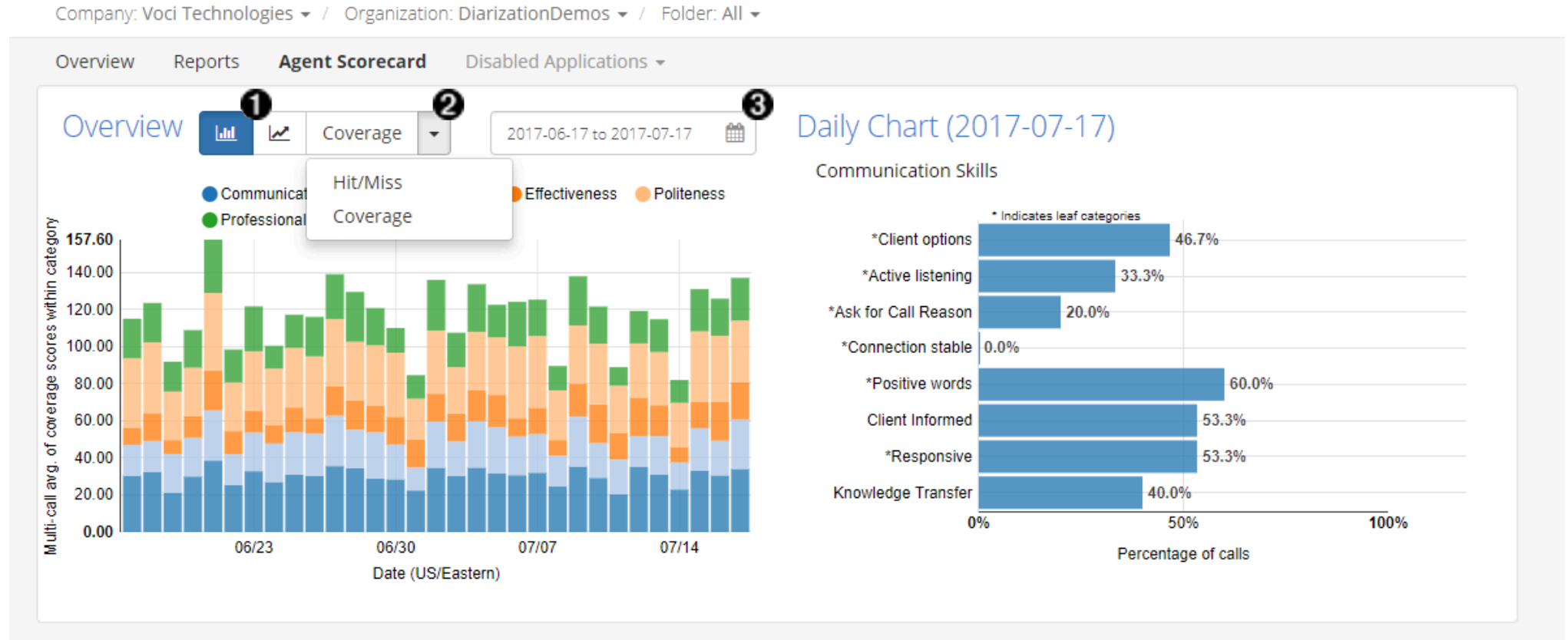
1. Select the company, organization, and folder to view, then choose Overview from the submenu.

2. Select the date range for the Overview. This defines the horizontal axis of the graph. Choose one of these options:
 - **Last Month Overview** - If there is data in the last month, the graph will display that date range by default. The number of calendar days that are considered part of this range will vary based on the length of the current month. The date picker contains a quick link to return to this view after exiting.
 - **Calendar month** - If there is no data in the last month, by default the graph will display the last calendar month with data. The date picker enables you to select any calendar month. To help you identify months containing data, days with data are displayed with enlarged numbers.
3. Select options from the drop-down menu to use different graph types to view your data. Select from:
 - **Call volume**
 - **Call duration**
 - **Agent emotion**
 - **Client emotion**

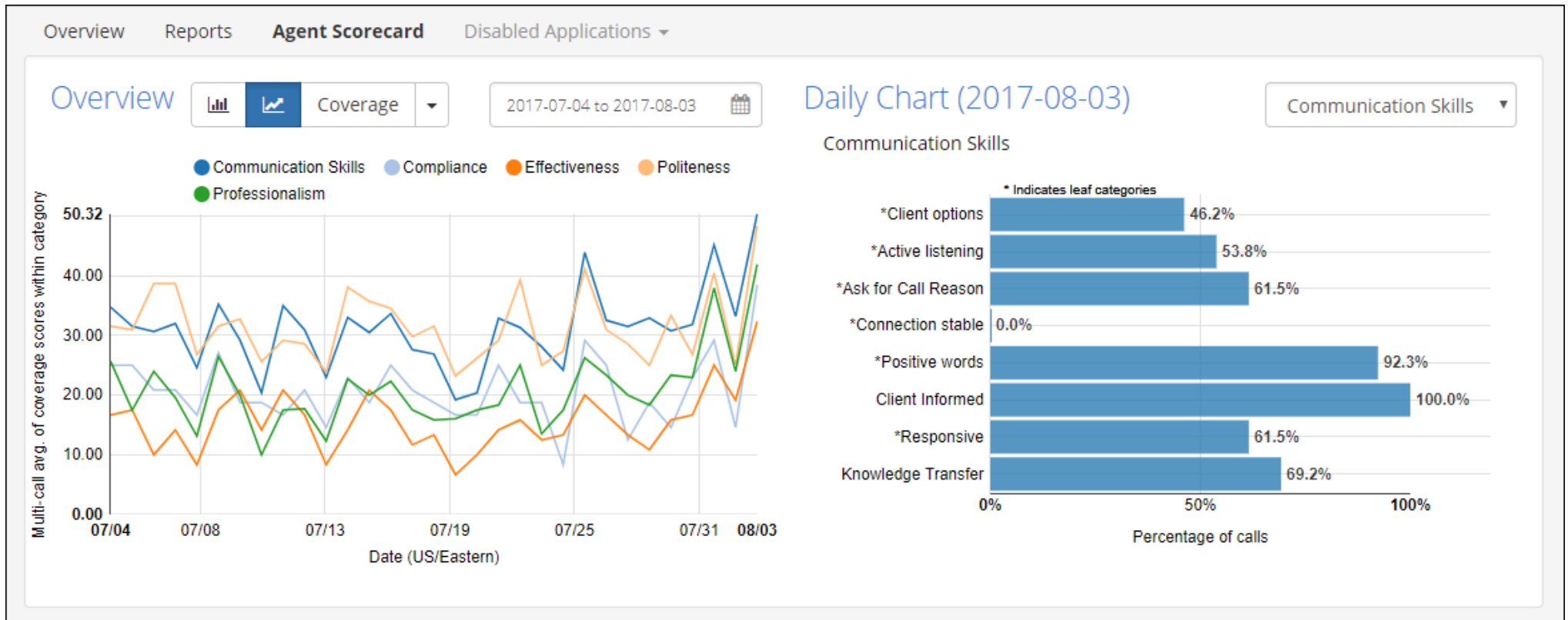
Application charts

The **Overview Chart** on the top left side of the screen breaks down a scorecard by category for each day over the past 31 days. Each **category** is made up of **lower-level categories**. You can choose to view the chart according to the percentage of all calls that meet the requirements for a certain category (Hit/Miss), or according to the average percentage of calls per lower-level category (Coverage).

Each colored bar and each colored line is clickable, and each changes the **Daily Chart** view to show the upper-level categories' lower-level categories for more thorough analysis. The Overview chart stacks the scores for each category so an overall score can be compared on a daily basis.



1. Select bar or line graph
2. Select Score type to view
3. Select Month Overview or 31 Day Overview



Dashboard views

While the **Overview** provides high-level visualizations of the audio, the **Views** section allows the user to interact with the data on the level of individual calls, clients, or dates. There are two types of views: the **Files View** and the **Summary View**. Each view provides a close-up look at the files through a variety of metrics over a customizable date range. Select a view by clicking on the drop-down menu next to **View**, below the chart on the **Overview** screen.

The screenshot displays the 'Views' section of the V-Spark dashboard. At the top, a line chart shows 'Positive agent emotion' over time from 10/23 to 11/22. Below the chart is a summary table for 'Positive client emotion'.

Metric	10/23	10/29	11/03	11/09	11/15	11/22
Positive agent emotion	0%	0%	0%	0%	0%	0%
Positive client emotion	100%	0%	100%	100%	100%	100%

The main 'Files View' section includes a 'View' dropdown menu (set to 'Files'), a date range selector (2021-10-23 to 2021-11-22), and a search bar. On the left, there are filters for 'Term' (Speakers), 'Gender' (Agent), and 'Emotion' (Overall). At the bottom left, a 'Call Duration' slider is set to 'Max'. The main area shows a table of call records with columns for File Name, Agent ID, Time, Duration, Silence Time, Overtalk, Diarization, Agent Clarity, Client Clarity, and Agent Gender.

