TELiNTA™
Call Monitor

User Guide

Rev. 1.0.6

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Introduction

About Telinta

Founded in 2002, Telinta offers secure and reliable cloud-based solutions for VoIP service providers. Our full portfolio of white label solutions is highly customizable for you and your resellers. With Telinta, you can focus on growing your business, while we focus on managing your technology.

TeliCore™ is our robust platform, integrating world-class carrier-grade Switching and Billing capabilities from PortaSwitch™ with Telinta's own proprietary enhancements. TeliCore is the largest hosted softswitch installation of its type, anywhere in the world.

Telinta offers:

- Cloud-based rapid deployment, with no capital investment
- Full portfolio of ready to use turn-key solutions for VoIP service providers
- Best-of-breed VoIP technology
- Highly stable, scalable, and customizable platform
- Your own VoIP termination and origination partners
- Comprehensive training and Around-The-Clock Technical Support.

Preface

This document provides a general overview of Call Monitor and its functionality. The main purpose of Call Monitor is to complement functionality that is not available in standard PortaSwitch, but it can also be helpful for different types of statistics monitoring. Statistics of your customer calls, vendor reliability parameters, and profits are crucial for running successful VoIP business.

ASR, ALOC, Revenue, and Gross Margin provide vital information that allows the service provider to be completely informed about its service and to be ready to perform any needed changes in the PortaSwitch configuration.

Call Monitor significantly enhances reporting capabilities of standard PortaSwitch.

Based on feedback from a large number of our customers, we learned that the statistics model of standard PortaSwitch needed to be extended to provide more information. The Call Monitor application is a proprietary addition developed by Telinta to cover some aspects of billing activities that cannot be controlled by the standard PortaSwitch's set of utilities.

The tool was developed to allow PortaSwitch users to increase their revenues with the capabilities described below.

Key Features And Benefits

Call Monitor has multiple features, which extend the limited functionality of a standard PortaSwitch installation.

These features include:

- Tracking customer profit
- Tracking down malfunctioning vendors with near real time ASR reports
- Monitoring ALOC of particular vendors
- Displaying information graphically
- Customizing configuration for information displays
- Using Asynchronous JavaScript and XML (AJAX)

Tracking customer profit

Call Monitor allows you to track your customer profits in order to quickly identify problems. For example, if the profits of a customer suddenly decreased, you could identify this problem and try to find the reasons for it (e.g., wrongly configured routing or extremely high profit guarantee limits).

Tracking down malfunctioning vendors with near real time ASR reports

Average successful rate (ASR) is an indicator of correct and sustainable performance of your vendors.

In scenarios with multiple vendors, you might face the problem when some vendors are not able to connect a call. In such a case they will be automatically skipped, but this will increase the **PDD** (**Post Dial Delay** – the time between dialing the number and connection with the called side).

Using Call Monitor ASR reports, you can identify this problem and take measures in time.

Monitoring ALOC of particular vendors

Another parameter of efficient termination is **average length of calls (ALOC),** which shows how long a call lasts. When this parameter is low, it can mean that a vendor disconnects the call in the middle of the conversation.

Call Monitor permits you to track these issues and allows you to start investigating and finding such a vendor. You can then exclude this vendor from routes, contact their tech support, and allow the vendor back when the problem is resolved.

Displaying information graphically

Call Monitor is able to draw graphs based on information of a particular vendor or customer. Such representation of information can simplify the process of report analysis by the operators.

Customizing configuration for information displays

There is a variety of parameters monitored by Call Monitor. All of them can be sorted in different ways. Additionally, all your settings, such as sorting, displaying of a particular parameter, vendor, or customer, etc., can be saved as a Profile. Profiles allow you to have different sets of rules for displaying the monitored information.

Using AJAX

AJAX (Asynchronous JavaScript and XML) is a web-programming technique that allows the creation of rich and fast user interfaces. Using this technique in Call Monitor, we can provide end-users with increased speed of the web-interface response.

