



Comprehensive Video Analytics Solutions

Application Note: Extended Counting Statistics Reports

savVi 5.4, 5.5



1. Overview

Users can produce an *extended* counting report, comparing a counting rule's aggregated count (e.g., incoming) with another counting rule's aggregated count (e.g., exiting) at any point in time, across multiple counting rules.

By presenting data visually in user-friendly graphs as well as numerically, users can easily and quickly evaluate traffic volumes per day, month or year, or per camera, and adjust and streamline operations accordingly.

The feature is capable of displaying reports:

- in a Report View of your choice (Daily, Monthly or Yearly)
- according to a Timeline Basis of your choice (Hour or Day)
- including Weekdays only, Weekends only, All, or Custom
- displaying the total number of targets that entered the facility (all cameras, all exits)
- displaying the total number of targets that exited the facility (all cameras, all exits)
- displaying how many targets are inside the facility at any given time
- displaying the delta (difference) between the total number of entries and exits if the two counts don't tally

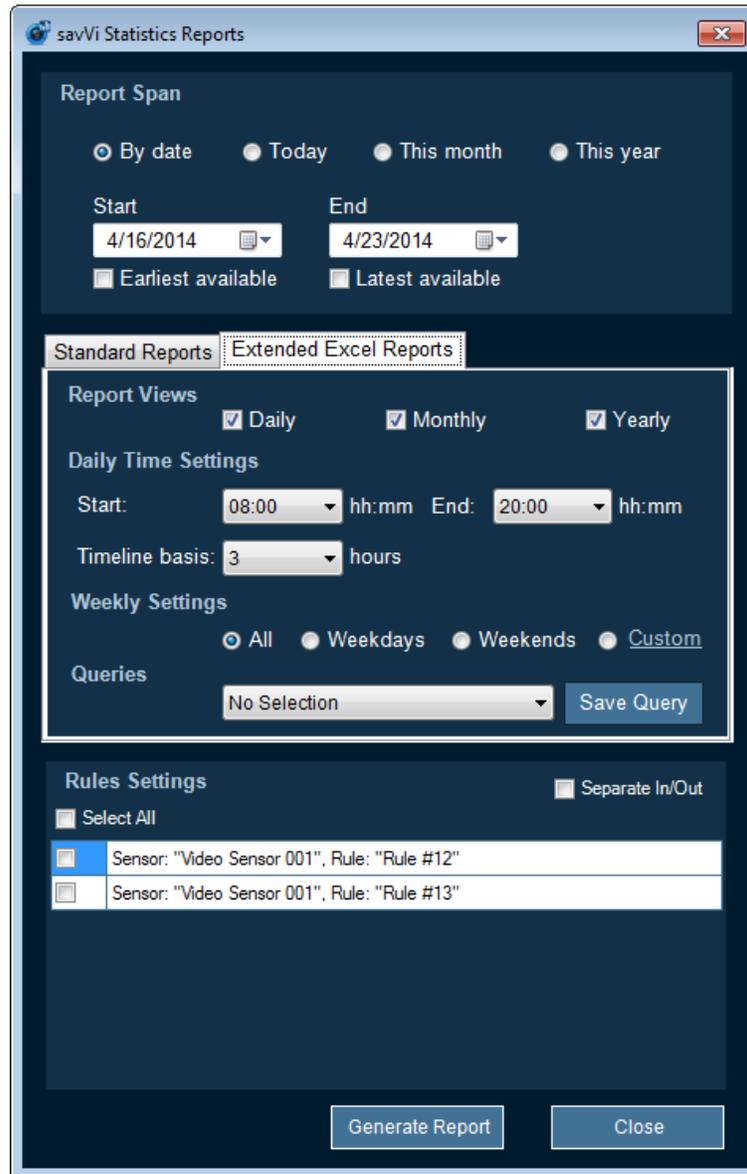
Requirements

To use this feature you'll need a *full* version of **Microsoft Excel 2007 or later** installed (i.e., not viewer-only).