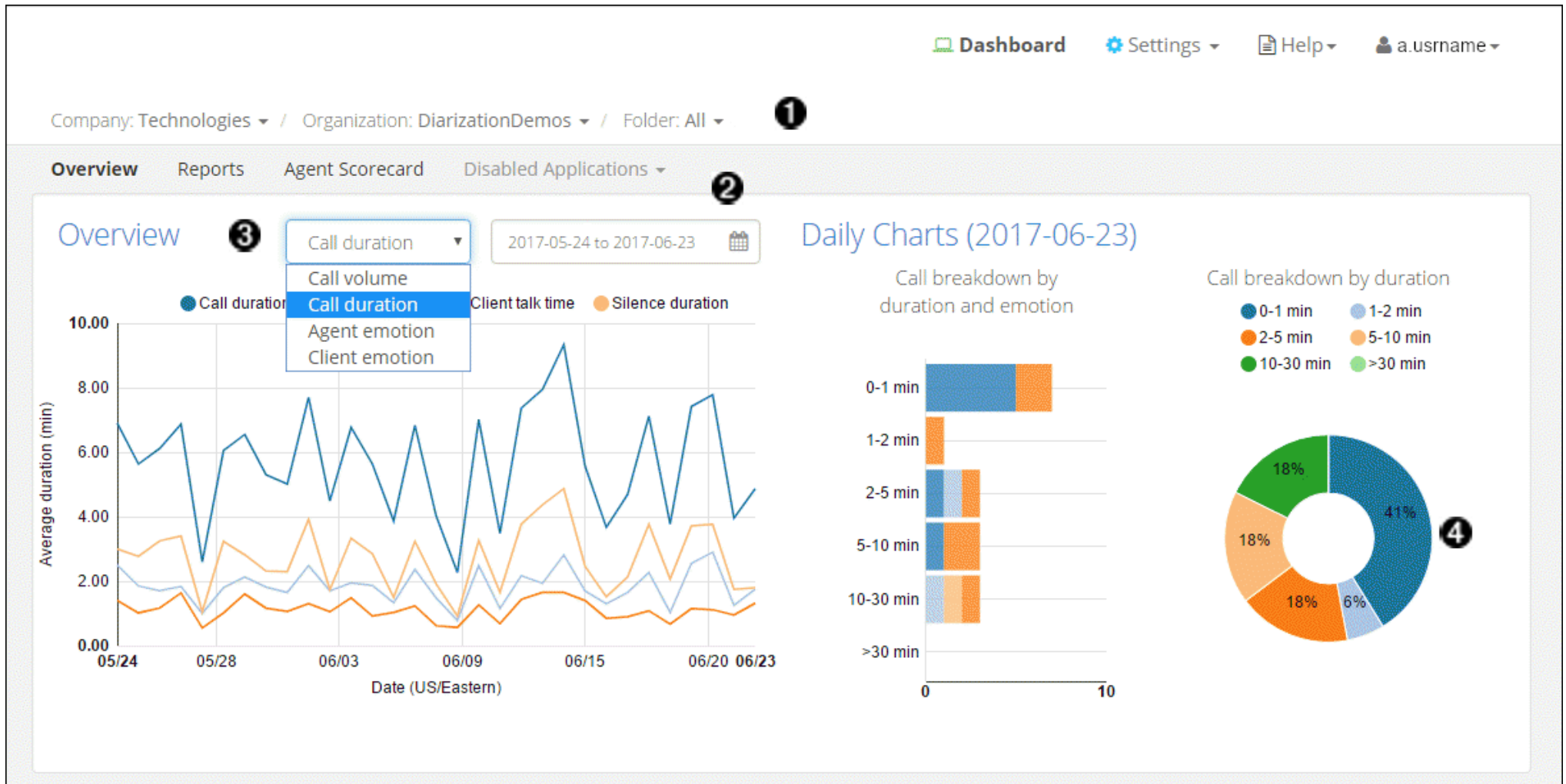
File Name	Agent ID	Time (US/Eastern)	Duration	Silence Time	Overtalk	Diarization	Agent Clarity	Client Clarity	Agent Gender
759925783659.wav	701	2021-11-22 2:38:28 pm	0:01:18	34.15%	14.29%	N/A	84.45%	82.41%	Fema
759925733067.wav		2021-11-18 5:16:34 pm	0:01:07	32.99%	N/A	N/A	N/A	91.89%	N/A

Application views

While the **Dashboard Overview** focuses on giving a high level view of the calls coming into V-Spark, defined **Applications** permit the user to focus on specific aspects of the data for deeper analysis. Available *Applications* are listed by name in the submenu. Applications use the linguistic and acoustic properties of calls to evaluate different metrics.

View options

The  **Dashboard** provides numerous ways of reviewing and searching individual and aggregated audio record data.



1. Specify the company, organization, and folder for which you want to view data. Your choices may be limited by your user permissions.
2. Select the date range for which you want to review data. Dates with no audio data are grayed out in the calendar menu.
3. Choose from various overview metrics to see daily charts for volume, duration, and emotion.

4. Roll over parts of the graphs to get specific information about call types.

Summary

The Summary View displays a table with call statistics by day. The available metrics are the same as those shown in the Call Statistics table and include the following:

- **Call volume**
- **Average call duration**
- **Average agent talk time**
- **Average client talk time**
- **Positive agent emotion**
- **Positive client emotion**

Clicking on a date takes the user to the Files View, with the date picker set to include only calls from that date.

Date	Call volume	Avg. call duration	Avg. agent talk time	Avg. client talk time	Positive agent emotion	Positive client emotion
2017-09-25	5	0:09:52	0:02:57	0:02:43	60 %	40 %
2017-09-26	6	0:12:10	0:03:47	0:03:21	100 %	83 %
2017-09-27	5	0:06:12	0:02:23	0:01:32	100 %	50 %

Showing 1 to 3 of 3 entries

Using the Summary view

The application **Summary View** enables you to compare application scores day by day. You are able to define categories to measure common call attributes, such as an increase in calls about Billing, a decrease in callback rates, or improvements in Agent Performance. It is then possible to identify changes in call distribution relating to those attributes.

The Summary View table contains a column for each top-level category in the application. Overall averages for each scored date in the selected date range are at the bottom of each column. Sort the table according to a particular category's scores by selecting the column heading of that category. Select a date in the **Date** column to switch the view below to the Files view and filter it to only show files from that date.

The Summary View also gives you the option to switch between viewing Coverage or Hit/Miss Scores for top-level categories.

The screenshot shows the Summary View interface. At the top, there is a 'View' dropdown set to 'Summary', a date range selector for '2018-11-08 to 2018-12-07', a 'Coverage' dropdown, and a settings gear icon. Below this is a blue button labeled 'Export Table as CSV'. The main table has columns for 'Date', 'Professionalism', 'Communication Skills', 'Compliance', 'Effectiveness', and 'Politeness'. The data rows are for '2018-12-04' and '2018-12-05', followed by an 'Overall' summary row. At the bottom left, it says 'Showing 1 to 2 of 2 entries'.

Date	Professionalism	Communication Skills	Compliance	Effectiveness	Politeness
2018-12-04	35.00	45.83	50.00	40.00	71.43
2018-12-05	0.00	0.00	0.00	0.00	0.00
Overall	17.50	22.91	25.00	20.00	35.72

Choosing **Hit/Miss** scores displays the percentage of calls on that date that received scores in that category.

Choosing **Coverage** scores displays the average coverage score of calls on that date that received scores in that category.

Files / Audio Records

The **Files View** enables you to search for, view, filter, and manage individual audio files. Search filters can constrain results on an ad-hoc basis.

The screenshot displays the Files View interface with the following components and annotations:

- 1**: Left sidebar containing filters for Term, Gender, Emotion, Call Duration, and Overtalk.
- 2**: Date range filter set to "2021-10-20 to 2021-11-19".
- 3**: Bookmarks section.
- 4**: Search Terms section with "OR" and "AND" options.
- 5**: Search icon.
- 6**: Table header for search results.
- 7**: Export (CSV) button.
- 8**: Column visibility dropdown showing "(16) Show / Hide columns".
- 9**: Search results table showing two entries.

File Name	Agent ID	Time (US/Eastern)	Duration	Silence Time	Overtalk	Diarization	Agent Clarity	Client Clarity	Agent Gen
759925733067.wav		2021-11-18 5:16:34 pm	0:01:07	32.99%	N/A	N/A	N/A	91.89%	N/A
759925734870.wav		2021-11-18 5:16:34 pm	0:01:07	32.99%	N/A	N/A	N/A	91.89%	N/A

1. The **left sidebar** filters search results based on specified attributes. Note that search terms can be either plain text or regular expressions.
2. The **date dropdown** filters results by recording date.
3. The **bookmarks section** enables you to save search terms.

4. The **search terms section** shows the terms that are currently being used to filter the file list.
5. The **bulk tagging toggle** shows or hides a toolbar that allows you to select multiple files and then to add or remove tags from the selected files.
6. The **search results section** displays metadata columns for each of the files returned by your search.
7. The **export button** enables you to save search results in .CSV format. Use the export dialog to filter the files and metadata fields to be included in the exported file.
8. The **show/hide columns button** enables you to select metadata columns to show or hide in the search results section.
9. The **delete button** enables you to remove individual files from the system. Once you click the **x** and confirm the removal, V-Spark queues the file for deletion. A system under heavy load may take several minutes to fully delete the file, but this situation is unlikely.

Application files view

In addition to narrowing your search results using the Dashboard graphs, you can also conduct searches using the filters for Dashboard application metrics and the other search functions based on the Application Files View. Additionally, you can use Boolean OR/AND searches to find calls that meet more than one category or that meet at least one of a subset of categories. These combined search capabilities give you the power to break down and analyze your data in highly flexible ways for deeper insights into your customer interactions. The following image shows the results of an OR search performed for "Communication Skills" or "Verification".

Application Files View

View

Files

2021-10-23 to 2021-11-22

Refresh search

Term Plain Regex

Speakers

+

Gender

Agent

All

Emotion

Overall

All

AgentCoverage OR AND

- + Compliance
All
- + Communication Skills
All
- + Effectiveness
All
- + Politeness
All
- Professionalism
All
- Call control
All
- Empathy
All

Bookmarks

Search Terms
OR
AND

(16) Show / Hide columns

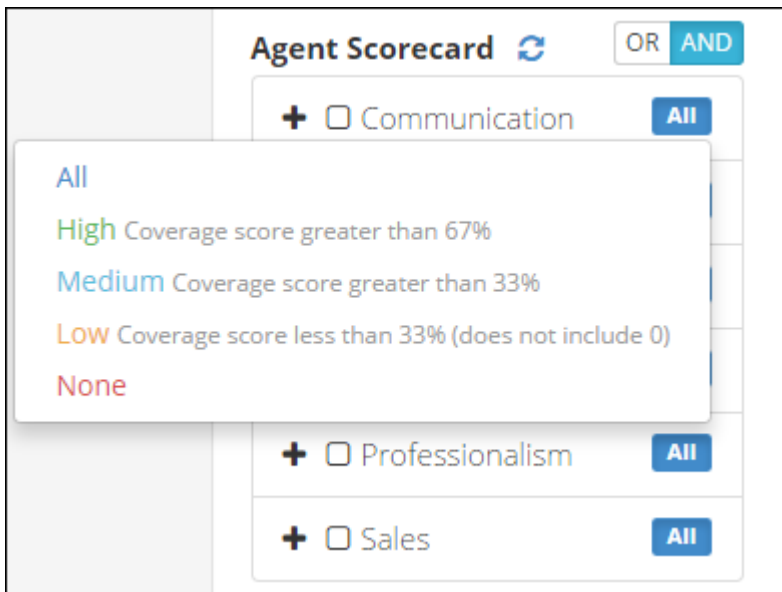
Showing 1 to 1 of 1 entries Export (CSV)

	File Name	Agent ID	Time (US/Eastern)	Duration	Silence Time	Overtalk	Diarization	Agent Clarity	Client Clarity	Agen Genc
✕	759925783659.wav	701	2021-11-22 2:38:28 pm	0:01:18	34.15%	14.29%	N/A	84.45%	82.41%	Fema

[Agent] ... for holding i **apologize for** the delay. yea ... ch for holding i **apologize for** the delay. ... yeah. the only **i will** be at we can l ... ut the account **the only way** it's gonna be ... n c

Previous
1
Next

Application Category Score Filters



This Files View is similar to the Files View of the Dashboard Overview. Perform simple searches by entering search terms in the **Term** field and by selecting the **+** button to add those terms to the **Search Terms** list. Choose built-in or custom metadata fields from the **Term** drop-down menu to search for a specific value/field pair. Remove active search terms from the list by selecting the **x** on the term's tag. Switch between plain text and regular expression searches by using the **Plain/Regex** toggle.