Call Monitor web-interface hardware and software requirements

- **Browser:** Firefox 3.0+, Internet Explorer 7.0+, Chrome 7+, Opera 10+ with Adobe Flash plug-in installed.
- **Internet Connection:** high speed for quick response from the interface
- **Display Settings:** minimum screen resolution is 1024 x 768

How to start using Call Monitor

To begin, the operator should log in to the PortaBilling web interface and follow the "Call Monitor" link from the main menu. After that, the user will be redirected to the Call Monitor interface.


Figure 1. Call Monitor link

Basic working concepts

Interface details

Here you can see the default look of Call Monitor:
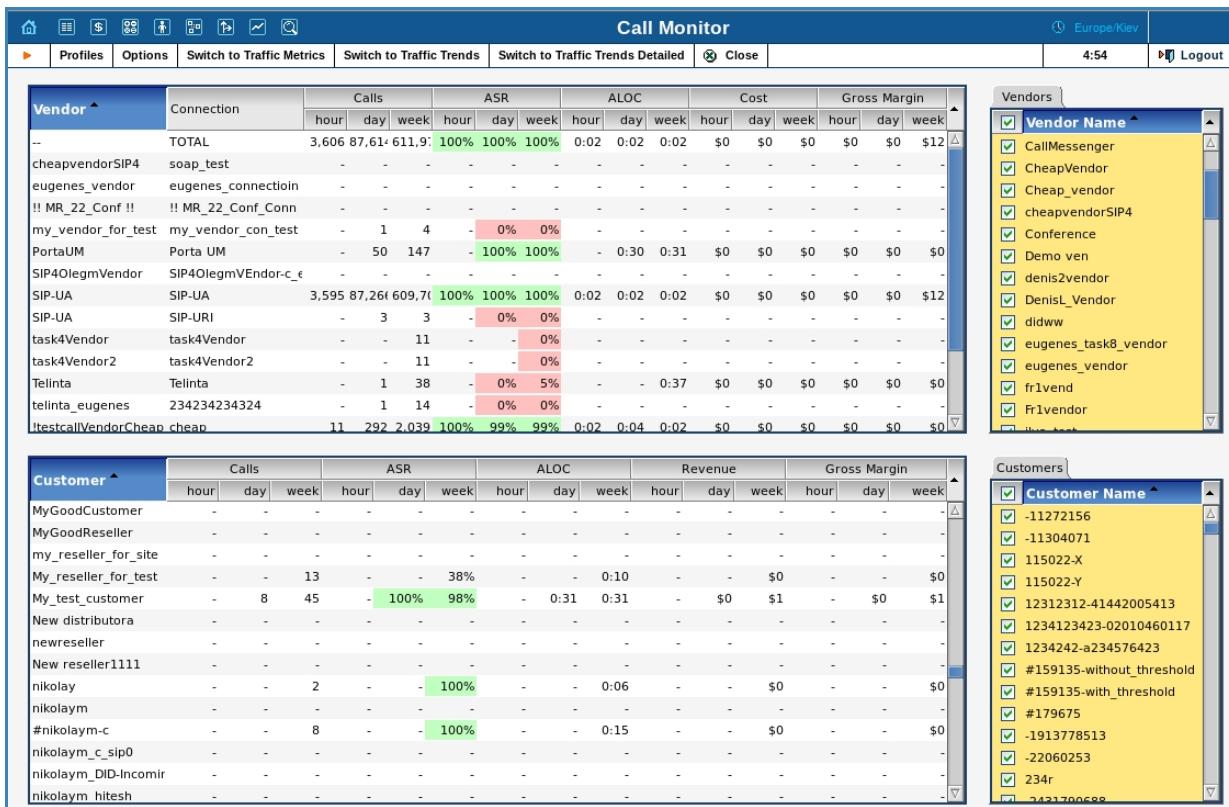
Figure 2. Default view

Vendor and customer information is kept in the same place to make the operator more productive. The operator has the ability to see all useful information at the same time and to take care of any suspicious events.

