VBrick
EtherneTV Portal Server

EthernetTV Reporter v4.4
User Guide

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VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others.

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EtherneTV Reporter v4.4 User Guide

EtherneTV Reporter is a log file analysis tool. It reads individual log files generated by the Portal Server and generates a graphical statistical report based on the contents of the log data. Each log entry contains multiple fields, and EtherneTV Reporter extracts those field values from the log data and populates the log fields. ETV Reporter is closely integrated with the ETV Portal Server. Please note the following constraints:

- VBrick does not support any user customization of this product.
- VBrick does not support non-ETV Portal uses of the software, for example the processing of Windows Media Server log files.

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Organization

Introduction	Provides an overview of the ETV Reporter application. It also explains how metrics are determined and how the filters work.
Administration	Explains how to create an admin user and how to create a profile. It also explains the scheduler and other options.
Generating Reports	Explains how to generate and view reports. It also explains how to use the interface elements on the report pages.
Sample ETV Reports	Shows examples of each type of report you can generate with ETV Reporter.

Getting Help

If you need help, or more information about any topic, use the online help system. The online help is cross-referenced and searchable and can usually find the information in a few seconds. Use the tree controls in the left pane to open documents and the up and down arrows to page through them. Use the **Search** box to find specific information. Simply enter one or more words in the box and press Enter. The search results will return pages that have all of the words you entered—highlighted in yellow (Internet Explorer only). The **Search** box is not case-sensitive and does not recognize articles (a, an, the), operators (+ and –), or quotation marks. You can narrow the search by *adding* words.

If you can't find the information you need from the online help, please contact your authorized VBrick reseller. They are trained and certified by VBrick and can provide help and technical support for all VBrick products. For additional information, use the VBrick Support Services "On-Line Support" page at www.vbrick.com/support/online_support.asp or call 1 203 303-0222 in Wallingford, CT, USA to speak with a VBrick representative. Note that the latest documentation and information for all VBrick products is available online at www.vbrick.com/documentation.

Font Conventions

Arial bold is used to describe dialog boxes and menu choices, for example: **Start > All Programs > VBrick**

`Courier fixed-width font` is used for scripts, code examples, or keyboard commands.

`Courier bold fixed-width font` is used for user input in scripts, code examples, or keyboard commands.

This bold black font is used to strongly emphasise important words or phrases.

`Folder names and user examples in text` are displayed in this sans serif font.

`User input in text` is displayed in this bold sans serif font.

Italics are used in text to emphasize specific words or phrases.

Related Documents

For more information about using and configuring ETV Reporter with the Portal Server, see the EtherneTV Portal Server Admin Guide.

Chapter 1

Introduction

EtherneTV Reporter is a web-based log file analysis tool designed for use with VBrick's EtherneTV Portal Server. It reads log files generated by the Portal Server and generates a graphical statistical report based on the log data. Access logging must be turned on and is enabled by default on the Portal Server. To verify that access logging is enabled, open the Portal Server Admin Console, go to **Global Settings > Access Logging**, and check **Enable Log Creation**. Each log entry contains multiple data fields and EtherneTV Reporter uses this information to create detailed and comprehensive reports.

The Portal Server lets you specify which fields are logged on the **Extended Logging Properties** page. When using ETV Reporter, be sure that all fields on this page are checked. ETV Reporter uses all log fields generated by the Portal Server and you cannot change which log fields are used to generate reports. You can also choose how often new log files are created on the **General Logging Properties** page. When using ETV Reporter, VBrick recommends setting the **Log Cycle Time** to **When File Size reaches ...** This will create one log file for stream "views" and one log file for stream "records".

Note The *Portal Server Admin Guide* has useful information that explains how access logging works on the Portal Server. It is strongly recommended that you read the "Access Logging" topic before generating reports using the ETV Reporter.

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ETV Reporter Overview

EtherneTV Reporter creates reports for you on-demand, so when you want to look at a report, you are seeing the most up to date information. ETV Reporter can be configured to update the reports whenever you want but typically they are updated daily. EtherneTV Reporter's reports are on-demand and are created when you click on the **View Reports** link. This allows you to "drill down" into the reports by selecting only those parts of the data you are interested in. The process of selecting only parts of the data is called "filtering" in ETV Reporter and you have a number of filter options to choose from.

EtherneTV Reporter date/time filters can be used to break down the reports into manageable chunks, for example to see all traffic for a given visitor or all traffic on only one of your domains. By breaking down the reports into different types of data you are able to use EtherneTV Reporter to answer questions.

Log File Types

There are two types of Portal Server Logs: **MCSRecord** logs and **MCSVoDLive** logs. These logs have the same fields and distinguish between user "recordings" and user "viewings" (which include both live streams and VOD streams). If you want to analyze user recording logs, be sure to point only to the recording logs when creating a profile, and vice versa if you want to analyze user viewing logs. One way to accomplish this is to create two separate profiles: one for **MCSRecord** logs and one for **MCSVoDLive** logs.

Report Fields

Each log entry contains multiple fields, and EtherneTV Reporter extracts those field values from the log data and populates the report. Each report basically has the same fields. *The ETV Reporter displays only those fields shown below and you cannot change which fields are logged.* The first field in a report is generally derived from the selected report, for example **Live Broadcasts**. The report may also have other report-specific fields. The fields shown below in Table 1 are standard in all reports. The log shows all individual entries with totals at the bottom.

Table 1. Standard Reporting Fields

Field	Description
Viewing events	The number of discrete events based on the selected profile. These can be recording events, viewing events, or both.
Visitors	The number of unique visitors (based on IP address). Be aware that this number is always one greater than the actual numbers of users in the log.
Play duration	The duration of the content that was played or recorded in 00:00:00 format.
Play duration per visitor (average)	The average duration of content that was played or recorded by each visitor.
Bytes transferred	The total number of bytes streamed in M(egabytes) or G(igabytes).
Maximum bandwidth (max)	The maximum bandwidth in M(egabytes) used for each viewing event.
Session events	Session information is computed by tracking the page, date/time, and hostname (client IP), for each page view.

Report Metrics

EtherneTV Reporter can analyze log traffic in several ways. Each way is counted independently of the others, and each has its own advantages in analyzing your traffic. Some of the different types of report metrics are shown in the following table.

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Table 2. Report Metrics

Field	Description
Viewing events	A viewing event is a single request to record or play a stream. Viewing events are similar to hits on pages. For instance, a hit on /index.html is followed by 10 hits on image files, 1 style sheet, and 2 JavaScript files, that appear in the page. This will count as a single page view and 14 hits—only the landing on /index.html will count in the Viewing events total.
Visitors	Visitors correspond roughly to the total number of people who visited the site (see Visitor Totals). Every visitor is tracked by their unique IP address. By default, EtherneTV Reporter defines visitors to be "unique hosts"—a hit is assumed to come from a different visitor if it comes from a different hostname (client IP). For example, if a single person visits the site and looks at 100 pages, that will count as 100 page views, but only one visitor. This is not the most accurate way of measuring visitors due to the effects of web caches and proxy servers.
Bandwidth	Bandwidth is the total number of bytes transferred. Bandwidth is tracked for every event that occurs, whether it is accepted as a "hit" or as a "page view".
Sessions	Sessions are similar to visitors, except that they can "time out." When a visitor visits the site, and then leaves, and comes back later, it will count as two sessions, even though it's only one visitor. To reduce the effect of caches that look like very long sessions, EtherneTV Reporter also discards sessions longer than a specified time. To change the timeout interval, contact your EtherneTV Reporter Administrator.

Visitor Totals

If you add up the number of visitors on each day of the month, and compare it to the total number of visitors for the month, they're not equal. To explain these differences, suppose you have a website where only one person ever visits the site, but that person visits it every day. For every day of the month, you will have a single visitor but for the month you will have a single visitor as well, because visitors are unique visitors, and there was only one unique visitor in the entire month. If what you're really looking for is "visits" rather than "visitors" (so each visit will count once, even if it's the same visitor coming back over and over), then that's what EtherneTV Reporter calls "sessions."

The total hits, bandwidth, and page views in a month is equal to the sum of the hits, bandwidth, and page views in a month on the days of the month. However, the total number of visitors in a month is not usually equal to the sum of the visitors on the days of the month because this is computed differently.