2. Define and Generate an Extended Excel Report

1. Launch **savVi Statistics Reports** by double-clicking the desktop icon
2. In the **savVi Statistics Reports** screen, click tab **Extended Excel Reports**:

Figure 2-1: savVi Statistics Reports – tab Extended Excel Reports



3. Under **Report Span**, choose the time period to be covered by the report. You're provided the flexibility to choose either:
 - **By Date:** If you choose this option, choose a **Start** and **End** date from the drop-down lists, or, alternatively, choose the open-ended option **Earliest Available** and **Latest Available**.
 - **Today:** If you choose this option, the generated report covers today's counting information only.
 - **This Month:** If you choose this option, the report covers the time period commencing on the 1st of the current month.
 - **This Year:** If you choose this option, the report covers the time period commencing January 1st of the current year.

4. Under **Report Views** select the view to be included in the report. One or more must be selected. Note that when you specify **Report Span** as described above, default views are automatically selected (which you can modify). Each view is presented in the Excel file as a **Sheet** (a Sheet for each Day, Month and Year, each of which is included in the report).
5. Under **Daily Time Settings** specify how the daily information will be presented. For example, with a **Start time** of **08:00**, an **End time** of **20:00** and a **Timeline basis** of **3 hours**, the report will present **4** time slots of 3 hours each, starting at 8 a.m. and ending at 8 p.m.
6. Under **Rules Settings** select the rules to be included in the report. Optionally, check the box **Separate In/Out** and designate each rule you've included as either **In** or **Out**, in order to aggregate counts as either targets entering or targets exiting a facility or an area. Click **Generate Report** to generate and view the Excel report. Click a **Sheet** tab to view traffic on a specific day. The reports displays the following intelligence:

Figure 2-2: Report Displaying Counting Statistics

Date: Monday, December 06, 2010									
Rule:Time period	Entries (In)	Exits (Out)	Entries (In)	Exits (Out)	In Count per Time Period	Out Count per Time Period	Delta per Time Period	Total Count per Time Period	Total % per Time Period
08:00-11:00	449	491	0	0	449	491	-42	940	44.3%
11:00-13:00	416	387	132	247	548	634	-128	1182	55.7%
Total Count per Rule	865	878	132	247	997	1125	-170		
Total % per Rule	40.8%	41.4%	6.2%	11.6%					
Grand Total	2122								