There is an additional search filter section for category scores. If there is a **+** button next to a category, select that button to display the lower-level categories beneath that specific category. Check the checkbox next to a category to filter the list and display only the files that received scores from that specific category.

When multiple check boxes are selected, use the search query Boolean function to find the intersection of the metrics. Select which type of Boolean search to perform by using the **OR/AND** toggle. Boolean "AND" searches only include files receiving scores from *all* of the selected categories. Boolean "OR" searches include files receiving scores from *any* of the selected categories. For each category, you can choose to filter by all or some of the lower-level categories or by certain ranges of scores.

- **All** – Displays all calls with coverage scores greater than 0%.
- **High** – Displays all calls with coverage scores greater than 67%.
- **Medium** – Displays all calls with coverage scores greater than 33%.
- **Low** – Displays all calls with coverage scores less than 33% and excludes scores of 0.
- **None** – Displays all calls with coverage scores of 0%, or calls that are unscored.

Agents

When V-Spark processes audio, it is divided into **agent** and **client** speakers. V-Spark helps you explore and audit agent information for things like politeness and emotion, the presence of specific phrases, compliance with requirements for content in each call, and so on. For mono audio, V-Spark uses a process called side classification to label speech as coming from either an agent or a client. For stereo audio, the channel that contains the agent speaker is configured at the folder level.

The next few sections illustrate the basic mechanisms that V-Spark provides to examine agent performance and how to work with that information. These sections use an application called **Agent Scorecard** that was designed to increase the efficiency of the agent evaluation process by automatically detecting the presence or absence of phrases that correspond to QA form requirements. The results of this application can be used to get an overall view of agent performance, pinpoint performance categories that require improved training, and compare scores for individual agents.

Using the Agents view

The Agents View enables you to compare application results by date range on an agent-by-agent basis.

The screenshot shows the V-Spark analysis interface. At the top, there is a 'View' dropdown set to 'Agents' and a date range filter for '2016-09-01 to 2016-09-30'. Below this, there are filters for 'LEVEL 1' (Effectiveness) and 'LEVEL 2' (All). A 'DATA' dropdown is set to 'Hit/Miss Score'. The interface also includes a 'Show 10 entries' dropdown, an 'Export Table as CSV' button, and a search bar for 'Search Agent ID'. The main table displays agent performance metrics for 16 agents, with an overall average row at the bottom.

Agent ID	Overall	Effectiveness	Additional assistance	Call Back	Offer best solution	Gather Facts	Sales Effectiveness
001	100.00	66.67	33.33	33.33	33.33	66.67	66.67
004	100.00	25.00	25.00	0.00	0.00	25.00	0.00
006	100.00	60.00	40.00	20.00	0.00	60.00	20.00
007	100.00	100.00	0.00	100.00	0.00	100.00	0.00
009	100.00	28.57	14.29	0.00	0.00	14.29	0.00
010	100.00	100.00	0.00	0.00	0.00	0.00	100.00
011	100.00	50.00	25.00	0.00	0.00	37.50	12.50
012	100.00	33.33	33.33	0.00	0.00	33.33	0.00
015	100.00	66.67	0.00	0.00	0.00	66.67	0.00
016	100.00	66.67	0.00	0.00	0.00	66.67	0.00
Overall (Avg.)	96.20	71.96	32.58	16.44	9.28	55.56	14.73

1. Select date range
2. View the application categories and phrases
3. Select application level and categories to view

4. Select data to view (Hit/Miss Score, Coverage Score, Average Call Duration, or Average Call Silence)
5. Search for a specific agent ID
6. An agent's overall score for all calls
7. Click on an agent ID to see all calls handled by that agent
8. Average overall totals for all agents

View Agents
2016-09-01 to 2016-09-30
⚙️

LEVEL 1
DATA

LEVEL 1: All
Hit/Miss Score

Show 10 entries
Export Table as CSV
Search Agent ID

Agent ID	Overall	Professionalism	Communication Skills	Compliance	Effectiveness	Politeness
001	100.00	100.00	100.00	66.67	66.67	100.00
006	100.00	100.00	100.00	100.00	100.00	100.00
007	100.00	100.00 3 hit/3 calls	100.00	100.00	100.00	100.00
011	100.00	100.00	100.00	100.00	50.00	100.00
012	100.00	0.00	66.67	100.00	33.33	100.00
018	100.00	100.00	100.00	100.00	100.00	100.00
020	100.00	100.00	100.00	100.00	100.00	100.00
022	100.00	100.00	100.00	100.00	100.00	100.00
025	100.00	100.00	100.00	100.00	0.00	100.00
028	100.00	100.00	100.00	90.00	50.00	100.00
Overall (Avg.)	98.40	88.66	96.73	79.92	78.50	98.40

Showing 1 to 10 of 59 entries

Previous
1
2
3
4
5
6
Next

By default, the Agents View is sorted by Agent ID, or can be sorted by any alternative column by clicking on the header for the column by which you want to sort. This makes it easy to examine agent performance in various ways. For example, in an application that scores agent

performance, you can click twice on the header for the **Overall** column to sort the view from lowest overall score to highest. You can then select the **Agent ID** entry of the poorest-performing agent to explore audio or transcripts of the individual calls of that agent.

The Agents View also provides ways to refine the data that you are displaying. The Agents View's Search box enables you to search for a particular agent to specifically evaluate their progress. To see the calls for a specific agent by date range, users can either:

- Click the Agent ID to display all of the calls for that agent. You can then drill down to do an individual examination of agent performance on specific dates.
- Use the date picker at the center of the screen to refine the calls that are displayed on the Agents View screen. Clicking the Agent ID then displays all of the calls for that agent during the selected time period.

As you move the cursor over any cell in the table, a pop-up identifies the number of calls from which the displayed percentage is derived. This can help you determine the significance of that percentage. For example, 50% derived from 1 out of 2 calls has a different meaning than 50% derived from 50 out of 100 calls. The first can be an aberration; the second is more likely to indicate a pattern. Clicking on any of the values in the table displays a **Files View** that is populated with the files used to compile that value.

The Blue toolbar shown in the Agents view provides multiple ways of refining the data that is displayed in the Agents view. From left to right:

- **LEVEL 1** - this drop-down enables you to select a complete (**ALL**) selection of top-level entries to display, or choose a top-level (Level 1) category that identifies a specific aspect of a call. Top-level/Level 1 categories are the same as the columns displayed in the Application Overview graph when you first explore the Application Overview Dashboard.

Once you have selected a specific top-level (**LEVEL 1**) category, you can also select a **LEVEL 2** category. A leading asterisk (*) next to a category name in the select list indicates a leaf-level category, meaning that you cannot drill down any further into associated data for the item.

Clicking a **LEVEL 2** item that is not a leaf-level category (and is therefore not preceded by an asterisk) displays a **LEVEL 3** drop-down category. A leading asterisk (*) next to a category name in the select list indicates a leaf-level category, meaning that you cannot drill down any further into associated data for the item.

- **DATA** - this drop-down enables you to specify the primary way by which the data shown in the table is calculated and organized. Possible options are:
 - **Hit/Miss Score** - indicates whether or not matches were found in a category's lower-level categories. Matches are based on the categories and category hierarchies that were defined in the application that produced this agents view.
 - **Avg. call duration** - indicates the average call duration, which is the time period between answering and terminating the call
 - **Avg. call silence** - indicates the average amount of silence that occurred during a call
 - **Coverage Score** - indicates the average score of all lower-level categories within the current highest level category. Matches are based on the categories and category hierarchies that were defined in the application that produced this agents view.

Finally, the **Agents View** enables exporting agent scores to a CSV file that includes all the categories currently shown in the table and facilitates more in-depth analysis of agent performance. All pages of the table will be exported.

View Agents
2016-09-01 to 2016-09-30
⚙️

LEVEL 1
All
DATA
Hit/Miss Score

Show 10 entries
Export Table as CSV
🔍 Search Agent ID

Agent ID	Overall	Professionalism	Communication Skills	Compliance	Effectiveness	Politeness
001	100.00	100.00	100.00	66.67	66.67	100.00
006	100.00	100.00	100.00	100.00	100.00	100.00
007	100.00	100.00	3 hit/3 calls	100.00	100.00	100.00
011	100.00	100.00	100.00	100.00	50.00	100.00
012	100.00	0.00	66.67	100.00	33.33	100.00
018	100.00	100.00	100.00	100.00	100.00	100.00
020	100.00	100.00	100.00	100.00	100.00	100.00
022	100.00	100.00	100.00	100.00	100.00	100.00
025	100.00	100.00	100.00	100.00	0.00	100.00
028	100.00	100.00	100.00	90.00	50.00	100.00
Overall (Avg.)	98.40	88.66	96.73	79.92	78.50	98.40