Visitor Duration

Here is an example of visitor duration. User 'A' open the Portal Server, clicks a stored video, and watches it for seven minutes; then clicks another video and watches it for five minutes; then exits by closing the browser. Here is the time line:

11/04/2007 16:12 - clicks a stored video1 and watches for seven minutes.

11/04/2007 16:20 - clicks stored video2 and watches for five minutes.

11/04/2007 16:26 - exits (closes browser with no further activity for 30 minutes).

With the session timeout interval of 30 minutes (this can be changed by the EtherneTV Reporter administrator) EtherneTV Reporter will count 1 session with a 12 minute duration, with the two videos having durations of 7 and 5 minutes respectively.

This calculation shows the problem of duration counting in all log analysis software. Since there is no reporting of the exact time the user left the site (there is no log entry for the 16.26 'exit' since closing the browser does not leave any record in the server logs), we have no way of knowing when the user exited, so we count from the last known time, which in this case, is the start of viewing the second video, 16:20.

Reporter Filters

The filters that are applied to the report determine what statistics you see. The filters let you "zoom in" on one part of your data (in a similar way to selecting a new view). You can use the filters to get information about a particular day, a particular directory, a particular domain, or more.

- Date/Time Filters These remain in effect until they are removed in the Calendar page.
- Zoom Filters These remain in effect until they are removed in the Calendar page.

All of these filters are combined when used together. For instance, if the Date/Time filters show events during 1am-2am, and the Zoom Filters show events on January 1, then the table will show events from January 1, during 1am-2am.

If there are no filters in place, that means you are looking at your complete data; all available data is represented by the graphs and tables shown. If the The Report Bar shows that there are filters active, then you are not seeing your entire data; you are seeing only a portion of it. The portion you're looking at depends on the filters. The filters are an extremely powerful way of getting detailed information about your site. If you want to know what day you got the most hits on VoD content, you can do that by adding a filter, and then changing to the "Years/months/days" view.

Another way to change filters is to click on something in the statistics. For instance, clicking on a Live broadcast stream in a page table will "zoom in" on that directory by adding it as the page field filter. Clicking on a month in the calendar view will "zoom in" on the month by adding it as the date/time field filter.

Login

ETV Reporter is a web-based server application that is installed with the Portal Server. You can login either locally (directly on the machine where the Portal Server is installed) or over the web (using a browser) from any remote location.

▼ To login locally

1. Go to **Start > All Programs > VBrick > EtherneTV Reporter**.
2. Then login with a valid user name and password. Default = admin/admin. **It is strongly recommended that you change the default admin name and password after logging in for the first time.** See Creating Admin Users on page 12 for details.
3. Alternately you can login using the following IP address and port 8987 *or* the Portal Server IP address and port 8987:

   <http://127.0.0.1:8987

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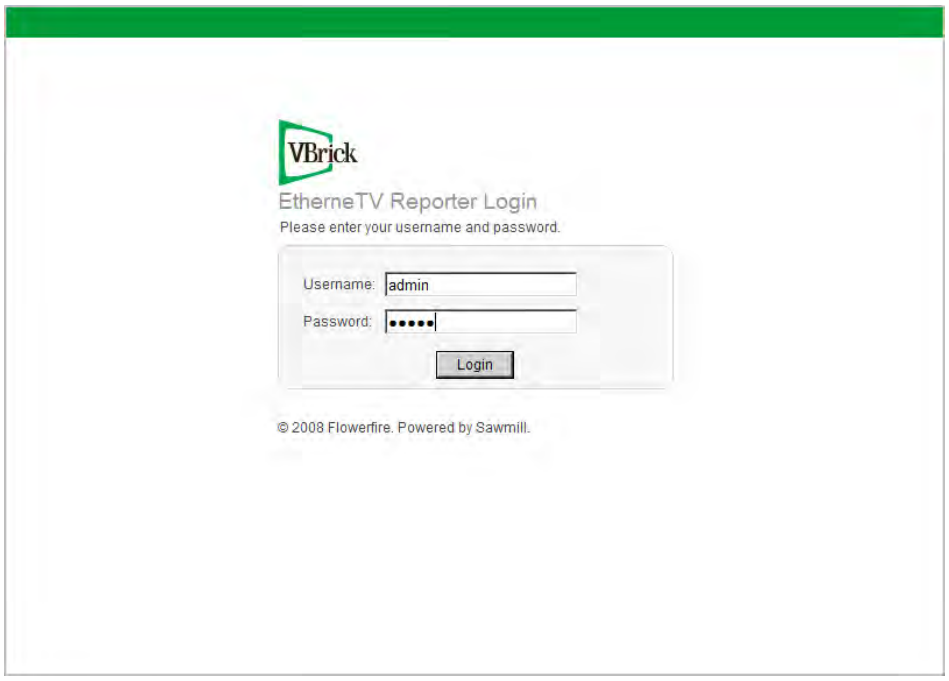
▼ To login remotely

1. Open a web browser and type: <http://portalserver_ip_address>:8987
2. Then login with a valid user name and password. Default = admin/admin.



Quick Start

Use the following steps to view actual data in the sample log file that is included with the application. This sample log file will let you view all available reports and exercise all ETV Reporter features and functions. For best results, take a few moment to familiarize yourself with the application using this sample log file; and then create your own users, profiles, and reports as explained in this document.

▼ To quickly get started using ETV Reporter

1. Launch ETV Reporter and login with the default username and password (admin/admin).
2. Click on **View Reports** next to the VBrick Sample Log File profile.
3. Select and view any report from the Report Menu on the left.

Software Installation

EtherneTV Reporter requires a license key. If your EtherneTV purchase included ETV Reporter, the license key will be installed by VBrick prior to shipment. If you ever need to re-install the software, the license key is attached to the "Software Activation Keys" card that is included with the server. If you purchase ETV Reporter separately, VBrick will send a "Software Activation Keys" card with the new license key attached. Launch ETV Reporter and enter this license key, when prompted, to activate the software.

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Chapter 2

Administration

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Admin Menu

The following table shows ETV Reporter admin functions. **You must be logged in as an administrator to see this menu.** Admin users have access to all functions and all profiles. When viewing reports, you can always return to the Admin pages by clicking **Admin** in the Report Header area.

Table 3. Administrator Functions

Function	Description
Profiles	Clicking this menu item will show the list of profiles. In this list, you can create new profiles, delete existing ones, edit profile configuration information, or view reports for a profile. See Creating a Profile on page 8.
Scheduler	Clicking this link will show the Scheduler. You can create, delete, and edit scheduled tasks in this section. For instance, you can create a task to update all your databases every night, or to send a report of the previous month by email on the first day of each month.
Users	Clicking this link will show the User editor. In this page, you can add and remove users, and change the options for each user; e.g. you can specify which users have administrative access, and which profiles they are permitted to view. See Creating Admin Users on page 12.

Function	Description
Preferences	Clicking this link will show the Preferences editor. This lets you change global preferences, including server IP and port, language, charset, and more.
Licensing	This page is not used.
Support	This page is not used.

Profiles

A profile is a pointer to an ETV Portal Server log file. When you first login, you will notice that a VBrick Sample Log File profile has already been created. *This profile is only an example and points to a sample VBrick log file.* You can click **View Reports** to see real examples of all the EtherneTV reports that are available. However, before you can analyze your own data, you need to create a profile that points to your own log files.

Note To generate reports, access logging must be enabled on the Portal Server. To verify that access logging is on, open the Portal Server Admin Console, go to **Global Settings > Access Logging**, and make sure that **Enable Log Creation** is checked.

Selecting a Log File

There are two types of Portal Server Logs: **MCSRecord** logs and **MCSVoDLive** logs. These logs have the same fields and distinguish between user "recordings" and user "viewings" (which include live streams and VOD streams). If you are using ETV Reporter, VBrick recommends setting the **Log Cycle Time** on the Portal Server to **When File Size reaches ...** and using the default 20 MB setting. This will create one log file for stream "views" and one log file for stream "records". It is unlikely that the log text files will ever exceed 20 MB.

If you want to analyze the recording logs, be sure to point only to the recording log(s) when creating a profile, and vice versa if you want to analyze user viewing logs. One way to accomplish this is to create two separate profiles: one for **MCSRecord** logs and one for **MCSVoDLive** logs.