IMPORTANT

Information displayed in Callmon can be 5 minutes behind real time.

Explanation of statistics information terms

Here is an explanation of the main parameters:

ALOC – Average length of calls

ASR – Average successful rate

Revenue – Money paid for the calls according to rates

Cost – Money paid to a vendor

Gross Margin – Difference between money paid to a vendor and revenue

Figure 3. Main parameters

Multiple vendors

You can select several vendors and see their statistics. To do this you need to select the vendor checkboxes and wait until statistics are loaded.
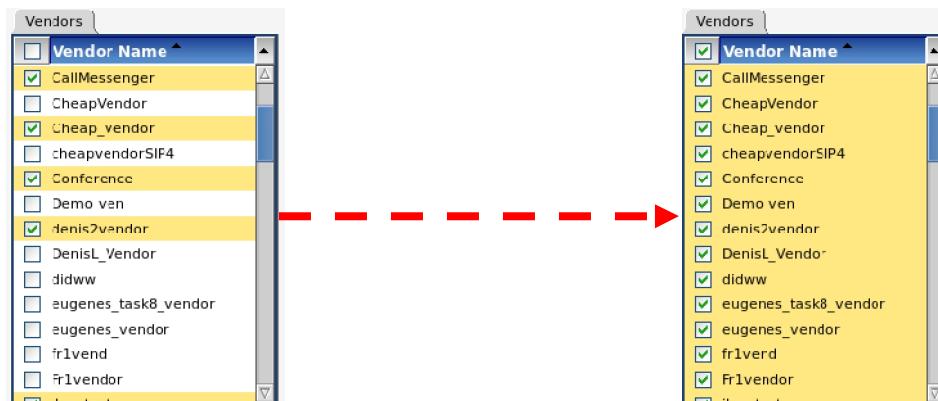

Figure 4. Selecting several vendors

To select all vendors, click the checkbox at the top left of the window, near the "Vendor

Name" label.

If several vendors are selected, Call Monitor will calculate the TOTAL number of hours, days, and other parameters for them. The total number will be displayed in the first line of statistics.

Vendor ▲	Connection	Calls			ASR			ALOC			Cost			Gross Margin			▲
		hour	day	week	hour	day	week	hour	day	week	hour	day	week	hour	day	week	
--	TOTAL	3,487	87,14:	612,1:	100%	100%	100%	0:02	0:02	0:02	$0	$0	$0	$0	$0	$12	

Figure 5. Total calculation

Customer statistics

Customer statistics have the same functionality as the vendors. You can select several customers at the same time to calculate their statistics.

Customer ▲	Calls			ASR			ALOC			Revenue			Gross Margin				Customers
	hour	day	week	hour	day	week	hour	day	week	hour	day	week	hour	day	week	▲	☑ **Customer Name** ▲ ▲
MyGoodCustomer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	△	☑ -11272156 △
MyGoodReseller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ -11304071
my_reseller_for_site	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ 115022-X
My_reseller_for_test	-	-	13	-	-	38%	-	-	0:10	-	-	$0	-	-	$0		☑ 115022-Y
My_test_customer	-	8	45	-	100%	98%	-	0:31	0:31	-	$0	$1	-	$0	$1		☑ 12312312-41442005413
New distributora	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ 1234123423-02010460117
newreseller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ 1234242-a234576423
New reseller1111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ #159135-without_threshold
nikolay	-	-	2	-	-	100%	-	-	0:06	-	-	$0	-	-	$0		☑ #159135-with_threshold
nikolaym	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ #179675
#nikolaym-c	-	-	8	-	-	100%	-	-	0:15	-	-	$0	-	-	$0		☑ -1913778513
nikolaym_c_sip0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ -22060253
nikolaym_DID-Incomir	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		☑ 234r
nikolaym_hitesh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	▽	☑ 2431700688 ▽

Figure 6. Customer statistics

Sorting

To analyze the monitored results better, you can sort all of them by clicking on the column header. On the picture below you can see results of re-sorting.