Showing 1 to 10 of 59 entries

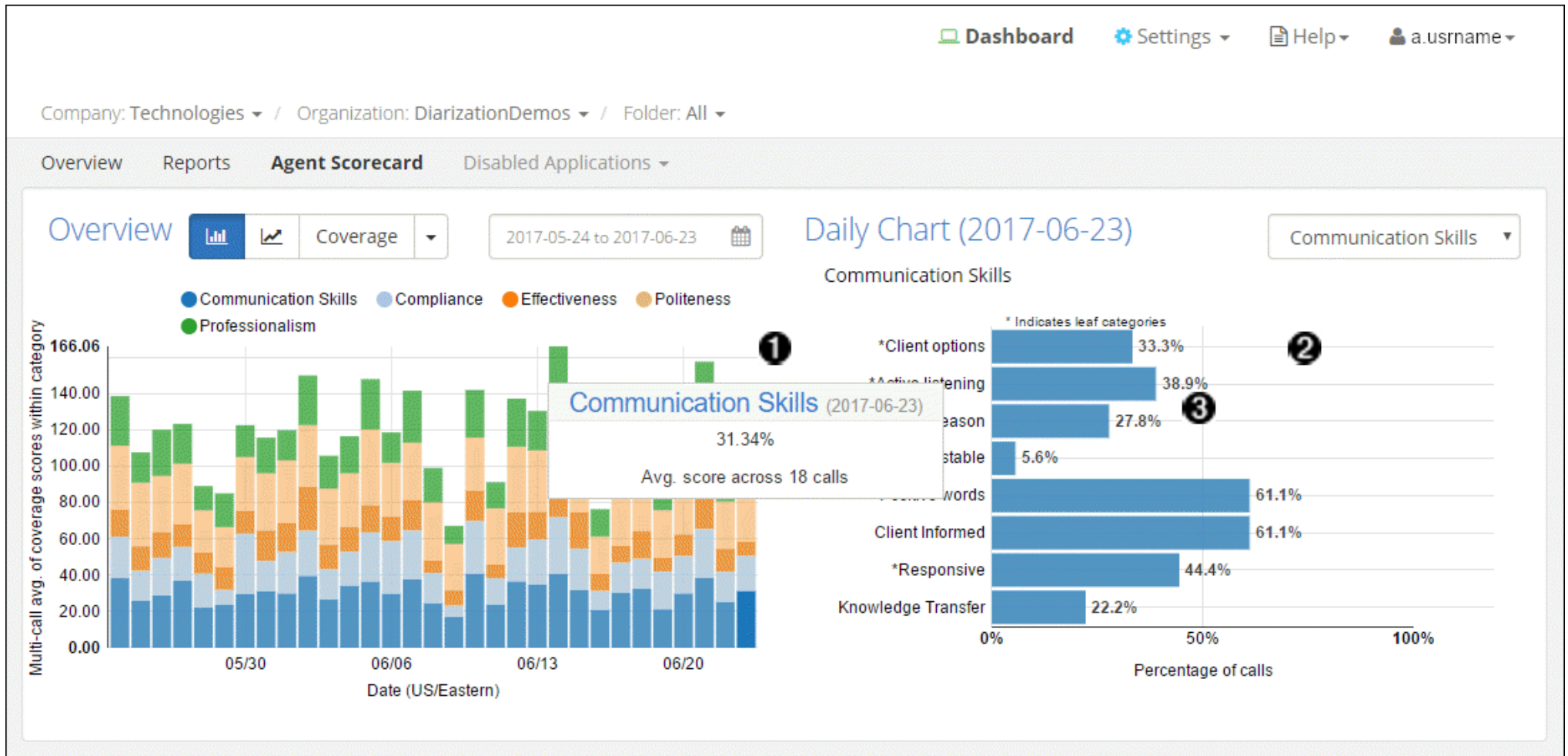
Previous
1
2
3
4
5
6
Next

After reviewing or refining the agents, time period, categories, and levels for which you want to see results, select **Export Table as CSV** to export current data in *Comma-Separated Values* format. More in-depth analysis of agent performance is possible using other tools where CSV

is a supported input format.

Agent performance

The **Agent Scorecard** screen displays an overview of score information for a given folder. To access this screen for a specified folder, click  **Dashboard**, then click the **Folder** dropdown, and select the folder that you are interested in. Finally, select the **Agent Scorecard** application from the submenu.



1. Roll over parts of the graph to see agent scores for each category.
2. Category breakdowns show you exactly where your agents can improve.
3. Click on a section of the graph to view lower-level categories for even more detailed insights.

Filtering agent data

The **View** section at the bottom of the Agent Scorecard screen enables you to filter the information about all of the Agents within a selected or default time period. These filters enable you to drill down into multiple levels within characteristics such as Communication Skills, Compliance, Effectiveness, and so on.

To display the Filtering Agent Data Files screen like the following, select **Files** from the **View** drop-down menu.

The screenshot displays the V-Spark interface for call analysis. On the left, there are several filter sections: 'Term' with a search input and 'Plain/Regex' options; 'Speakers' with a search input; 'Gender' with a dropdown menu; 'Emotion' with a dropdown menu; and 'Agent Performance' with a list of categories like 'Communication Skills', 'Compliance', 'Recording', 'Verification', 'Effectiveness', 'Politeness', and 'Professionalism'. The main area shows a search results table with columns for File Name, Agent ID, Time, Duration, Silence Time, Overtalk, Diarization, Agent Clarity, Client Clarity, and Agent Gender. Below the table, there are call transcripts with highlighted words.

File Name	Agent ID	Time (US/Eastern)	Duration	Silence Time	Overtalk	Diarization	Agent Clarity	Client Clarity	Agent Gender
Call4508897.wav	0001	2018-03-21 3:03:22 pm	0:13:56	34.49%	16.39%	--	86.40%	80.72%	Male
[Agent] ... i don't know what's going on with. ... ora, that's no good oh, okay, gotcha . yeah. okay. i ... i gotcha i'll tell you ... i gotcha i'll tell you ... hat let's say, great once again, yo									
Call4541511.wav	0007	2018-03-20 3:03:30 pm	0:27:41	25.74%	30.10%	--	87.31%	86.95%	Male
[Agent] ... name is jason, how can i help you. ... is jason, how can i help you. ... name is jason, how can i help you. ... et up that and correct ... t, well, i can definitely understand t									
Call4541392.wav	0006	2018-03-19 3:03:20 pm	0:07:07	28.23%	41.18%	--	85.21%	82.79%	Male
[Agent] ... hello, i'm definitely sorry having t ... o basically if i understand right, what's ... d so basically if i understand right, what's ... you have that i'm trying to press and h ... tion									
Call4541274.wav	0005	2018-03-18 3:03:18 pm	0:08:14	22.70%	27.78%	--	89.08%	83.48%	Female
[Agent] ... me is cecilia. how can i help you? ... s cecilia. how can i help you? ... me is cecilia. how can i help you? ... ur memory card is that correct ms with it um. so you're try									

1. Search your calls using text, filters, and bookmarked searches.
2. Filter calls using individual or combined application categories.

File details

759173003539435.wav

1 ▶ 0:00 / 19:48 🔊 🔽

2 📄 Download MP3 | JSON | Text

4 File Details Application Scores Tags

Recording Date
Friday, March 23, 2018, 2:00:01 AM EDT

Transcript ID (tid)
27765

Request ID
ccbb102f-faee-4e3d-b1ee-70718de351c6

Show Emotion ON OFF

Skip Silence ON OFF

Duration 0:19:48

Silence 49.1 %

AGENT: Finance, that's the one, but usually made to the log in.

CLIENT: When I when I click on more because shop support and my _Company_ finance ashwell started it

AGENT: To go to the sign in but you should be the choose mobile or online. It's you know, thanks to the m

CLIENT: Est the mobile.

AGENT: **Alright, good day long** out. [SILENCE 4] Can log on I am the mobile version? [SILENCE 5]

CLIENT: Yeah. [SILENCE 3]

AGENT: And then go back and see if you can.

CLIENT: Yeah, it's automatically. [SILENCE 4]

AGENT: Well and see if he and from the mobile doesn't say online on mobile doesn't hear that you want.

CLIENT: Yeah, they still my face and I will whenever I click it would be in the home in the search bar 85 and w.com.

AGENT: Take the mobile support out the back and put and I'm just going here to the website discuss. I sev website and I've seen. And you know. [SILENCE 6] Just take the mobile part at the back side of it and save the actual mobile. [SILENCE 15]

CLIENT: Okay, this looks like you.

The controls on this page enable you to:

1. Play the entirety of the audio file, use the slider, or navigate to specific moments by clicking on a section of the transcript.
2. Download the file in audio MP3 format, and the transcript in text or JSON formats.
3. Read the transcript, taking advantage of highlighted search terms.
4. Select tabs to switch between viewing File Details including call metadata and emotion, Application Scores, and Tags.

When folders are created, folder options define what type of audio will be added to the folder and how the audio should be broken down in the transcript.

- Transcripts of two-channel, stereo audio with one speaker on each channel are divided into "speaker turns" that show you who was speaking during each part of the transcript.
- Transcripts of one-channel, mono audio files with a single speaker are broken up into "utterances" to make them easier to read and to simplify drilling down into a single utterance.
- Transcripts of one-channel, mono audio files with two speakers may display speaker turns due to V-Spark's "diarization" feature. However, if diarization does not detect multiple speakers to trigger different speaker turns, the transcript will display all audio as a single speaker, broken up into utterances.

Highlighted areas within a transcript use different colors to indicate the following:

- **green** - positive emotion identified
- **grey** - both positive and negative emotional content
- **red** - negative emotion identified
- **(none)** - no detectable emotion

Bold words in the transcript identify those words or clauses that have emotional content.

Clicking on a section of the transcript will also allow you to listen to the audio at that point in the conversation. The audio player skips over sections of silence longer than 10 seconds when **Skip Silence** is turned on. In the previous example, **Show Emotion** is ON and **Skip Silence** is OFF.

For 2-channel audio calls that receive an overtalk score greater than 0%, the score is highlighted by blue text. When speaker overtalk occurs within a transcript, the affected speaker turns will display a solid blue border on the left-hand side so that they can be easily spotted and reviewed if necessary.

If you navigate to the File Details page after conducting a search, your search terms appear highlighted in yellow, and arrows on the right hand side enable you to navigate between instances of your search terms.

Silence time is visualized in the transcript as [SILENCE (length of silence in seconds)]. For example, [SILENCE 4] indicates 4 seconds of silence. Only silence lasting longer than 3 seconds will be marked. You can filter calls based on the percentage of silence time using the **Call Silence Time** slider in the Files View of the Dashboard.

UI controls

To see information about an audio file in the current folder, click its name in the file list to open a **File Details** screen:

The screenshot displays the V-Spark interface for analyzing an audio file. On the left, the file details for 'fe_03_11365.wav' are shown, including recording date, transcript ID, request ID, and agent ID. Below this, there are toggle switches for 'Show Emotion' and 'Skip Silence', and a table of audio metrics.

Metric	Value
Duration	0:10:00
Silence	19.2 %
Overtalk	55.8 %
Agent Clarity	86.9 %
Client Clarity	84.2 %

On the right, the transcript is displayed with search results. The search term 'I didn't understand get' is highlighted in red in the client's message. The agent's response is highlighted in green, showing the search term 'I quickly took know' in bold. The transcript is numbered 1, and the search results are numbered 5 and 8. The interface includes a search bar, a play button, and a volume slider.