Creating a Profile

In order to generate reports, you must create a profile for each log file you want to analyze. In order to create a profile, you must have Access Control Enabled on the Portal Server. You can have an unlimited number of profiles and each profile is associated with one log file. When you create a profile, ETV Reporter will ask you for the log source. The log data can come from a file or from a collection of files. The files can be local, or ETV Reporter can download them from an FTP site. To use an FTP site, you can use a standard FTP URL to specify the location of the files.

Once you have told ETV Reporter where your log data is, ETV Reporter will create a profile for you using reasonable values for all the options. You can then click **View Reports** to see the reports—ETV Reporter will read and process the log data to build its database, and then will display the reports. You can also click **View Config** to customize any of the profile settings. A good way to start is to leave them at their default settings at first, and just look at the reports. Once you're familiar with your statistics using the default settings, you can go back and start changing them if necessary.

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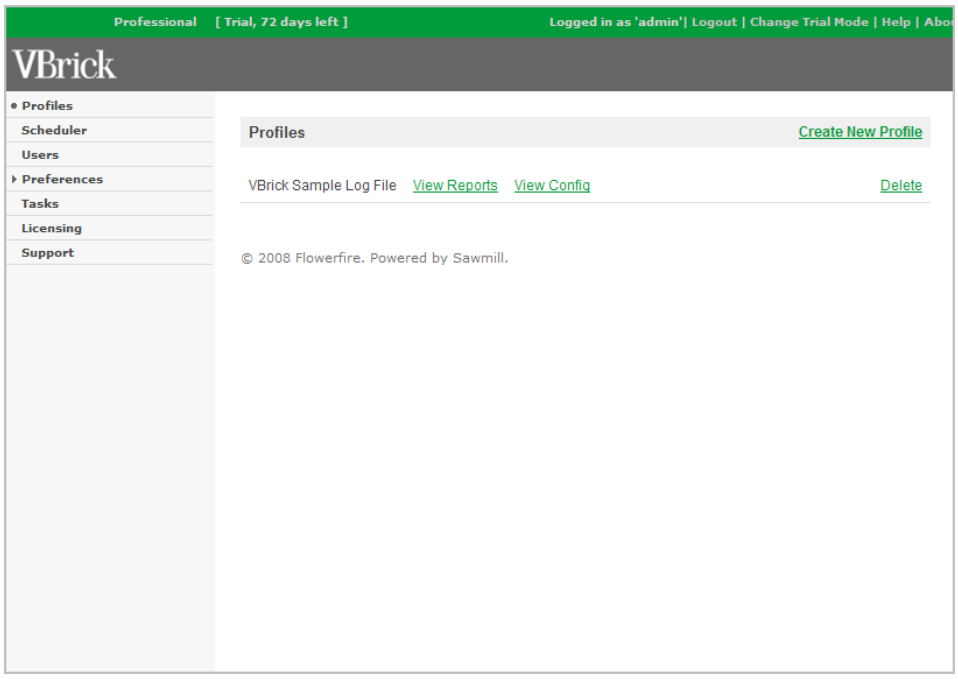
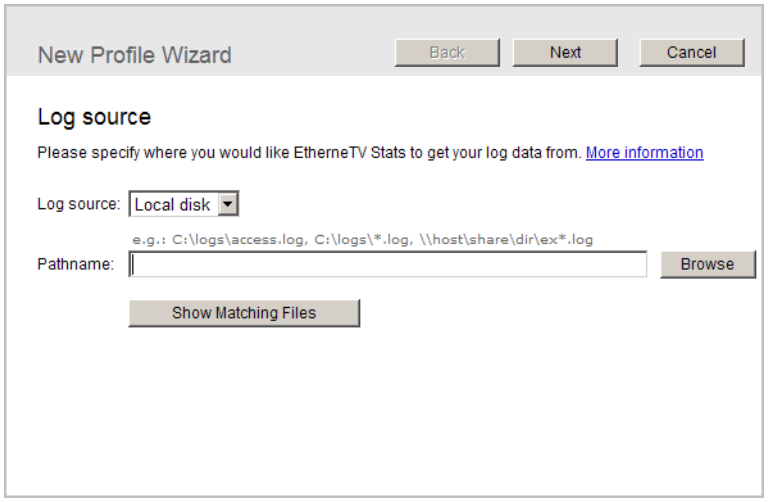
▼ To create a profile

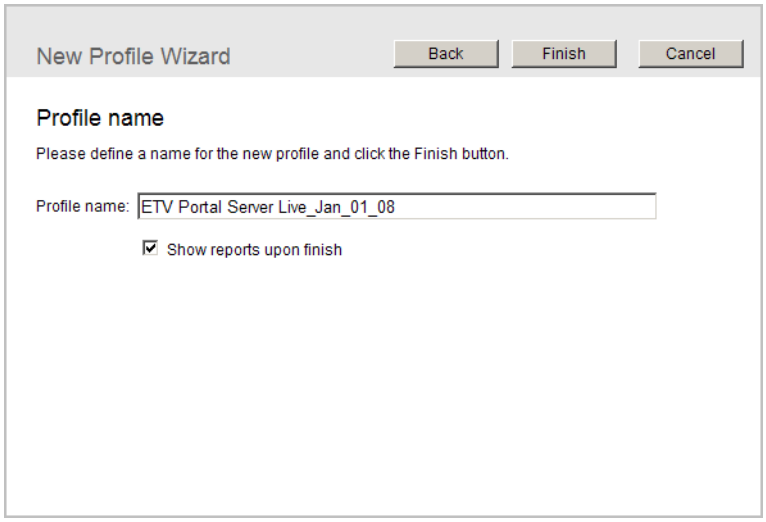
1. Click on **Profiles** in the navigation frame on the left.



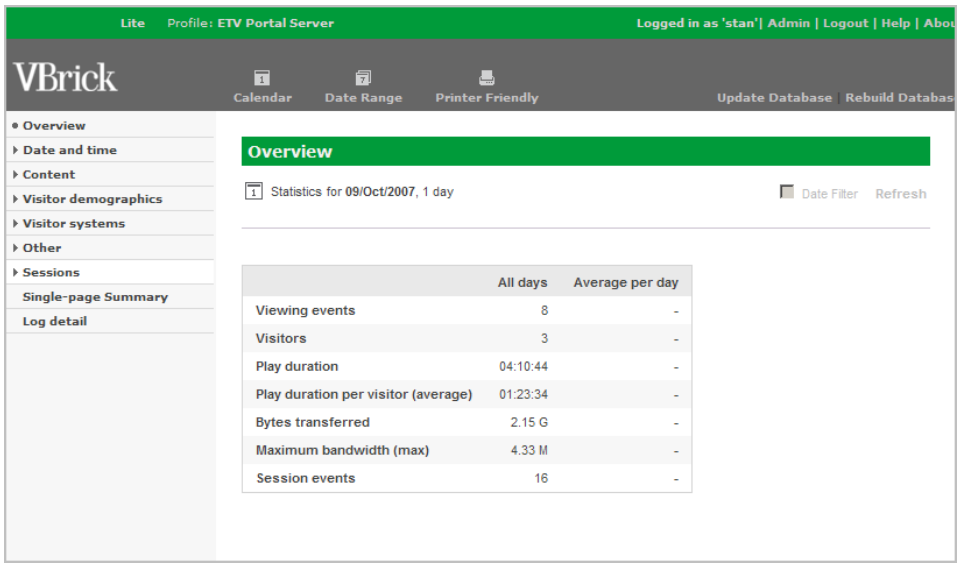
2. Click **Create New Profile** on the Profiles page to launch the New Profile Wizard.



3. On the New Profile Wizard page, you will specify where your ETV logs are located.
4. For **Log source**, select **Local disk** from the dropdown.
5. For **Pathname**, browse to a local log file and click **OK**. On the Portal Server these are typically located at C:\Program Files\VBrick\MCS\Logs.
6. Once the **Pathname** field is populated, click **Next**. Click **Next** again and you will be prompted for a **Profile name**.



7. Enter a meaningful name. Then click **Finish** to save the profile, build the database, and launch the report (if **Show Reports** ... is selected) based on that profile.



Scheduler

EtherneTV Reporter includes a built-in scheduler which can be used to schedule report generation at a specific date and time and then e-mail that report to a designated individual. You select the report type (for example "Broadcast totals"), the date range, and an e-mail recipient. Scheduled items can only be run when EtherneTV Reporter is running.