Figure 7. Data sorted by hour

Options

Call Monitor menu provides an ability to customize statistics look. A list of options is available under the "Options".

Figure 8. Options window

There you can define which fields should be shown, and which fields should be hidden; what parameter statistics should be sorted by, and in which order.

> **IMPORTANT**
>
> **Fields to show, Fields to hide** and **Sort** options influence the behavior of pop-up windows (shown on double-click) only.

Refresh option defines how frequently statistics should be updated. When the option is set, the timer counting the time left until the next update will appear.

Figure 9. Timer

Filter calls option limits the number of visible calls. For example, if the option is set to '5', connections and customers with less than 5 calls during last week will not be displayed.

Details

To see details of a certain vendor or customer, double click on their name and the 'Details' window will appear. The Details window shows statistics per country. Double clicking on a country will display the detailed statistic per destination.

Figure 10. Details window

Graphs

Call Monitor can draw graphs based on the statistics. To create a graph, an operator should right-click on a statistics line and select "Plot values" from the pop-up menu. The window will display the data in a graph, making it more convenient to understand the trends in the data.
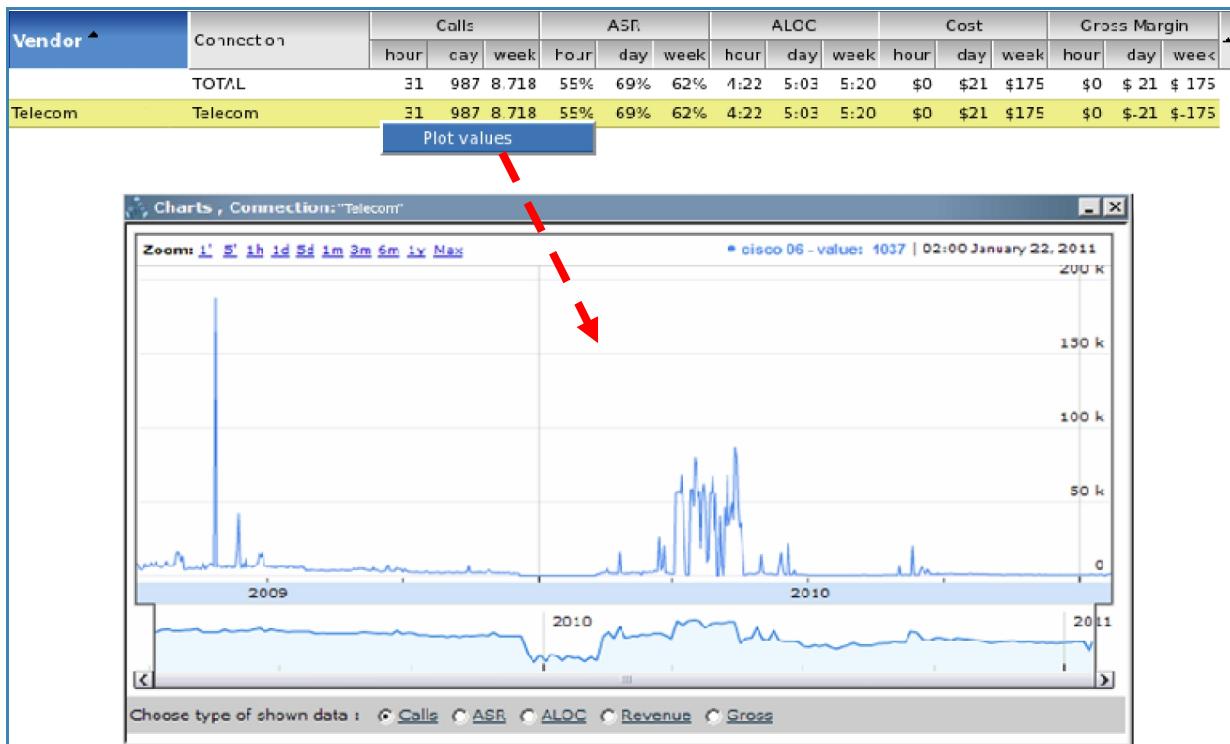
Figure 11. Graphs drawing

> **IMPORTANT**
>
> The information used to draw graphs is taken for the whole period from the day the Call Mon was launched (Jan 2008).