Figure 2-3: Graph Showing Total Count per Time Period

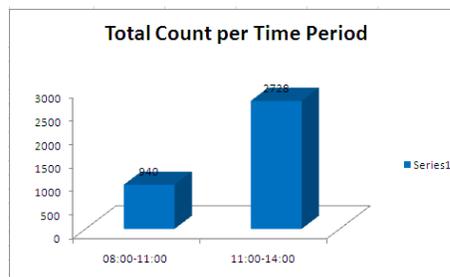


Figure 2-4: Graph Showing Total % per Time Period

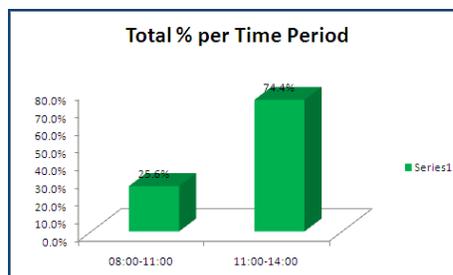


Figure 2-5: Graph Showing Total Count per Rule

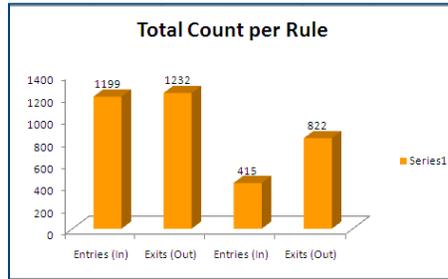


Figure 2-6: Graph Showing Total % per Rule



Figure 2-7: Graph Showing In/Out Count per Time Period

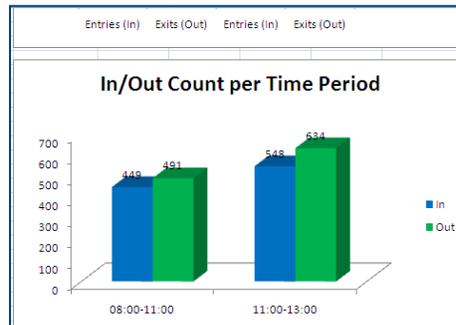
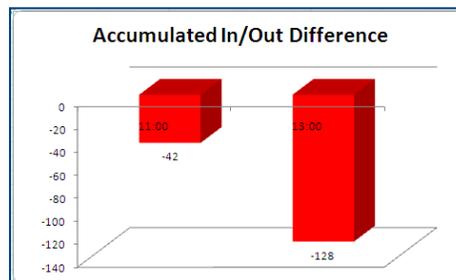


Figure 2-8: Graph Showing Accumulated In/Out Difference



Report production time

If a report covering an extended time period of several months is requested, it may take several minutes to produce it.

The generated report is saved as an Excel file, with a name based on its generation date and time, in the following path:

<savVi installation folder>\vi-client\StatisticsReports\Reports\

7. Open the x/s file.
8. Click the Excel **sheet tab** you require. In [Figure](#) , the **year sheet tab** (2010) is chosen. To choose a **month sheet tab**, you'd click one of the red-colored tabs; to choose a **day sheet tab**, you'd click one of the orange-colored tabs. Each offers counting data presented in both graphic as well as numerical format.