A scheduled item consists of a date and time, a profile name, and other options. EtherneTV Reporter will perform the operation on the profile whenever the date and time match the current date and time. For instance if you choose January, Monday, day 12 of the month, 06:09 as your date and time, EtherneTV Reporter will generate a report at 6:09 AM on any Monday which is the 12th of January.

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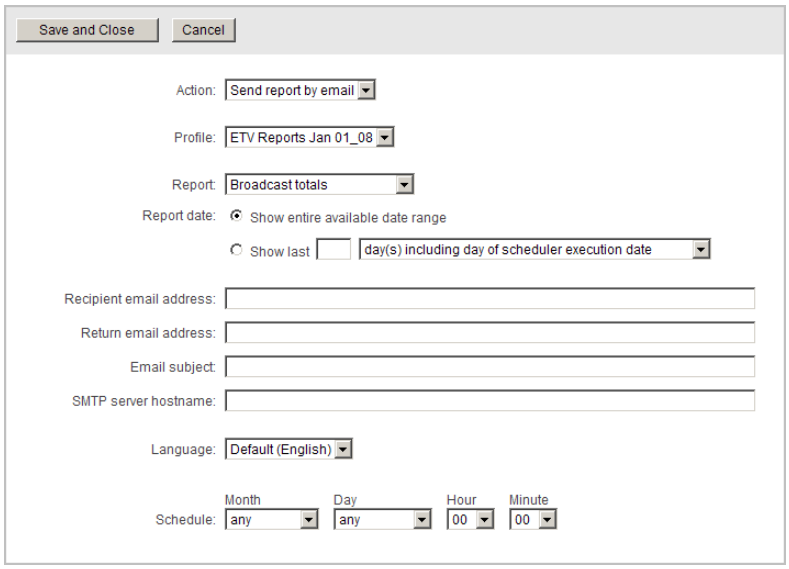
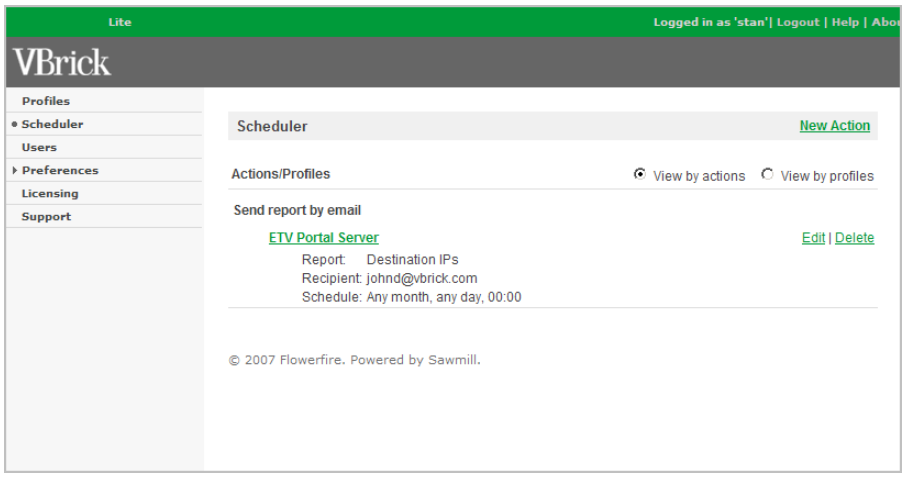
Creating a Schedule

▼ To create a schedule

1. Click on **Scheduler** in the navigation frame on the left.
2. Then click **New Action** to display the following window.



3. Complete the page with appropriate values. The fields are self-explanatory. Click **Save and Close** when done.



4. Click **Edit | Delete** as appropriate to edit or delete the schedule.

Users

There are two types of ETV Reporter users: admin users and non-admin users. Admin users can view reports and perform all administrative tasks; non-admin uses can only view reports. Non-admin users can also be restricted to specific profiles. ETV Reporter is pre-configured with a default admin user name and password (admin/admin). It is strongly recommended that you change this default admin name and password after logging in for the first time (see Creating Admin Users for details). **Be sure to record and save the new admin user name**

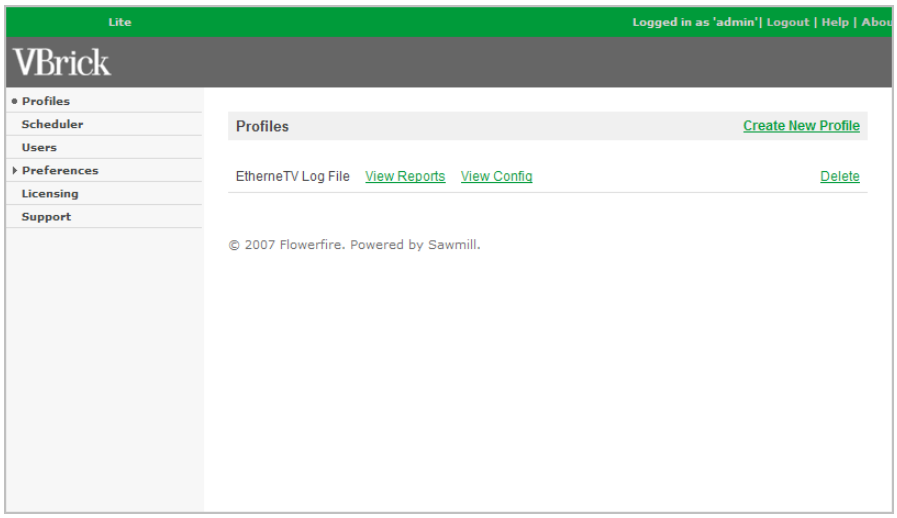
and password. If you don't have a valid admin user name and password you will be unable to login to EtherneTV Reporter as an admin user.

Creating Admin Users

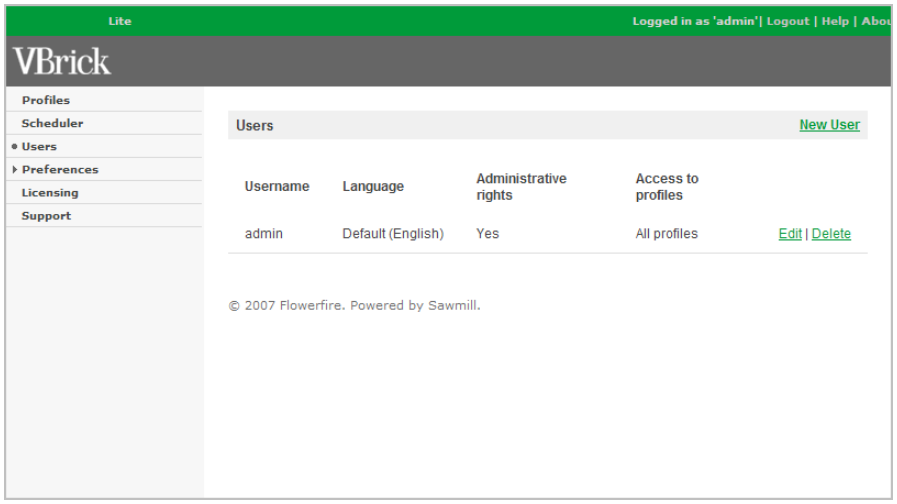
The first time you launch ETV Reporter, you *must* login with the default user name and password (admin/admin). An admin user must be logged in to perform any tasks that potentially affect security, for example creating a profile or selecting log files for processing. You typically create one "admin" user and any number of "non-admin" users. However, depending on how your organization is structured, you may choose to have multiple admin users in different departments or in different geographical locations. As noted above, you should change the default admin user name and password after logging in for the first time.