The graphs window allows switching between different types of graphs: **Calls, ASR, ALOC, Revenue and Gross.** To select a needed graph type, click on the radio button at the bottom of the window.

Profiles

Call Monitor provides the ability to create profiles, which allows you to save settings. For example, you can use a profile to set a default type of sorting and a column view.

To create a profile, click the link "Profiles" on the top panel:
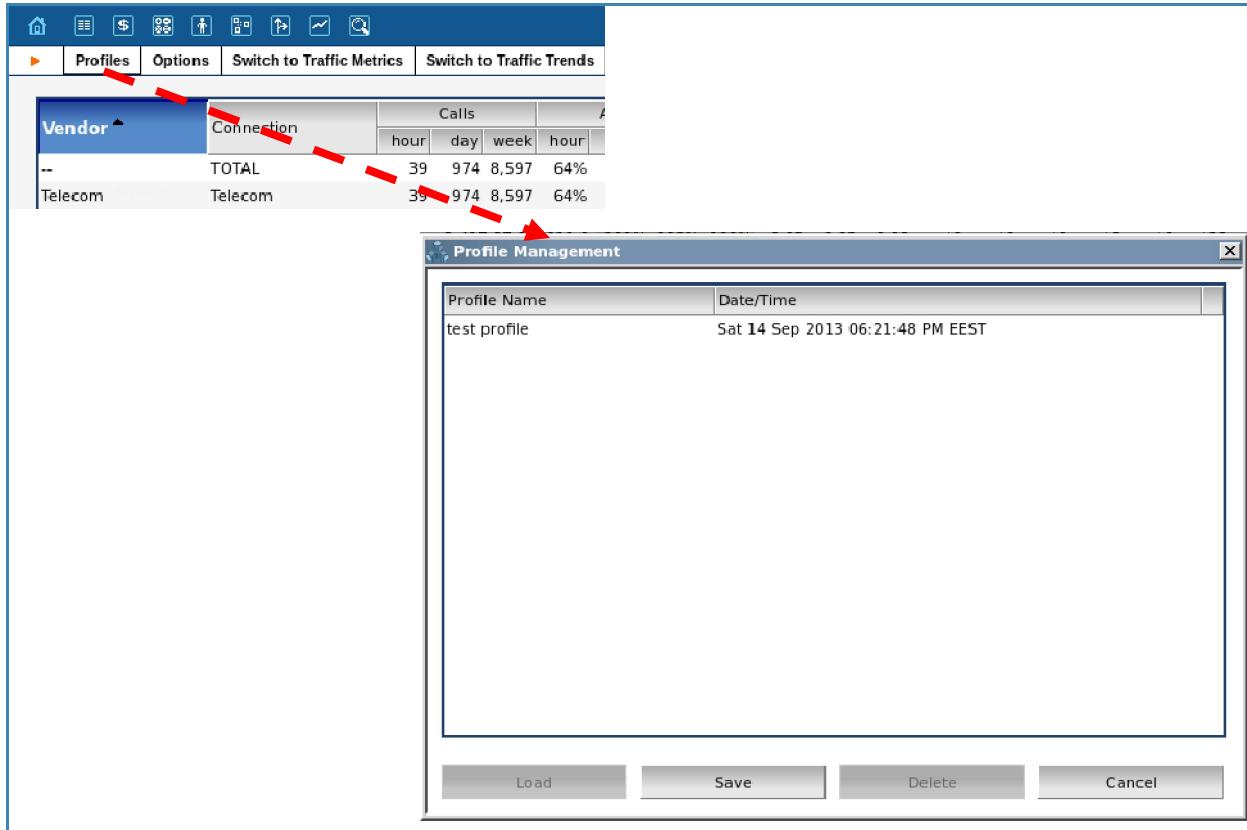
Figure 12. Profile management window

In order to save current configuration, click on the **Save** button and enter a name of the profile. To load a saved profile, click on it and push the **Load** button.