Figure 2-9: Excel Sheet Tabs

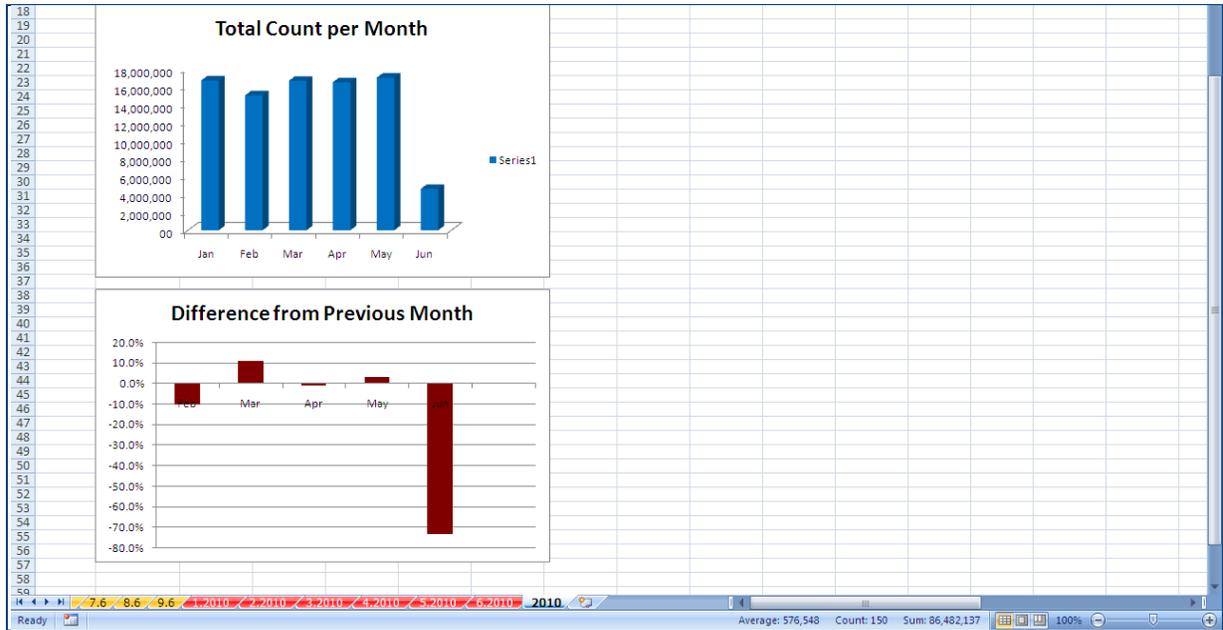


Figure 2-10: Excel Sheet - Month - Total Count per Day

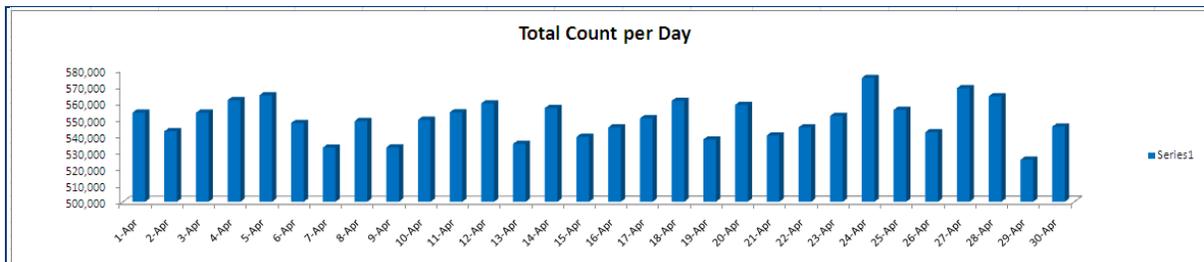


Figure 2-11: Excel Sheet - Day - Total Count per Rule

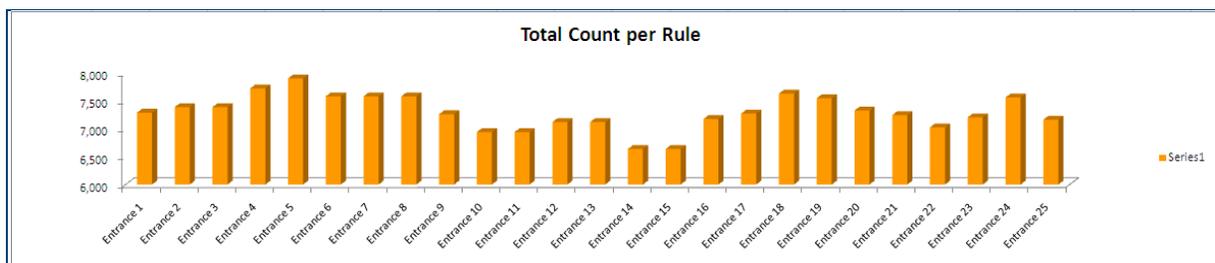


Figure 2-12: Excel Sheet – Year – Total Count per Month

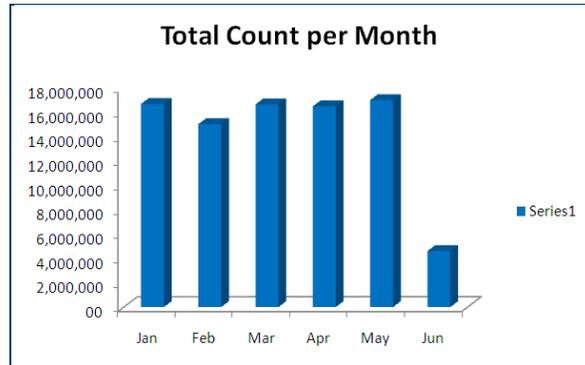


Figure 2-13: Excel Sheet – Yearly Counting Statistics Report – Numerical Data

Year:	2010										
Rule/Date	Entrance 1	Entrance 2	Entrance 3	Entrance 4	Entrance 5	Entrance 6	Entrance 7	Entrance 8	Total Count per Month	Total % per Month	Difference from Previous Month
Jan	666,437	666,962	664,813	667,299	665,994	672,868	668,376	668,527	16,690,325	19.3%	
Feb	599,372	598,982	604,489	602,561	602,029	600,654	600,048	602,518	15,027,514	17.4%	-10.0%
Mar	668,698	667,245	669,868	670,418	667,458	668,632	670,475	665,055	16,660,140	19.3%	10.9%
Apr	659,066	655,066	656,423	662,972	662,499	661,206	661,103	661,154	16,498,278	19.1%	-1.0%
May	675,746	672,348	676,322	674,923	676,766	678,095	676,069	682,571	17,005,631	19.7%	3.1%
Jun	185,107	184,853	184,581	187,042	185,330	185,812	185,607	185,150	4,600,249	5.3%	-72.9%
Total Count per Rule	3,454,426	3,445,456	3,456,496	3,465,215	3,460,076	3,467,267	3,461,678	3,464,975	86,482,137		
Total % per Rule	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%			
Average per Rule	575,738	574,243	576,083	577,536	576,679	577,878	576,946	577,496			
Grand Total	86,482,137										

3. Using Queries to Regenerate Reports Later

For improved usability, users can save report settings, retrieve them later and then regenerate a similar report. Perform this under **Queries**.

➤ To save report settings for later reuse

- Click **Save Query**; you're prompted to give the query a name
- At any point in time (during the current application session or later) you can click the associated menu to view a list of all the queries you've saved hitherto, and you can select the query you require.
- When a saved query is selected, you can regenerate the report immediately or choose to modify the report settings.
- A query that was modified can be saved again. You can either save to the same name (overriding the original query) or to a different name.

Queries saved as *xml* files

Queries that you define are saved as *xml* files in location:

```