▼ To create an admin user

1. Go to **Start > All Programs > VBrick > ETV Reporter**.
2. Login with the default user name and password to display the **Profiles** page:



3. Click **Users** in the Admin Menu on the left.



4. Click **New User** (or **Edit | Delete** to modify the default admin user).

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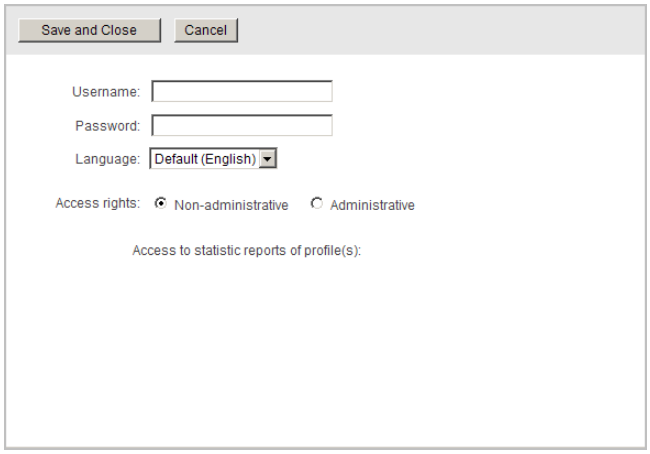
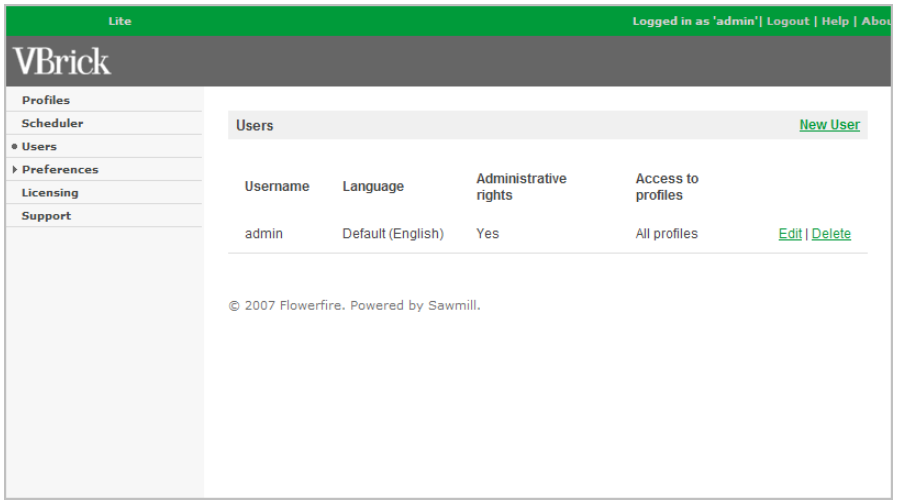


5. Complete the fields as appropriate. Select a username, password, language, and check the profiles this user can access. Note that you must associate this user with a profile or they will be unable to login.
6. Click **Save and Close** when done.

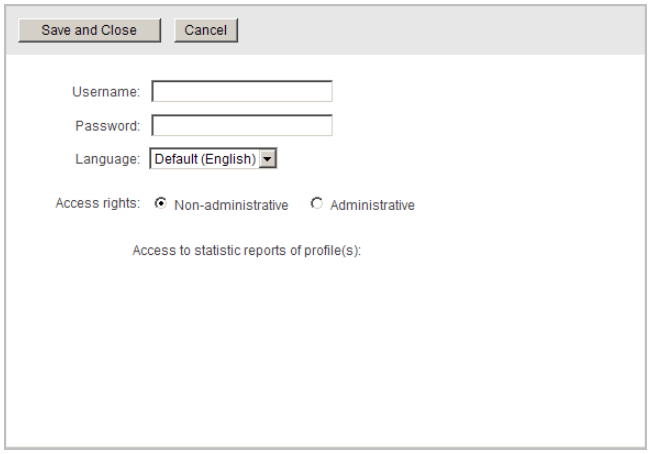
Creating Non-Admin Users

▼ To create a non-admin user

1. Click on **Users** in the navigation frame on the left.



2. Click **New User**.



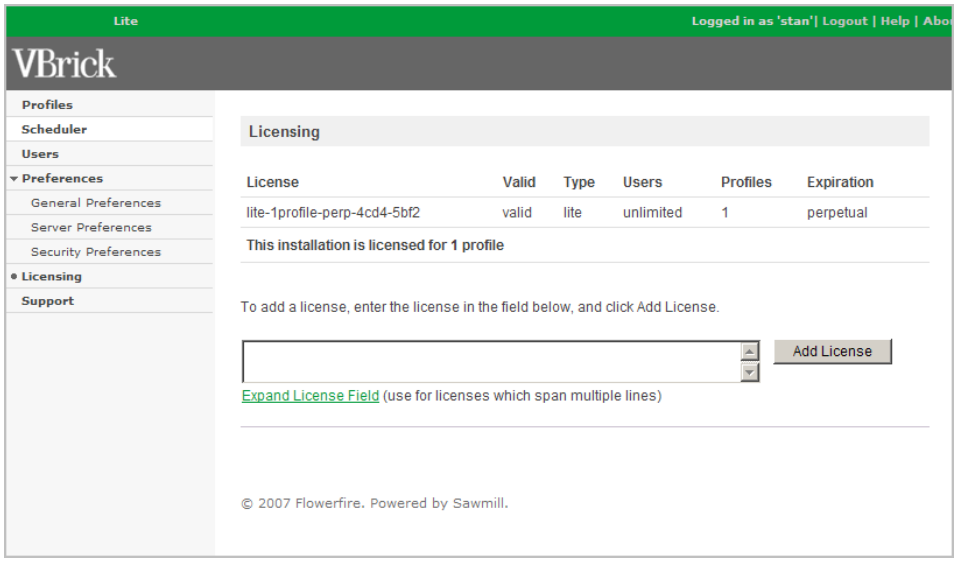
3. Complete the fields as appropriate. Select a username, password, language, and check the profiles this user can access. Note that you must associate this user with a profile or they will be unable to login.
4. Click **Save and Close** when done.

Preferences

It is unlikely that you will ever need to change Preferences and doing so may adversely affect ETV Reporter functionality. Do not modify **General**, **Server**, or **Security** preferences except as directed by a VBrick Support Services representative.

Licensing

Ignore this page. If you purchased Portal Server hardware and software from VBrick, your ETV Reporter license was pre-installed. If you purchased the software only version, the license file can be found on the "Software Activation Keys" card included with your order.



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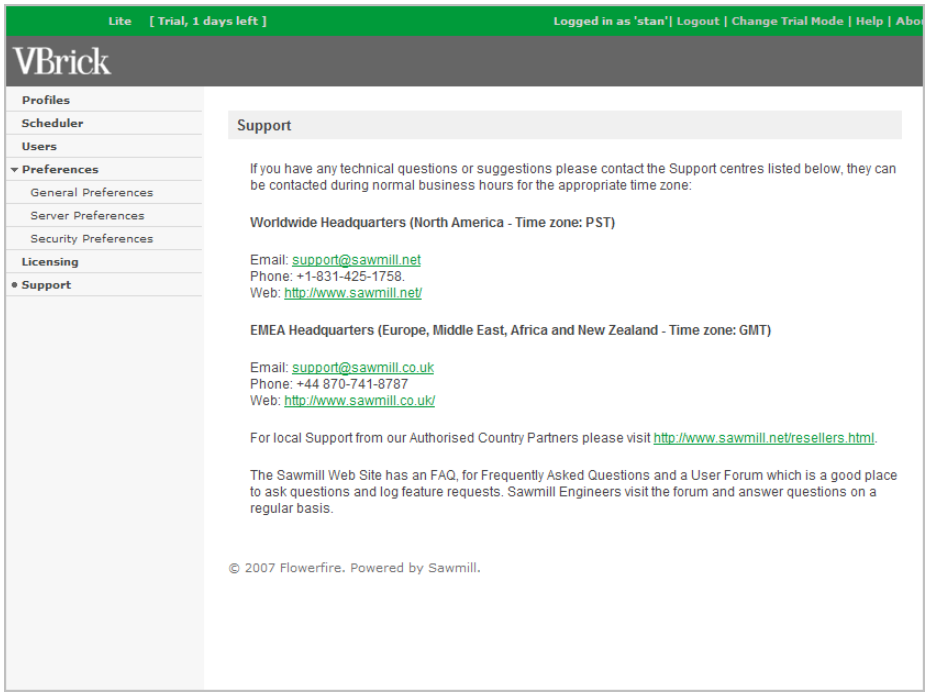
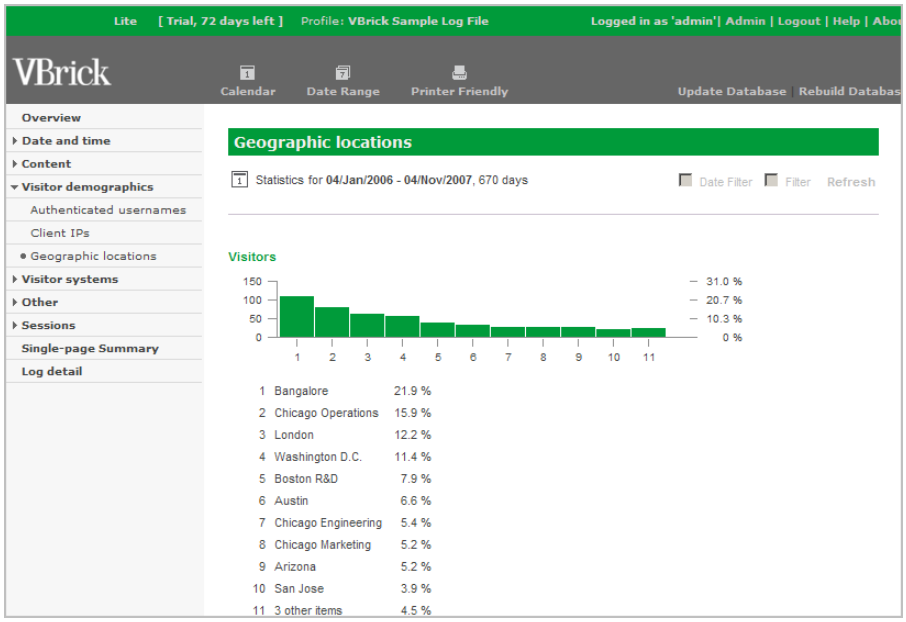
Support