Traffic Trends

In the carrier business, a service provider usually receives a lot of traffic to one or several destinations from one customer. It is very important to have the ability to quickly identify when the customer has stopped sending the traffic and take the necessary actions (fix the quality, lower rates, increase credit limit, etc.)

Traffic trends tab provides volume statistics for the selected customers for the last four days and allows to quickly compare the customer volume statistics.
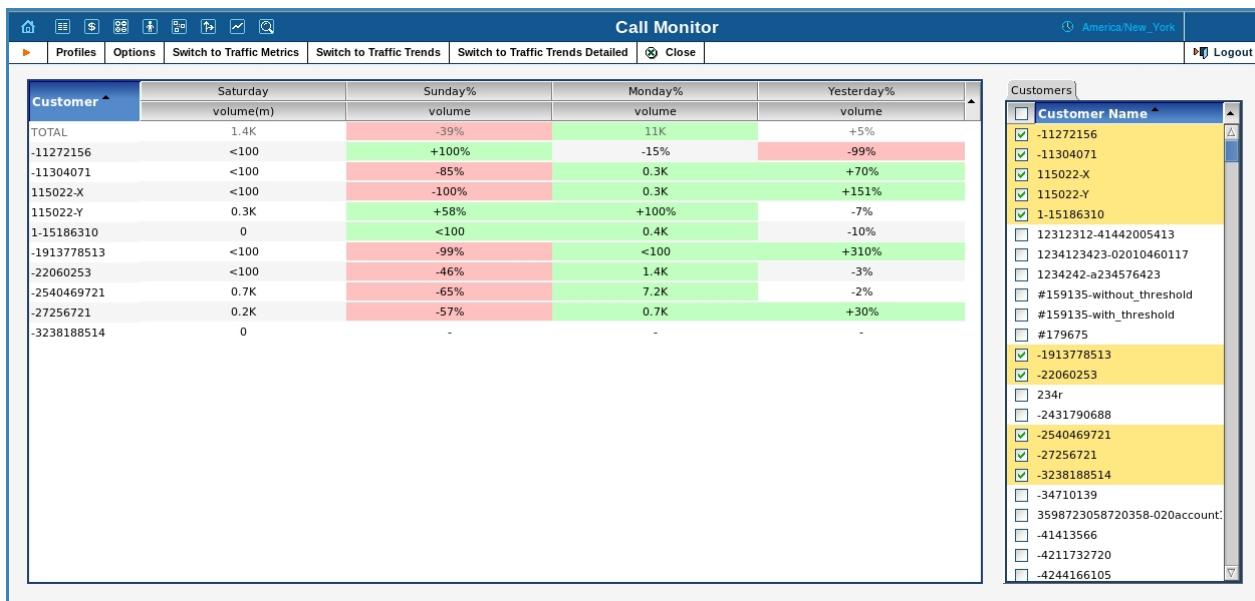
Figure 13. Traffic Trends
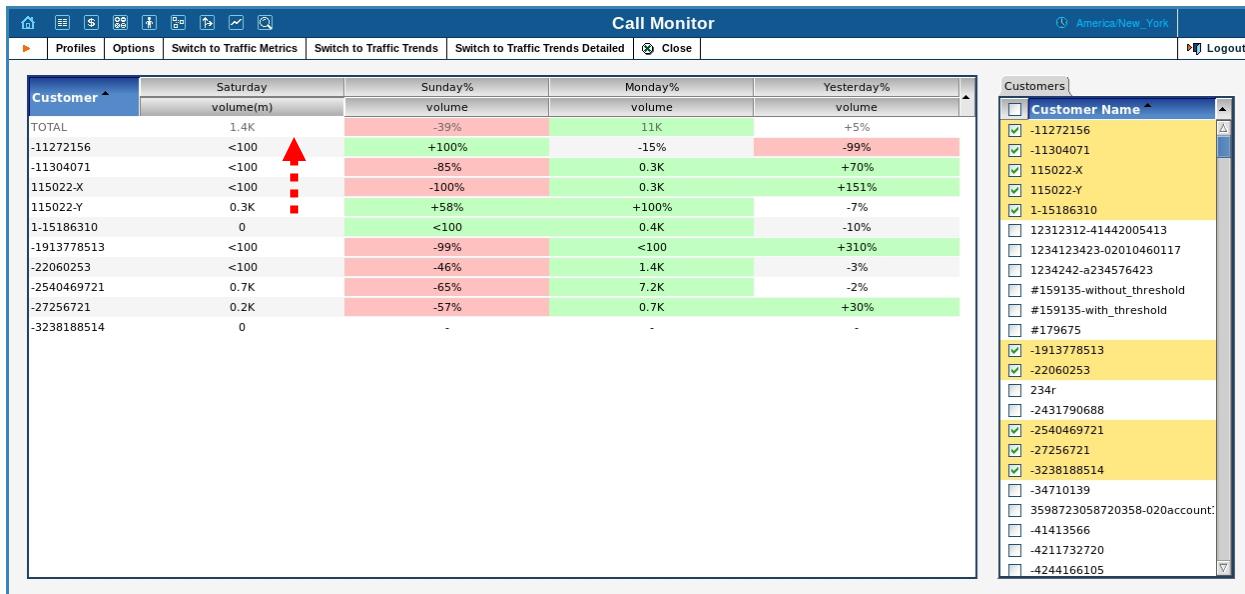
Figure 14. Sorting by Saturday traffic