1. Clear search term highlighting from transcript display
2. Use the up and down arrows to view instances of your search terms

3. Play call audio
4. Select **MP3** to download an MP3 audio file of the call. Select **JSON** to download a JSON file of the call transcript. Select **Text** to download a text file of the call transcript.
5. Select a piece of the transcript to play audio from that point
6. Show emotion for a visual representation of sentiment analysis
7. Skip silent portions of the call for faster review
8. Select to display a URL that links to this point in the transcript. You can copy this URL to the clipboard for use elsewhere.
9. The blue border on the left of the transcript indicates portions of the call with high overtalk

Application Scores

Application scores are also accessible for individual call transcripts. If there are multiple applications with scores for the file, they will all be displayed in the side panel.

Application Scores

759173003539435.wav

0:00 / 19:48

Download MP3 | JSON | Text

File Details | **Application Scores** | Tags

Agent Performance View Scores

Processed: 2018-03-23 06:00:06

Communication Skills ▾	69%
Client options	1
Active listening	2
Ask for Call Reason	1
Connection stable	
Positive words	10
Client Informed ▾	33%
Share System Info	
Warm Hold	
Agent Actions	8
Responsive	2
Knowledge Transfer ▾	20%
Compliance ▾	50%

AGENT: Let me get over here. So you are looking at the for like the form browser. Alright, let me get over here with you. [Go to top](#) ↑

CLIENT: HI, baby, huh huh huh huh.

AGENT: So much computer.

CLIENT: But what I'm what I'm and it looks like the little app, but it's not I'm not I'm not on the apps is I think with you have to go into my browser and I fives and _Company_ and a lot how long.

AGENT: Alright now and you aren't are you where is says my users, and view usage details. They do see that.

CLIENT: Click.

AGENT: On my _Company_ at the top and you know within the within your. [SILENCE 3]

CLIENT: Is I'm gonna?

AGENT: Squarely on a plaque.

CLIENT: At the bottom bags me you import X and when I Cook more asked him he says when he feels message please do so bad. It is for me. If you I'll click on this is I mean if he feels and it just comes up my name my number \$5.08 and then it shows the total amount and I've use a flash and then the a great plan manage usage alert and then it's like.

AGENT: And **my favorite is** this a breakdown the recent activity.

CLIENT: No maam. [SILENCE 3]

AGENT: Alright, can you go back to. So you're on a minute. Alright minutes. [SILENCE 3] Alright, here's a year, where you see the total minutes right all right go back out one go back out one, I mean can you. Alright, alright, hold on. Alright do you see where says Curry call logs these scroll down to see if you can recall law up on the break down of usage tight. [SILENCE 4]

CLIENT: Is this is and I was nothing on it. So I clicked out and I went all the way back to my _Company_ mobile and it has like a little home screen of the bills the plan the device and profile and it says. Usage summary, has my name is Sharon minutes shared messages share data and then I come on the **fifth most popular weights** and then it has all these extra things at the bottom.

AGENT: And I think minimum when you're in the _Company_, I'm a little in the my mobile you want to.

CLIENT: A **wrong** with my.

AGENT: And is designed for the most. How you're in your town? You're in the right you need to be in the online can you choose online one. [SILENCE 5] You know one is for my mobile and that's probably why.

Selecting an application category will allow you to drill down into lower-level categories. For leaf-level categories you will see the Count scores listed to the right. Clicking on that number will highlight the instances of that category's phrases in the transcript.

NOTE: Count scores are the number of matches at the leaf-level. They may not always match the number of highlighted phrases. More information about count scores can be found in the V-Spark Application Development Guide.

For more information about viewing application scores. see [Scores](#).

Tags

V-Spark enables you to identify specific transcripts or the results of previous searches by adding a logical label called a **tag** to the transcript's file details. You can then search for transcripts that are associated with that tag. Tags are displayed on the **Dashboard** beneath the **File Name**.

Apply tags to multiple files in bulk using the **Bulk tag toolbar** on the **Dashboard** (see **Tags**). Modify the tags associated with an individual file using the **Tags** tab on the **File Details** page.

Tags

The screenshot displays the V-Spark interface. On the left, a file player for '759173003527850.wav' is shown with a progress bar at 0:00 / 15:09. Below the player are options to 'Download MP3 | JSON | Text' and tabs for 'File Details', 'Application Scores', and 'Tags'. An 'Add Tag' field is present, with a list of existing tags: 'apology', 'ineligible', 'review', and 'upgrade'. On the right, a transcript is visible with alternating colored blocks (red, blue, green) representing different speakers. The transcript includes the following text:

AGENT: Yeah, we do have any idea cause apple has announced it yet.

CLIENT: I don't know. Okay. And my question is **he isn't eligible** for an upgrade to February and I was that you do this and you got the five C and he just did the monthly payments and sever came around with he still be eligible for an appraised and I can you can you get out of the edge program and take it up right.

AGENT: Well, you you'd still be able to go ahead and upgrade, but he's still gonna have a balance for the for the upload of the edge program do still have that balance due right exactly uh-huh,

CLIENT: It's does depend itching and **he supposed** to be 74, but if you with the February the upgrade would be cheaper that.

AGENT: depending on whatever that the actual cost of that the actual iPhone, six is correct.

CLIENT: Right, but usually when you have enough when you get it for less money than if you're gonna buy it out right.

AGENT: Right and then the only difference is that you would be in a two year. Contract so the contract with start all over again right I have.

CLIENT: At that point right so if you waited to do this five. C yes, and the pains and \$74

AGENT: Right.

CLIENT: just to get at or whatever before you could do something else. If you waited till February to eight so February and he's an upgrade you might be able to get the sixth then at that point for that it would be


Add a tag to the file by typing the name of the tag into the **Add Tag** field. As you type, tags that contain letters that you have previously typed and are already applied in other files will be displayed in a menu below the field. Choose one of these tags to complete the tag, or finish typing to complete a new tag, then press **Enter** to add the tag. V-Spark will display "Tag added successfully!" beneath the **Add Tag** field, and the tag will be visible in the list of tags.

You may add a maximum of 100 tags to any file. Tag names may not contain punctuation or other special characters, but may contain any combination of numbers and letters.

Remove a tag from the file by selecting the **x** button on the tag you want to remove. The tag will be removed in the list of tags, and V-Spark will display "Tag removed successfully!" beneath the **Add Tag** field.

Search

The Files view provides a function for searching your files. This section discusses how to perform **Plain Text** and **Regular Expression** searches, perform **Metadata** searches, perform **OR/AND** searches, **Bookmark** search terms, and filter through results.

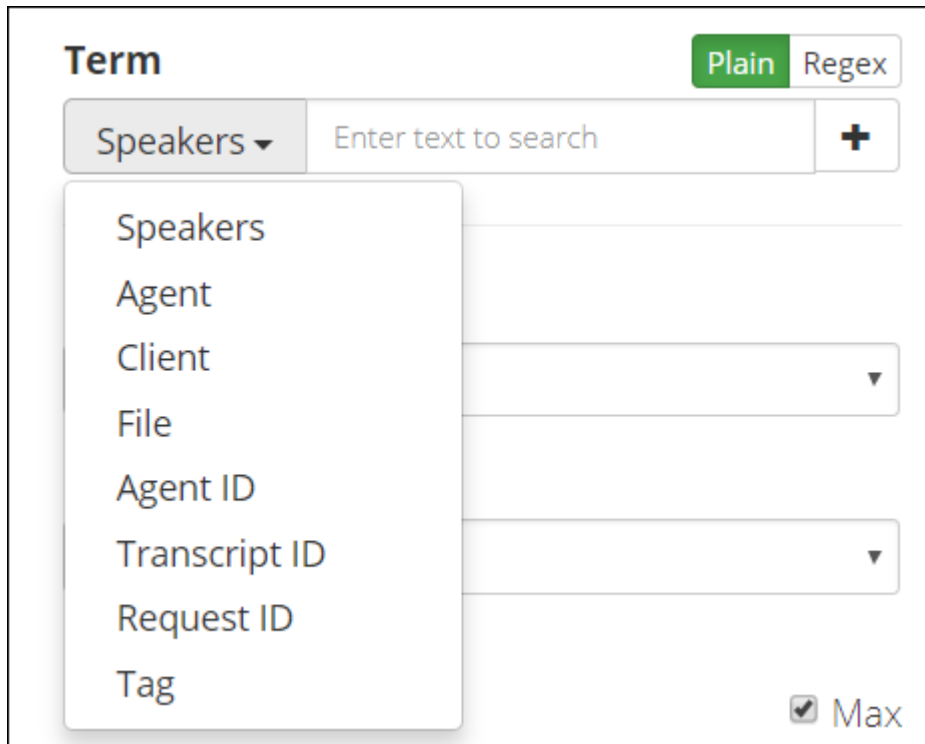
The following example shows the **Files View** of the calls in a folder. To access this screen for a specific folder, click  **Dashboard**, then use the dropdown lists to select the company, organization, and folder options associated with the audio record data you want to review or search. Audio records associated with these entities appear below dashboard overview charts.

The screenshot displays the V-Spark 4.4.1-1 search interface. At the top, there are options for 'View' (Files) and a date range filter for '2016-09-01 to 2016-09-30'. The search bar contains the text 'Agent: Thank you for calling' with a search icon. Below the search bar, there are filters for 'Term' (Plain/Regex), 'Gender' (Agent/All), 'Emotion' (Overall/All), 'Call Duration' (0:00:00 to Max), 'Overtalk' (0% to 100%), and 'Call Silence Time' (0% to 100%). The search results are displayed in a table with the following columns: File Name, Agent ID, Time (US/Eastern), Duration, Silence Time, Overtalk, Agent Gender, Client Gender, and Overall Emotion. The table shows three search results for the term 'Thank you for calling'.

File Name	Agent ID	Time (US/Eastern)	Duration	Silence Time	Overtalk	Agent Gender	Client Gender	Overall Emotion
759173003521219.wav [Agent] ... Thank you for calling this is Travis ...	043	2016-09-02 11:19:22 am	0:16:01	34.76%	3.13%	Male	Female	Imp
759173003521546.wav [Agent] ... Thank you for calling my name is Luis ...	184	2016-09-02 11:15:27 am	0:01:25	28.64%	12.50%	Female	Female	Posi
759173003521522.wav [Agent] ... Thank you for calling #Company#. My ...	068	2016-09-02 11:15:23 am	0:07:28	22.22%	23.33%	Female	Male	Posi

1. Search your files for key words and phrases.
2. Show and hide data field columns to customize display.
3. Bookmark frequent searches.
4. Export search results to a CSV file.
5. Use filters to narrow down your search.