Ignore this page. If you have questions regarding installation or operation not covered in the documentation, please contact your authorized VBrick reseller. They are trained and certified by VBrick and can provide help and technical support for all VBrick products. For additional information, use the VBrick Support Services online Support page at or call 1 203 303-0222 in Wallingford, CT, USA to speak with a VBrick representative. Note that the latest documentation and information for all VBrick products is available online at www.vbrick.com/documentation.



Geographic Location Mapping

You can use this feature to map network or subnet IP addresses to local or international geographical locations on a report. The IP prefixes in a specific subnet range are mapped to a geographic location using a template that is installed with the application. After you configure mapping and rebuild the database, the Geographic locations report will show exactly where your viewers are located.



Geographic Mapping Setup

Use the steps below to map IP addresses to geographic locations (refer to the Sample Mapping File below). Basically, you open the template in an editor, replace the IP addresses and locations with your own data, and save the file. The mapping template is installed with the Portal Server in the following location:

C:\Program Files\EtherneTV Reporter\Log Analysis Info\rewrite_rules\ip_location_mapping.cfg

▼ To configure geographic mapping

1. Create a profile as explained earlier (see Creating a Profile on page 8).
2. Open the template (ip_location_mapping.cfg) in a text editor and replace the IP addresses and geographical locations with your own data. **Do not change anything else.** The fields you do not use will be ignored.
3. Save your changes to the template.
4. Open EtherneTV Reporter. Then click **View Config > Rebuild Database** for the profile you created. This will rebuild the database and generate new reports.
5. On the Report Menu, go to **Visitor demographics > Geographic locations** to see your generated report.