Customer traffic statistics of the fourth day before the current date are taken as a checkpoint. Volume statistics for the subsequent three days are shown in increment or decrement percent values. If the difference is significant or the costumer's traffic is less than 100, the values are shown in minutes. Traffic improvement is marked in green; traffic degradation is marked in red.

Statistics results can be sorted by the customer name and by traffic volume for a particular day.
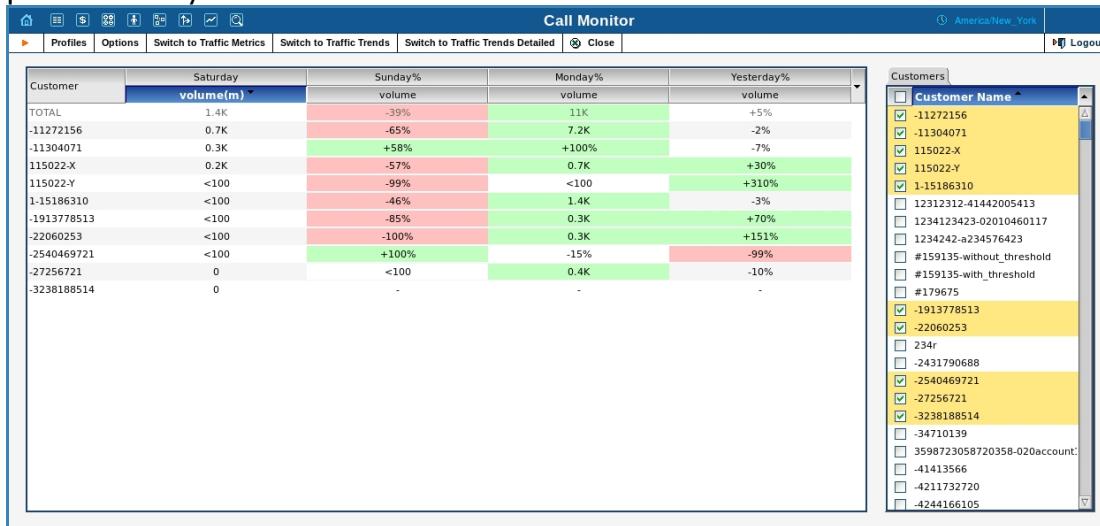
Figure 15. Sorting results