To search the transcripts of the files that are located in this folder, enter a term into the search field under the **Term** label. The files in the selected date range for the current folder are searched for the specified term, and that term is added to the list of search terms at right.



The screenshot shows a search interface with the following elements:

- Term** label at the top left.
- Search method toggle buttons: **Plain** (highlighted in green) and **Regex** (highlighted in orange).
- A search input field containing the placeholder text "Enter text to search" and a plus sign (+) button.
- A dropdown menu for "Speakers" with the following options: Speakers, Agent, Client, File, Agent ID, Transcript ID, Request ID, and Tag.
- A checkbox labeled "Max" at the bottom right of the dropdown menu.

The search term input field supports both the *Plain and Regex* (Regular Expression) text search methods. The desired type of search is selected using the green/orange **Plain/Regex** toggle button at the top right of the search field. Plain search can consist of words or phrases and can use the special characters shown in Plain Text Search, while regex searches only search a single word and support the special characters discussed in Regular Expression Search.

NOTE: All dashboard searches are case insensitive.

The search function can be used to search for words, phrases, or regular expressions. The search can be applied over all turns in all transcripts,

the agent speaker turn or the client speaker turn of transcripts, as well as by File Name, Agent ID, Tag, Transcript ID, Request ID, and any custom metadata fields that have been configured for the folder. This type of filtering is selected using the drop-down menu to the left of the search text box, and is discussed in the next section.

NOTE: Depending on whether or not a phrase triggers number translation, numbers can appear either written out (two) or as digits (2) in transcripts. The application phrases and dashboard searches only look for exact matches, so if you search for (2) you won't see results for (two). If you are looking for all instances of a number, you can use the OR "|" search operator. For example, searching "2 | two" will provide you with all files containing the number two.

Search Fields and Default Values

The Plain/Regex toggle button determines how a search is performed based on the text and special characters that you enter. The **Term** drop-down enables you to identify the field within a transcript that is searched for the specified value. Different fields are different data types, and therefore have built-in defaults for how they are searched. The fields on the **Term** drop-down and their associated default search behavior are the following:

- **Speakers** - searches within strings that have been identified as any spoken text in the transcript, both **Agent** and **Client**.
- **Agent** - only search within strings that are identified as **Agent** speech in the transcripts.
- **Client** - only search within strings that are identified as **Client** speech in the transcripts.
- **File** - enables you to search file names, and automatically includes a '*' wildcard on either side of the term that you are searching for. This will match any file names that contain the search term as a substring.
- **Agent ID** - searches within any strings that have been identified as the **Agent ID** field in custom metadata that you provided
- **Transcript ID** - an integer value that can only be searched for explicitly. No special characters are permitted.
- **Request ID** - a string value that can be searched for explicitly or using the special characters that are associated with the type of search that you are performing.
- **Tag** - a string value associated with a file that can be searched for explicitly or using the special characters that are associated with the type of search that you are performing.
- `custom metadata fields` - searches within any strings that have been identified as fields in any custom metadata that you provided. These custom metadata fields are folder-specific, and a list of them is appended to the bottom of the **Term** drop-down.

Plain Text Search

Plain text search may be used to search for single or multi-word phrases, while a regular expression search accepts only single words such as "frustrat*". The following table shows characters that may be used to perform special functions when using plain text search.

Special Search Characters for Plain Text Search

Character	Function	Example	Meaning
- (minus)	Exclude	-not happy	Files that do not contain "not happy"
&	AND	cell phone & tablet	Files containing both "cell phone" and "tablet"
	OR	cell phone tablet	Files containing either "cell phone" or "tablet"
*	Wildcard for 0+ characters	help*	Will return results for help, helping, helpful, and other variants of the word stem. Does not work with multi-word searches.
?	Single character wildcard	th???	Will return results for "there", "thank", "those". Does not work with multi-word searches.
~n	Search for phrases appearing up to <i>n</i> words apart within the same speaker turn	cancel account ~4	Files containing "cancel" and "account" within the same speaker turn and no more than 4 words apart. For example, "cancel your, the account", "cancel my daughter's membership account", and so on.

Character	Function	Example	Meaning
~t	Search for phrases appearing within the same speaker turn	cancel account ~t	Files in which "cancel" and "account" appear in the same speaker turn
^	Search for phrases found at the beginning of a speaker turn	^ thank you	Files containing "thank you" at the beginning of a speaker turn
\$	Search for phrases found at the end of a speaker turn	account number \$	Files containing "account number" at the end of a speaker turn

NOTE: The `^` (beginning of line) and `$` (end of line) characters were added in V-Spark Version 3. Data uploaded prior to Version 3 cannot be searched using these characters.

Time-based Search & Limitations

Time-based searches can be used to find phrases that occur within a specified time period from the start or end of the call. Examples of time-based searches are shown in the following table.

Time-Based Search Terms


Search Term	Meaning
phone ~s<30	Files that have "phone" in the first 30 seconds of call
cancel account ~s>30	Files that have "cancel account" anywhere except the first 30 seconds of call
thank you ~e<30	Files that have "thank you" in the last 30 seconds of call
upset ~e>30	Files that have "upset" anywhere except the last 30 seconds of call
-thank you ~e<30	Files that don't have the search term "thank you" in the last 30 seconds of the call

One consequence of time-based search requires explanation. Since time-based search only evaluates speaker turn start times, some matches may be missed or incorrectly marked. For example, if the search phrase is "Client: phone ~s<30" and the Client's turn begins at 28 seconds, but the phrase "phone" doesn't occur until 40 seconds after the start time, then a match will still be signified since the start of the speaker turn fell within the correct interval.

NOTE: Time-based searches were not allowed in 2.2.x data searches, and will return results for the search phrase located anywhere in the file.

Regular Expression Search

Regular expression (regex) queries search text using pattern matching. V-Spark regex syntax is briefly described in the following sections.

Regex searches can be performed in the  **Dashboard Files** view by selecting the **Regex** option for search text. Regex queries in V-Spark will only match whole terms as with plain text queries. There are no partial matches.

NOTE:

Regex queries operate on individual terms and cannot be used to match multi-word phrases. For each regex query, the search engine scans the list of terms in the inverted index to find all matching terms. It then retrieves all documents for each term.

This means that running a regex query that matches many unique terms can be very resource intensive. Users should avoid using a pattern that starts with a wildcard (for example, *.foo).

For more information on regex syntax as used in V-Spark, refer to the [documentation for Elasticsearch 1.4](#).

Allowed characters

Any Unicode characters may be used in the pattern, but certain characters are reserved. The reserved characters are:

```
. ? + * | { } [ ] ( ) # @ & < > ~" \
```

NOTE: ^ and \$ are not reserved characters.

Anchoring

Most regex search engines will match any part of a word. In these cases ^ and \$ are used to anchor searches to the beginning and end of a word, respectively. However, since V-Spark regex searches will only match whole words, these special anchors are not required and not valid

except as literal characters. As an example, for the word "abcde":

```
ab.* # match
abcd # no match
^abcd # no match
abcd$ # no match
```

Characters and examples

Regular Expression Examples

Character	Meaning	Example Text	Example Queries	Match?
.	Match any character	ab	a.	Yes
+	Match preceding shortest pattern 1 or more times	aaabbb	a+b+	Yes
		aaabbb	a+b+c+	No
*	Match the preceding shortest pattern 0 or more times	aaabbb	a*b*	Yes
		aaabbb	a*b*c*	No
?	Match the preceding shortest pattern 0 or 1 times	aaabbb	aaabbbc?	Yes

Character	Meaning	Example Text	Example Queries	Match?
{n}	Indicate a minimum number of times the preceding shortest pattern should match	aaabbb	a{3}b{3}	Yes
			a{4}a{4}	No
{n,n}	Indicate a minimum and maximum number of times the preceding shortest pattern should match	aaabbb	a{2,3}b{2}	Yes
()	Group characters to form subpatterns	ababab	(ab)+	Yes
	OR (applies to the <i>longest</i> pattern on either side)	aaabbb	a+ ccc	Yes
			aaa bbb	No
[]	Indicate lists or ranges of characters. ^ negates characters.	abc	[a-z]*	Yes
			[^a-z]	No
~	Negate the following shortest pattern	abcdef	abc~df	Yes
			ab~ef	No
< >	Range of numeric values	99	<1-100>	Yes

Character	Meaning	Example Text	Example Queries	Match?
			<100-101>	No
			<99-100>	Yes
&	AND - text must meet conditions on both sides	aaabbb	aaa.+&.+bbb	Yes
			aaa&bbb	No
@	Match any word	hello	@	Yes
			@&~(hello)	No

Bookmark Searches

If you conduct a particular search regularly, you can bookmark your search terms to quickly repopulate the terms at a later time. Click **Add to Bookmark** in the **Search Terms** drop-down menu to display the **Add Bookmark** dialog.

Add Bookmark

Name

Boolean OR AND

Search Terms Speakers: need help x Speakers: looking for help x

Term

Plain Regex

Additional search terms can be added to the bookmark using a search term input similar to the one used for search. A name must be provided for the bookmark, and **AND/OR** search can be toggled as needed. After the bookmark is saved, it can be found in the list to the right of

Bookmarks. Clicking the blue bookmark tag will reset the search to contain only the search terms saved in the bookmark. Bookmarks may be modified or deleted by clicking on **Manage Bookmarks** in the **Bookmarks** drop-down menu.