<savVi installation folder>\vi-client\StatisticsReports\Queries\
```

4. Generating Reports Offline

Extended Excel Reports can be generated offline without using the GUI.

➤ To generate a report offline

- Given the following parameters:
 - Address of you Vi-Server: **LBS-IP**
 - You defined a query **Query.xml** for which you'd like to generate a report
 - The initial login user is **Admin**
 - The initial login password is **Master**

Change directory to "C:\Program Files (x86)\AgentVi\savVi\vi-client"

Execute the following command:

```
CountingStatistics.exe -user admin -password Master -serverip LBS-IP -
application 2 -silent "C:\Program Files (x86)\AgentVi\savVi\vi-
client\CountingStatistics\Queries\Query.xml"
```

Note that when using this command you need to substitute with the parameters that are applicable for your deployment.

- You're advised to use **Windows Scheduled Tasks** to configure a periodic generation of your reports. **Windows Scheduled Tasks** are available from: Start > All Programs > Accessories > System Tools
- If you're using **Windows Scheduled Tasks**, follow these optional tips:
 - Copy the "C:\Program Files (x86)\AgentVi\savVi\vi-client\CountingStatistics\stats-report-cmd-example.bat" to a folder location that does not contain spaces (e.g., C:\Temp\), and refrain from inserting spaces in the batch file name.
 - Edit the batch file if your installation folder is different or if any of the other parameters in your environment are different.
 - In the **Run** field of **Windows Scheduled Tasks**, enter the batch file name along with the host name and the name of the query to be executed.
For example:
C:\Temp\stats-report-cmd-example.bat Admin Master LBS-IP "Mall Monthly"
 - In the **Start in** field of **Windows Scheduled Tasks**, enter the location of the folder containing the batch files, e.g., C:\Temp\

Location of saved offline report as xls file

The generated offline report is saved in the **Reports** subfolder as indicated above.

Its filename is constructed by the query name:

<Query Name>-ReportOutput.xls, for example, Mall Monthly-ReportOutput.xls

If the same report is generated again offline, the previously generated report is copied to a backup file <Query Name>-ReportOutput-Old.xls, for example, Mall Monthly-ReportOutput-Old.xls

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