Detailed Traffic Trends

Traffic Trends Detailed tab provides detailed traffic statistics of the selected customers for the last two days. Statistics are divided into 6 hour sections and include the traffic volume, ASR and ALOC.

| Today: 24-18 hh			Today: 18-12 hh			Today: 12-06 hh			Today: 06-00 hh			Tuesday: 24-18 hh			Tuesday: 18-12 hh			Tuesday: 12-06 hh			Tuesday: 06-00 hh		
volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc
0	0	0	0	0	0	0	0	0	8518	69	1.2	343746	48	1.4	383580	57	1.4	4124	61	0.4	20508	54	0.5
0	0	0	0	0	0	0	0	0	0	0	0	10419	31	0.1	14470	52	0.1	654	59	0.1	4706	54	0.1
0	0	0	0	0	0	0	0	0	261	100	1	18149	84	2.2	9302	85	1.5	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1559	27	2.5	29566	46	3.1	10907	41	2.3	0	0	0	2866	33	5.5
0	0	0	0	0	0	0	0	0	2648	90	2.1	25135	55	2.3	21253	56	1.4	2485	77	2.2	5240	81	6.4
0	0	0	0	0	0	0	0	0	58	100	0.2	8954	82	1.2	14487	84	2.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	181	100	0.2	1805	70	4.1	1585	89	1.3	0	0	0	1058	100	17.3
0	0	0	0	0	0	0	0	0	24	100	0.1	22652	73	1.5	57213	59	3.4	293	100	1.3	0	0	0
0	0	0	0	0	0	0	0	0	3050	78	1	194033	59	2.2	226798	58	2.1	674	54	0.2	5185	50	1.1
0	0	0	0	0	0	0	0	0	0	0	0	25643	78	2.4	26013	92	3.1	0	0	0	48	75	0.1
0	0	0	0	0	0	0	0	0	737	69	1.2	7390	65	2.1	1552	61	1.2	18	100	0	1405	80	2.5

Figure 16. Traffic Trends Detailed

> **NOTE**
>
> Day columns are ordered from right to left, thus to get statistics for the current date, refer to the first three left columns.

Today: 24-18 hh			Today: 18-12 hh			Today: 12-06 hh			Today: 06-00 hh			Tuesday: 24-18 hh			Tuesday: 18-12 hh			Tuesday: 12-06 hh			Tuesday: 06-00 hh		
volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc	volume (sec)	asr %	aloc
0	0	0	0	0	0	0	0	0	8518	69	1.2	343746	61	1.4	383580	57	1.4	4124	61	0.4	20508	54	0.5
0	0	0	0	0	0	0	0	0	3050	78	1	194033	59	2.2	226798	58	2.1	674	54	0.2	5185	50	1.1
0	0	0	0	0	0	0	0	0	2648	90	2.1	25135	55	2.3	21253	56	1.4	2485	77	2.2	5240	81	6.4
0	0	0	0	0	0	0	0	0	1559	27	2.5	29566	46	3.1	10907	41	2.3	0	0	0	2866	33	5.5
0	0	0	0	0	0	0	0	0	737	69	1.2	7390	65	2.1	1552	61	1.2	18	100	0	1405	80	2.5
0	0	0	0	0	0	0	0	0	261	100	1	18149	84	2.2	9302	85	1.5	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	181	100	0.2	1805	70	4.1	1585	89	1.3	0	0	0	1058	100	17.3
0	0	0	0	0	0	0	0	0	58	100	0.2	8954	82	1.2	14487	84	2.1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	24	100	0.1	22652	73	1.5	57213	59	3.4	293	100	1.3	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	10419	31	0.1	14470	52	0.1	654	59	0.1	4706	54	0.1
0	0	0	0	0	0	0	0	0	0	0	0	25643	78	2.4	26013	92	3.1	0	0	0	48	75	0.1

Figure 17. Sorted by volume