Sample Mapping File

```
ip_location_mapping = {
   vbrick_ethernetv_portal_server = {
     locations = {
       0 = {
         ip_prefix = '37.29.'
         name = 'Tokyo'
       }
       1 = {
         ip_prefix = '88.167.30.'
         name = 'San Jose'
       }
       2 = {
```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```
        ip_prefix = '82.165.22.'
        name = 'San Diego'
      }
      3 = {
        ip_prefix = '122.25.'
        name = 'Arizona'
      }
      4 = {
        ip_prefix = 782.165.22.'
        name = 'Bangalore'
      }
      5 = {
        ip_prefix = '22.25.'
        name = 'Austin'
    } # locations
  } # vbrick_ethernetv_portal_server
} # ip_location_mapping
```

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Chapter 3

Generating Reports

Access Logging is enabled by default on the Portal Server. To verify that logging is enabled and you can generate reports, open the Portal Server Admin Console, and go to **Global Settings > Access Logging**, and check **Enable Log Creation** if necessary.

Topics in this document

Using the Interface. 19
Generating Reports 25

Using the Interface

Reports, created with EtherneTV Reporter, present log file statistics in an attractive and easily navigable format. The following screenshot shows a typical report. The user interface elements and controls are explained on the following pages. These include the Report Header, the Report Toolbar, and other interface components.

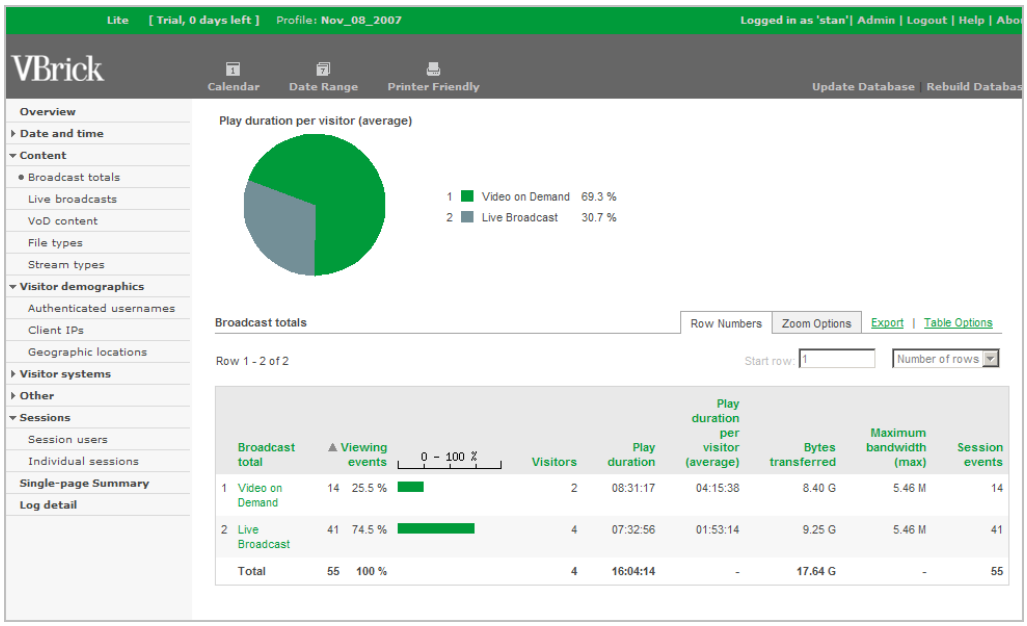

Figure 1. Typical ETV Report

Report Header

Profile <name>	The name of the active profile, the profile whose reports are being displayed.

Logged in as <name>	The user who is currently logged in.
Admin	Shown in "View reports" mode. Provides a link to the admin interface, the profiles list, and other administrative functions.
Logout	A link to log out of EtherneTV Reporter.
Help	A link which opens a new window containing the EtherneTV Reporter documentation.
About	Displays the software version number.

Report Tool Bar

Calendar	Use to open the Calendar window, where you can select a single day, month, or year to use as the date/time filter. When you have selected an item in the Calendar, all reports will show only information from that time period, until the date/time filter is removed (by clicking "Show All" in the Calendar).
Date Range	Use to open the Date Range window, where you can select a range of days to use as the date/time filter. When you have selected a range in the Date Range, all reports will show only information from that time period, until the date/time filter is removed (by clicking "Show All" in the Calendar).
Printer Friendly	Use to open a separate browser window with the current report displayed suitably for printing. After the new window appears, use your browser's Print function to print it. **Printing in this way gives better results than printing the original report directly.**
Update Database	**Do not use unless directed.** All new files will be added to the database. This may result in duplicate files.
Rebuild Database	Building the database re-reads all log data specified in the log source. Use this feature whenever the source log file changes.

Using the Calendar

The Calendar shows the years, months, weeks and days during which there was traffic by displaying a clickable link for each day, week, month or year. *All links that are not clickable have no data in the database.* Clicking any day, week, month, or year adds Date/Time Filters to the reports for the selected period, thereby "zooming in" on that data. Each day, week, month or year in the calendar that has data will be highlighted when you move the mouse over it. The Calendar controls the date and time filtering in the report and once filtered, the Report Bar shows the time period that the report is displaying. The screenshot below shows an Overview report filtered by date from 09/Oct/2007 to 02/Nov/2007.

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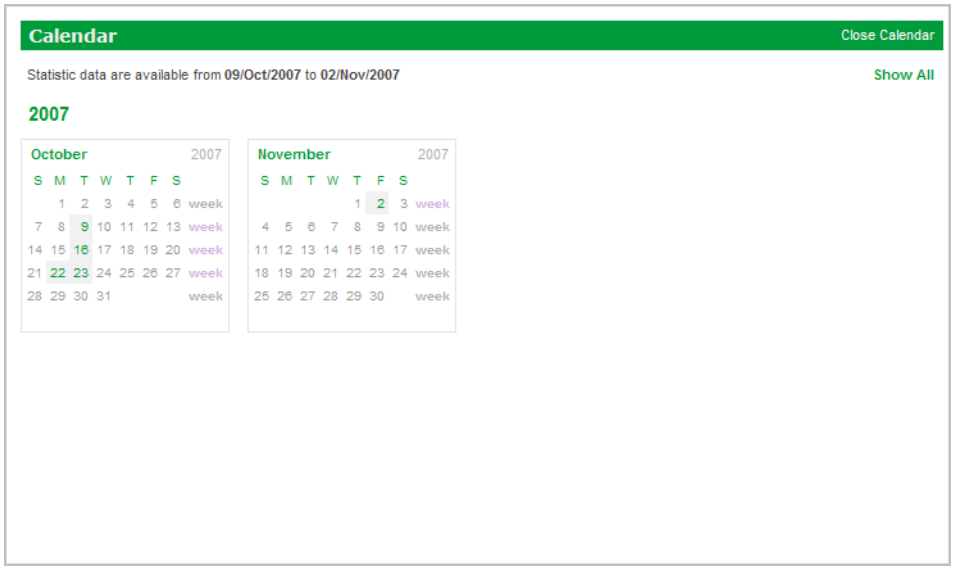
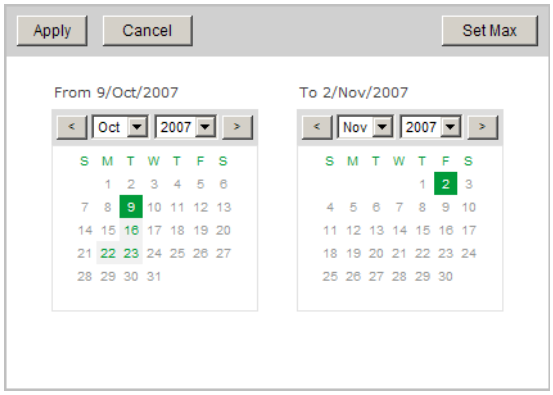


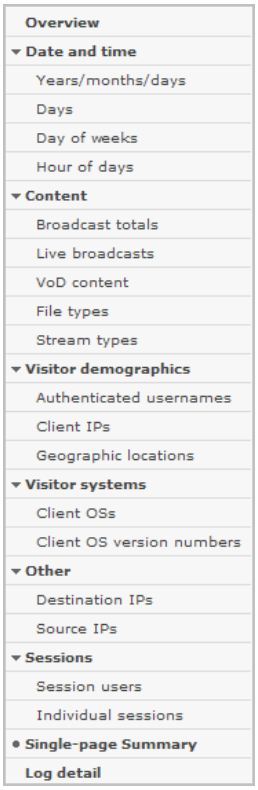
Using a Date Range

The Date Range window is where you can select a range of days to use as the date filter. You can select any range by clicking on the dates in from and to calendars and selecting from the drop down menus, then clicking apply, or use the **Set Max** button to select all available dates. When you have selected a range in the Date Range window, all reports will show only information from that time period, until the date filter is changed (by going into the Date Range Selector again) or removed (by clicking **Show All** in the Calendar).



Report Menu

At the left of the window is the Report Menu, which lets you select the report to view. Clicking a category will expand or collapse that category; clicking a report name will change the report display to show that one. Clicking a report name will remove any Zoom filters but will not remove Date/Time filters. See Sample ETV Reports on page 29 for a brief description of each report.

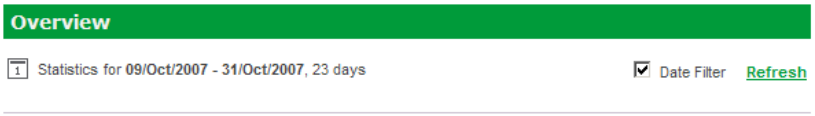


Report Content

The main portion of the window (lower right) is occupied by the report itself. This is a view of the data selected by the filters (date/time filters, and zoom filters). This provides one breakdown of the data specified by the filters—you can select another report in the Reports Menu to break down the same data in a different way. There are several parts of the report as explained below.

Report Bar

At the top of the report is a bar containing the report label and the current global and date/time filters, if any.



Report Graph

For some reports, there will be a graph above the table. The existence of this graph, its size, type (for example a pie chart, bar, or line, and other characteristics varies from report to report. The graph displays the same information as the table below it.

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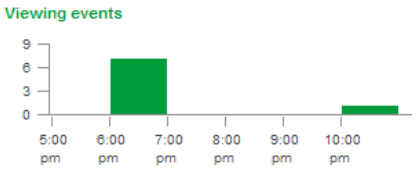


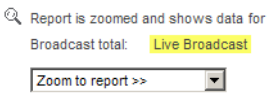
Report Table