Filter Searches

Search Filters

View Files 2018-06-27 to 2018-07-26

Refresh search ↻

Term Plain Regex

Speakers ▾ Enter text to search +

Gender Agent ▾ All ▾

Emotion Overall ▾ All ▾

Call Duration Max
0:00:00 Max

Overtalk 0% 100%

Call Silence Time

In addition to the text filtering options described above, there are several other valuable **Search Filters**. Each setting is described in detail below:


- **Date range:** Search within a particular date range. The default date range is the last month with data.
- **Gender:** Search based on Agent or Client gender: Male, Female, or All.
- **Emotion:** Search based on Overall or specific Agent or Client emotion: Positive, Negative, Improving, or Worsening. Positive calls begin positive and remain positive or neutral through most of the call. Negative calls begin negative and remain negative or neutral through the call. Improving calls go from mostly negative to positive by the end of the call. Worsening calls go from positive or neutral to negative.
- **Call Duration:** Search within calls with durations that are within a call duration range.
- **Overtalk:** Search within calls with overtalk percentages that are within a range of percentages. Overtalk occurs when speakers talk over one another. The overtalk slider filters based on the percentage of Agent overtalk. This is the count of the Agent-initiated overtalk turns as a percentage of the total number of Agent speaking turns. In other words, out of all of the Agent's turns, Overtalk measures how many turns interrupted a Client's turn. 100% region has the most overtalk.
- **Call Silence Time:** Search within calls with percentages of silence that are within a range of percentages. Silence is equal to all non-speech time, calculated as the total audio duration minus the sum of the durations of each word. If music and noise are not decoded to word-events, they are counted as silence. Calls with 100% silence contain the most silence.
- **Agent Voice Clarity:** Search within calls with levels of clarity in the Agent audio that are within a range of percentages. Agent voice clarity measures how clear the agent sounds in the recorded audio. Agents with 100% clarity are the clearest, while low clarity is defined by poor signal, background noise, or difficulty of comprehension due to accent or enunciation.
- **Client Voice Clarity:** Search within calls with levels of clarity in the Client audio that are within a range of percentages. Client voice clarity measures how clear the client sounds in the recorded audio. Clients with 100% clarity are the clearest, while low clarity is defined by poor signal, background noise, or difficulty of comprehension due to accent or enunciation.
- **Diarization:** Search within calls with diarization scores that are within a range of values. When mono (1 channel) audio has multiple speakers, diarization is done to separate the speakers for analysis. The diarization score is a value between 0 and 1 that identifies how

completely the call can be divided into individual speakers. A score of 2 means the call cannot be diarized. Diarization technology is not perfect, and to find calls where diarization is done well, set the slider closer to one than to zero. The tradeoff is that fewer calls will be retrieved.

Exporting results

Generate CSV reports based on search results



Context

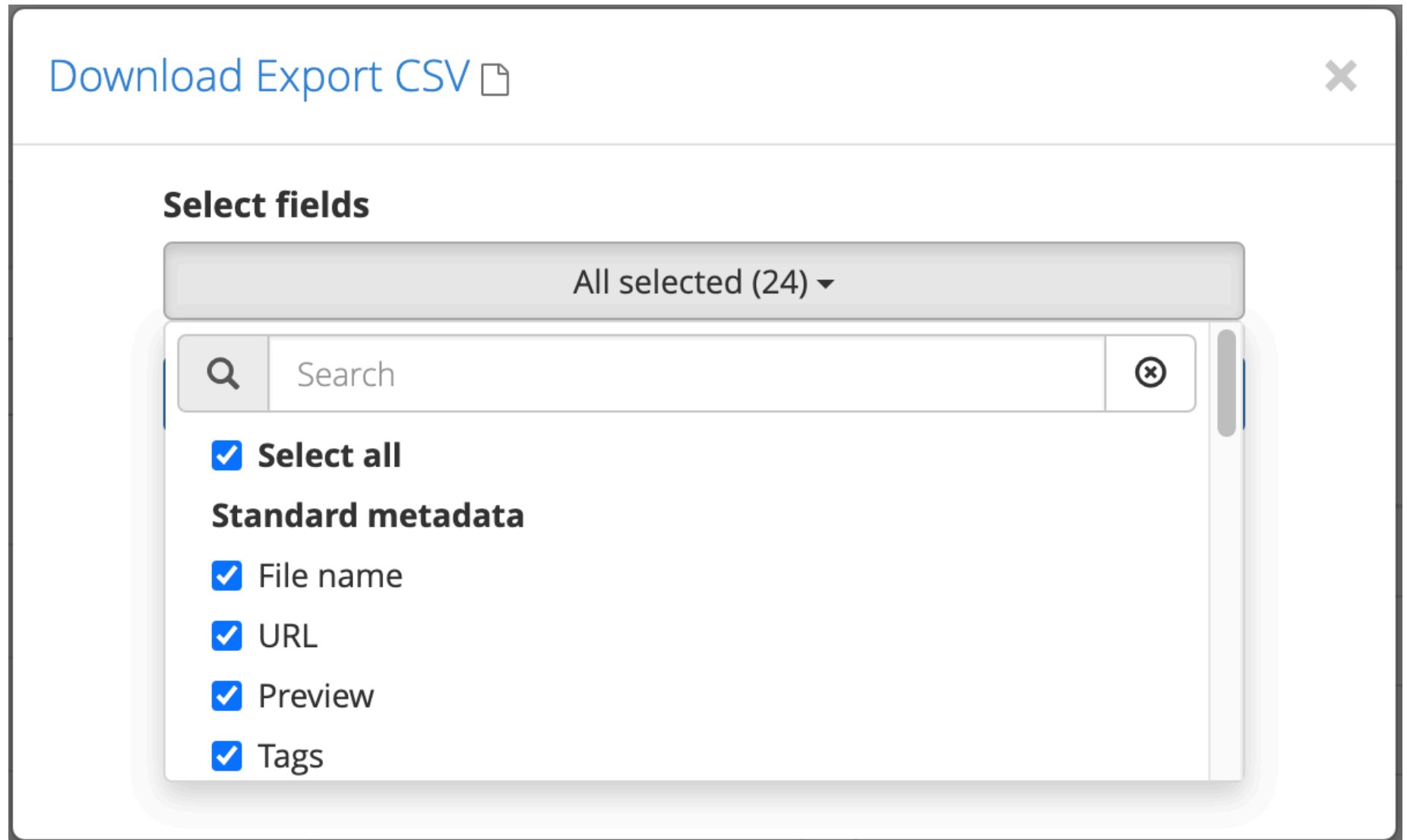
Export audio and application data from V-Spark to import it to other tools with the  **Dashboard Files** view. CSV reports may also be generated using the /search endpoint.

NOTE: As of version 4.4, there is no limit on the number of records that may be included in a CSV report.

Previously, the number of entries in CSV reports was limited to a maximum defined with the `export_filelist_limit` system configuration option. This option has been removed.

Procedure

- 1 Navigate to the  **Dashboard** and select the company, organization, and folder to be reviewed.
- 2 Scroll to the **Files** view and use the search functions to refine the results list. Each result listed in the **Files** view corresponds to one row in the export.
- 3 Click  **Export (CSV)**. The **Download Export CSV** dialog displays.



- 4 Specify all or select the fields (or columns) to be included in the export, and click **Generate export**.

Download Export CSV

✕

Select fields

All selected (24) ▼

Generate export

Your request has been submitted successfully with this unique ID:
62f89907-db71-4e0e-93b9-93e98a00e81d

The system will send an email to vspark_notifications@vocitec.com with a download link when the report is ready.

A link to the file will also appear in this window, but it may take a while to generate the report.

Closing this window does not cancel your request.

Link to report:

- 5 After V-Spark generates the report, click the link to download the results.

Download Export CSV

✕

Select fields

All selected (24) ▾

Generate export

Your request has been submitted successfully with this unique ID:
4ebac01f-41ce-4858-a650-2ec14529a1a8

The system will send an email to vspark_notifications@vocitec.com with a download link when the report is ready.

A link to the file will also appear in this window, but it may take a while to generate the report.

Closing this window does not cancel your request.

Link to report:

Result

While V-Spark generates the report, the **Download Export CSV** dialog displays a status indicator. When the report is ready for download, the indicator changes to a link, and V-Spark notifies the user who requested the report via email. Closing the dialog does not cancel the export request. If the dialog is closed before the report is ready, the report link must be retrieved from the email sent to the address associated with the user account that requested the report.

Tags

V-Spark makes it easy to identify specific transcripts or the results of previous searches by enabling you to apply a **tag** (a logical label) to them and then subsequently search for transcripts that are associated with that tag. Tagging multiple items in a single operation is generally referred to as *bulk tagging*.

Tagging multiple results

Tagging selected results is done from the **Dashboard**, using the **Bulk tagging button** and the **Bulk tagging toolbar** that displays under the **Bulk tagging button** once it has been selected.

Bulk Tagging Button and Toolbar

View Files

2021-10-19 to 2021-11-18

Refresh search

Term Plain Regex

Speakers Enter text to search +

Gender Agent All

Emotion Overall All

Call Duration 0:00:00 Max Max

Bookmarks

Search Terms

No files selected

Showing 1 to 10 of 13 entries

File Name	Agent ID	Time (US/Eastern)	Duration
759925733067.wav		2021-11-18 5:16:34 pm	0:01:07

The callouts in image above highlight the following:

1. The **Bulk tagging button**. Select this button to toggle display of the **Bulk tagging toolbar**.
2. The **Bulk tagging toolbar**. Enables you to select multiple files at one time, and to add and remove tags.

To tag results:

1. Use V-Spark's search capabilities to locate the transcripts that you want to tag
2. Click the **Bulk tagging button** to open the **Bulk tagging toolbar**
3. Click **No files selected**. A drop-down menu displays. To select files, click one of the following:
 - **All (up to 1000)** - select all of the matching results (if there are 1000 or less matching results)

TIP: If more than 1000 matching result are available and you want to tag all of them, you will need to tag the first 1000, then select results that match but do not have that tag, tag the next 1000, and so on.

- **All in view** - select the matching results that are shown on the current page

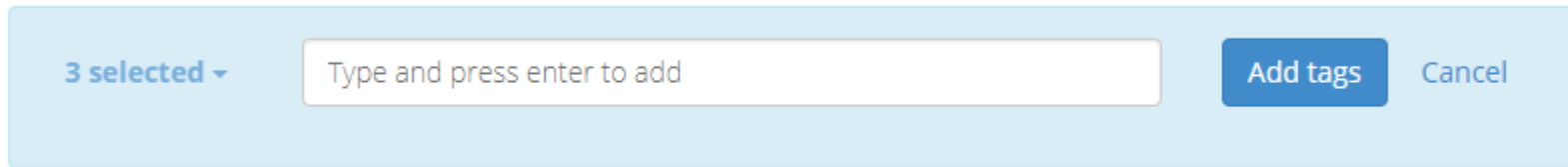
You can also select individual files manually by clicking the checkbox beside their names.

After selecting one of these menu commands or selecting files manually, the matching transcripts are highlighted.

You can also use other commands on this menu to deselect all selected items, or only deselect those that are shown on the current page.

4. After selecting the transcripts that you want to tag, the **Bulk actions menu** displays. Click that menu header to display the **Add tags** and **Remove tags** menu items. Select **Add tags**. A textbox displays.

Add Tags Textbox When Adding Tags



5. Type the tag(s) that you want to apply to the selected transcripts. Tag names cannot begin with a hyphen (dash). As you type, a drop-down menu displays existing tags that match what you have typed. Select a tag from the menu to complete the tag name, or finish typing the tag name. You can add multiple tags at the same time by pressing the enter key after each tag that you want to add. You can only add up to 20 tags at one time.

NOTE: You can cancel adding tags at any time before adding them by selecting **Cancel** from the Bulk tagging toolbar.

6. When you are finished entering the tag(s) that you want to apply, click **Add tags**. The tags that you have added to the selected transcripts display at the bottom of each selected transcript.

Once you have tagged transcripts, you can easily locate them again by selecting **Tag** from the **Term** drop-down in the search term input area, entering the name of the tag that you want to search for in the text input area, and pressing enter or the add (+) button. The search term input is discussed in Search.

NOTE: There can be a slight delay between the time that you initiate a bulk tagging operation and the point at which tagged versions of all matching results are displayed. You can click the **Refresh Search** button at any time to force the display to be updated.

You can also double-click any displayed tag to automatically add that tag as a search term and filter the file list.

Removing tags

The process of removing tags from multiple search results in a single operation is similar to the process of adding tags to multiple search

results, except that you:

1. Select **Remove tags** from the **Bulk actions menu**. After selecting this menu option, the tags area is pre-populated with the tags that occur on the selected transcripts. Only up to 20 tags can be displayed.
2. Click the **x** in any of the available tags to schedule them for deletion. The tag changes from green to red to make it easy to see that it is scheduled for deletion, and the **x** changes to an undo button, which you can click to remove that tags from the list of those that are planned for deletion.

NOTE: You can cancel removing tags at any time before adding them by selecting **Cancel** on the Bulk tagging toolbar.

3. Once you have identified all of the tags that you want to remove from the selected transcript, click **Remove tags** to remove those tags.

Removing tags

The screenshot displays the Bulk tagging toolbar. At the top, there is a 'Bookmarks' dropdown menu. Below it is a 'Search Terms' dropdown menu with a green tag labeled 'Speakers: help x'. To the right of the search terms are two buttons: 'OR' and 'AND'. Below the search terms is a blue button with a tag icon. The main area of the toolbar is light blue and contains a '110 selected' dropdown menu, a 'Cancel' button, and a 'Remove tags' button. A red tag labeled 'help-23-feb C' is shown in a white box, indicating it is scheduled for deletion.

Reports

The **Submenu** of the Dashboard also contains the **Reports** tab. There are two types of reports generated by V-Spark: **Monthly** and **Daily**. The reports in the list are ordered by date. Daily reports are generated at 12:05 AM (according to the time zone that was chosen for the organization) and summarize the activity of the previous day. Monthly reports are generated at 12:05 AM on the first day of the calendar month, and provide statistics about the previous month.

If the system is not running when a report is scheduled to be generated, that report will not be generated and will not appear in the list. Reports only incorporate data that was present when the report was scheduled to be generated. If you load or re-upload historical data for a day, that day's report will not be re-generated. If that day is in the current calendar month, however, the data will be incorporated into the monthly report when it is generated.

Location of Reports

The screenshot shows the V-Spark Reports interface. At the top, there are navigation links: Company: Technologies, Organization: internal, and Folder: All. Below this is a tabbed interface with 'Reports' selected. The 'Daily' report type is active, and a list of reports is displayed. The list has two columns: 'Day' and 'Report'.

Day	Report
2016-07-14	2016-07-14.csv
2016-07-13	2016-07-13.csv

Each CSV data file provides the name of each audio file with its corresponding Agent ID, date, time, and duration. These report files, which can be imported into a spreadsheet program for viewing, provide “big picture” summaries of the data.

The CSV file has multiple tables, each with their own headers that describe what each column contains. The following sections detail the

indicators measured in each table.

Calls per Hour Table

Hours/#Calls, Day 1, Day 2, Day 3: This section lists the number of calls made each hour of the day. There are 24 rows, one for each hour, and one column for each day of the reporting period for a monthly report.

Agent ID, Longest Average Call Durations, Shortest Average Call Durations: This section lists the top and bottom 20 Agent IDs in terms of their average call durations, both shortest and longest.

Agent ID, Highest #Calls, Average Call Duration: This section lists the top 20 Agent IDs with the most number of calls along with their average call durations.

Calls per hour Table

	A	B
1	Hour / #Calls	3/16/2015
2	0	0
3	1	0
4	2	0
5	3	0
6	4	0
7	5	0
8	6	0
9	7	0
10	8	0
11	9	0
12	10	100
13	11	0
14	12	0
15	13	0
16	14	0
17	15	0
18	16	0
19	17	0
20	18	0
21	19	0
22	20	0

Emotion Tables

Average call duration (Agent/Client emotion): These tables list the average duration of calls according to agent and client emotion. The four emotional values are positive, negative, improving, and worsening. These values are sorted alphabetically by emotion.

% of calls (Agent/Client emotion): This table lists the percent of calls for each emotion experienced by agents and clients. The four emotional values are the same as those in the table above, and are sorted alphabetically by emotion.

Emotion Tables

64	Avg. call duration (Agent emotion: improving)	Avg. call duration (Agent emotion: negative)	Avg. call duration (Agent emotion: positive)	Avg. call duration (Agent emotion: worsening)
65	0:03:28	0:04:09	0:03:46	0:03:29
66				
67	Avg. call duration (Client emotion: improving)	Avg. call duration (Client emotion: negative)	Avg. call duration (Client emotion: positive)	Avg. call duration (Client emotion: worsening)
68	0:03:53	0:04:00	0:03:49	0:03:24
69				
70	% of calls (Agent emotion: improving)	% of calls (Agent emotion: negative)	% of calls (Agent emotion: positive)	% of calls (Agent emotion: worsening)
71	29.53	25.17	28.86	16.44
72				
73	% of calls (Client emotion: improving)	% of calls (Client emotion: negative)	% of calls (Client emotion: positive)	% of calls (Client emotion: worsening)
74	26.85	29.19	24.16	19.8
75				

Call Averages Tables

Agent ID, Highest Avg. Silence %, Agent ID, Lowest Avg. Silence %: This table lists the top and bottom 20 Agent IDs on the basis of the average percentage of silence in their calls. Percentage of silence is calculated as total non-speech duration divided by total call duration.

Agent ID, Most Speech Clarity, Agent ID, Least Speech Clarity, Agent ID, Most Overtalk Agent ID, Least Overtalk: This section lists the top and bottom 20 Agent IDs on the basis of the average agent-initiated overtalk in their calls. Agent-initiated overtalk is when the agent starts talking while the client is still talking. This section also lists the top and bottom 20 Agent IDs on the basis of their overall speech clarity. Speech clarity scores measure the V-Spark system's confidence that it has correctly identified the words that were spoken. The higher the score, the clearer the speech.

Agent ID, Highest Avg. Talk Time, Agent ID, Lowest Avg. Talk Time: This section lists the top and bottom 20 Agent IDs on the basis of their average talk time per call. This is different than the Average Call Duration indicator, which measures length of call regardless of speech duration.

Avg. Agent Talk Time, Avg. Client Talk Time: This section displays the average talk time across all calls for agents and for callers.

Male Agent #Calls, Female Agent #Calls, Male Client #Calls, Female Client #Calls: This section lists the number of calls with male agents vs. with female agents, as well as male clients vs. female clients.

Male Agent Avg. Call Duration, Female Agent Avg. Call Duration, Male Client Avg. Call Duration, Female Client Avg. Call Duration: This section displays the average call duration for all calls when the agent is male vs. when the agent is female, and also for when the client is male vs. when the client is female.

Tables: Average Talk Time, Number of Calls by Gender, and Duration of Calls by Gender

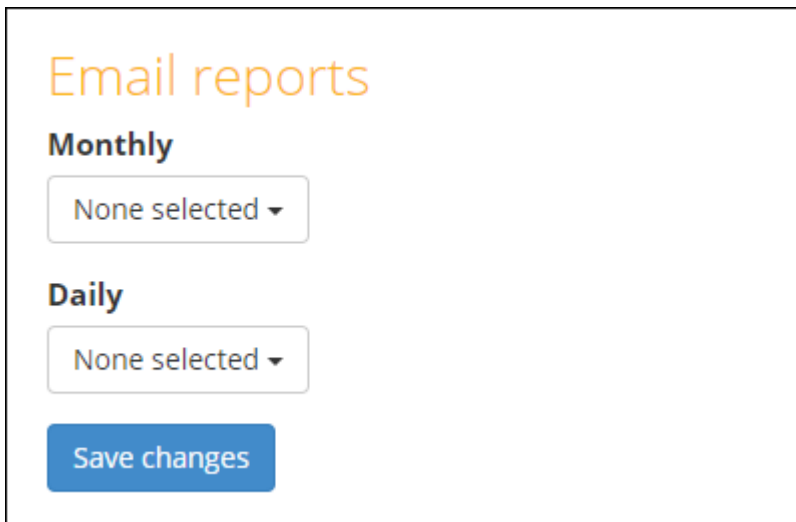
554	Avg. Agent Talk Time	Avg. Client Talk Time		
555	0:02:01	0:01:29		
556				
557	Male Agent #Calls	Female Agent #Calls	Male Client #Calls	Female Client #Calls
558	19	81	32	68
559				
560	Male Agent Avg. Call Duration	Female Agent Avg. Call Durati	Male Client Avg. Call Duration	Female Client Avg. Call Duration
561	0:08:17	0:05:09	0:07:17	0:05:02
562				

Subscribing to Email Reports

V-Spark allows subscriptions to **Email reports**. CSV files can be received as attachments to email so that reports can be reviewed regularly. This automation removes the need to log into V-Spark to download individual reports.

There is a drop-down menu at the top of all V-Spark pages that displays your user name. Choose **Profile** from that menu to display the **User settings** page, then scroll down to the **Email reports** section.

Email reports section of the User settings page



The screenshot shows the 'Email reports' section of the user settings page. It features a title 'Email reports' in orange. Below the title are two sections: 'Monthly' and 'Daily'. Each section has a drop-down menu with 'None selected' as the current selection. At the bottom of the section is a blue button labeled 'Save changes'.

The **Monthly** and **Daily** drop-down menus contain a list of all of the folders to which your account has access. If your account has access to multiple companies and organizations, the list of folders is separated into groups by organization short name. Each group also has an **All** choice that enables you to receive a single report for all of that organization's folders. Check the folders for which you would like to receive monthly (or daily) reports. As you choose folders, their names (or "All") are displayed on the button for the drop-down menu. If you select four or more items, the number of reports is displayed instead. Uncheck a folder to stop receiving monthly (or daily) reports for that folder.

Press the **Save changes** button to save your choices to your V-Spark account. You will receive the selected reports as email attachments the

next time those reports are generated.