The Report Table contains the main information of the report. It displays one row per database field item, with the aggregated numerical values (for example the total of viewing events) in columns next to it. It may also include columns showing bar graph representations of the numbers, and/or percentages (if these are selected in **Table Options**). The **Table Options** link above and to the right of the table can be used to change which columns are visible, the sort order, and other aspects of the report. The Number Of Rows option in **Table Options** can be used to change the number of rows that are displayed in the table. The sort order can also be changed by clicking a column name; click once to sort by that column, or again to sort in reverse. You can zoom in on a particular item by clicking it—that will switch you to the report specified in the **Zoom Options**, and will set a Zoom filter for that item.

	All days	Average per day
Viewing events	8	0.35
Visitors	3	-
Play duration	04:10:44	00:10:54
Play duration per visitor (average)	01:23:34	-
Bytes transferred	2.15 G	95.86 M
Maximum bandwidth (max)	4.33 M	-
Session events	16	0.70

Zoom to Report Menu

The **Zoom to Report** menu shows the name of the report that will be displayed when you zoom. For example, if you select R from the menu, and then click an item X in a table for field F, it will zoom you in on X, and simultaneously switch to report R. This can be useful if you want to break down each item in a table by some other report, for instance to see what traffic looked like by hours of day, for a particular day; choose Hour Of Day from the menu in the Days report, and then click on a day to zoom in on that day and see the hours of the day for that day. If you are not zoomed on anything, there will be no immediate effect when you select a new item in the **Zoom to Report** menu—it will just change the menu selection. But when you click, the selection in the **Zoom to Report** menu will be used to determine which report to display.



This is an extremely useful feature that lets you drill down to specific, granular data. For example, suppose you want to determine if a specific user watched a specific piece of VOD content. There are a number of ways to get this information but here is one way:

1. Select **VoD Content** from the Report Menu on the left side of the page. This displays a list of all VoD content played during the selected period.
2. Click on a VoD title. This displays the **Zoom to Report** menu and some summary data.

3. From the **Zoom to Report** menu, select **Session Users**. This displays a list of all users who watched the selected VoD content.
4. Click on the **Session User** name to display a table showing how long this user watched the specified content.
5. And you can continue drilling down as desired. For example zoom to **Hour of days** to see when this content was viewed.

This process also works in reverse. For example if you first search **Authenticated usernames** for user "Mike", you can then select **VoD Content** as the **Zoom to report**. This will display a list of all VoD titles that Mike watched during the specified time period.

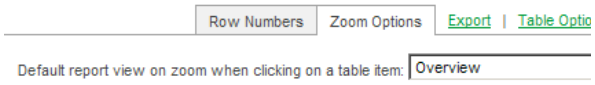
Report Controls

Row Numbers

Start row	Allows you to enter and directly jump to any row and list from there.
Number of rows	Allows you to see more rows than the default for this table.

Zoom Options

This control shows the name of the report that will be displayed when you zoom. For instance, you can see that the "Overview" report (in the screenshot below) will display when you click in an item in the table. By selecting a different Report View from the menu, you will Zoom into that new view



Export

Use this control to export report data in .csv format. A window will open and you can download the report. Large reports may take a few moments to generate.

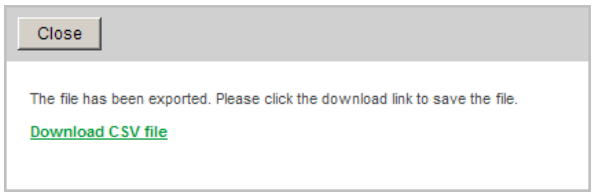


Table Options

The **Table Options** controls which elements of the statistics are visible. Most elements are optional, and you can turn them on or off by selecting them from here. In most cases, you will want to keep the defaults. The list of available elements changes depending on the view, the database structure, and other options. You can change which columns are visible, the sort order, and other report options. *You change the sort order clicking the column name. Click once to sort; click again to reverse the sort.*

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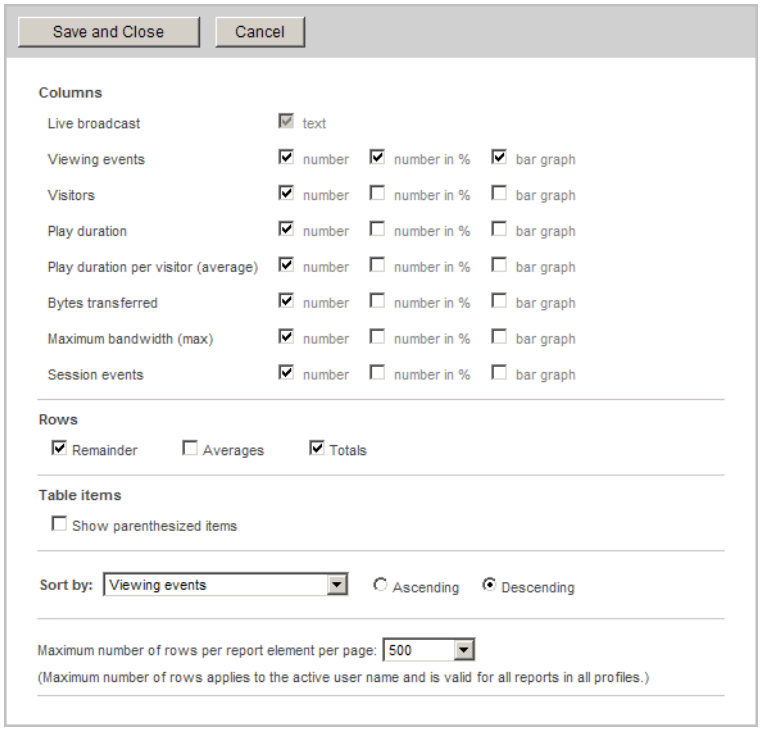
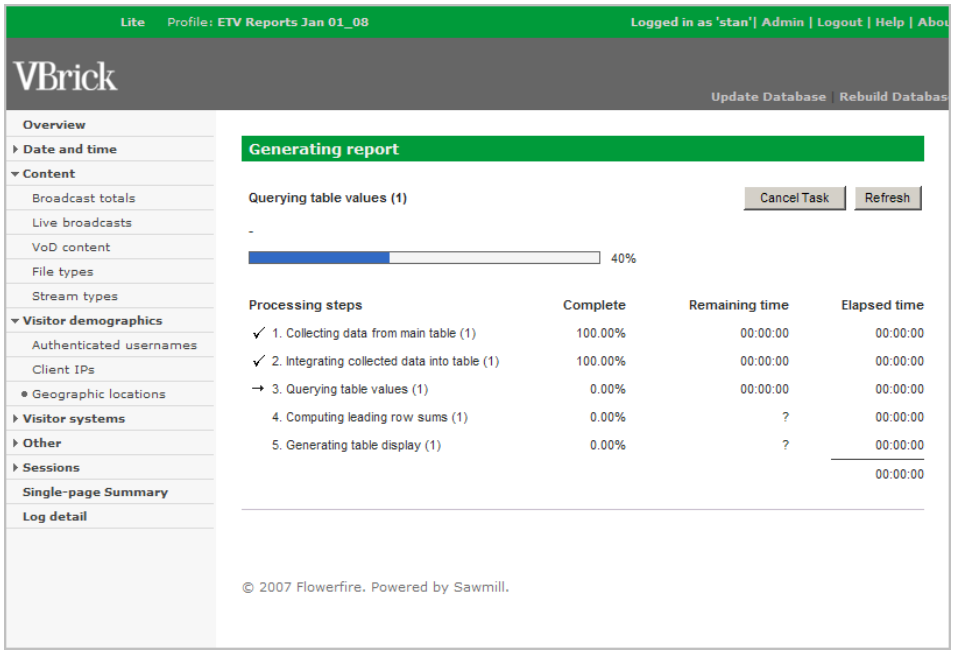


Show parenthesized items	When this is shown, the items in the table that have parentheses (brackets) around them are shown. These include (empty) where a field is empty.
Maximum number of rows	This menu lets you control the number of rows displayed per table item per page. The default is 500 and if there are more than 500 items for a given table item, they will not be displayed.

Generating Reports

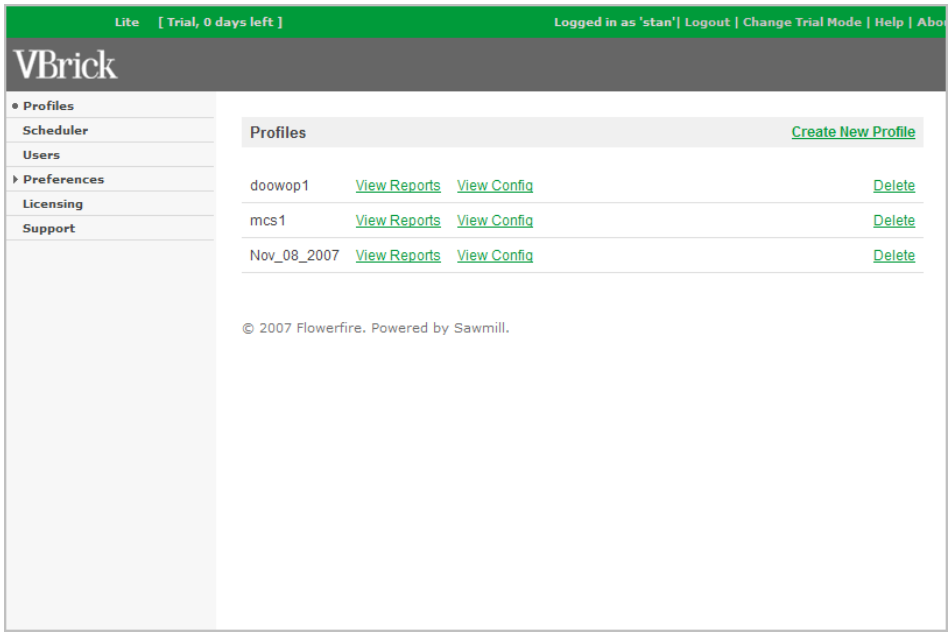
Once configured with a profile, the ETV Reporter will generate any report simply by clicking on the desired report in the left navigation pane. It may take a few moments to generate depending on the complexity of the report and the number of entries in the log. During that time, a status window similar to the one shown below is momentarily displayed.

The size of the log file generated by the Portal Server is dependent on the number of users accessing the system, how often they access the system, and the **Log Cycle Time** setting in the Portal Server (daily, weekly, or by maximum size). The larger the log file processed by the ETV Reporter software, the longer it takes to generate reports. Small log files with a limited number of users take only seconds to generate a report, while large files may take several minutes or longer. If you find it takes too long to generate a report, you can reduce the size of the input log file by changing the **General Logging Properties > Log Cycle Time** in the Portal Server admin pages to a weekly or daily setting.



▼ To begin generating reports

1. Launch the application and enter a valid user name and password.
2. Click on **Profiles** in the navigation pane on the left.
3. Click on **View Config** to view the configuration of an existing profile.
4. Click on **View Reports** to view the reports associated with an existing profile.



5. Click once on any item in the left navigation pane (for example **Content**) to see the reports that are available in that category.

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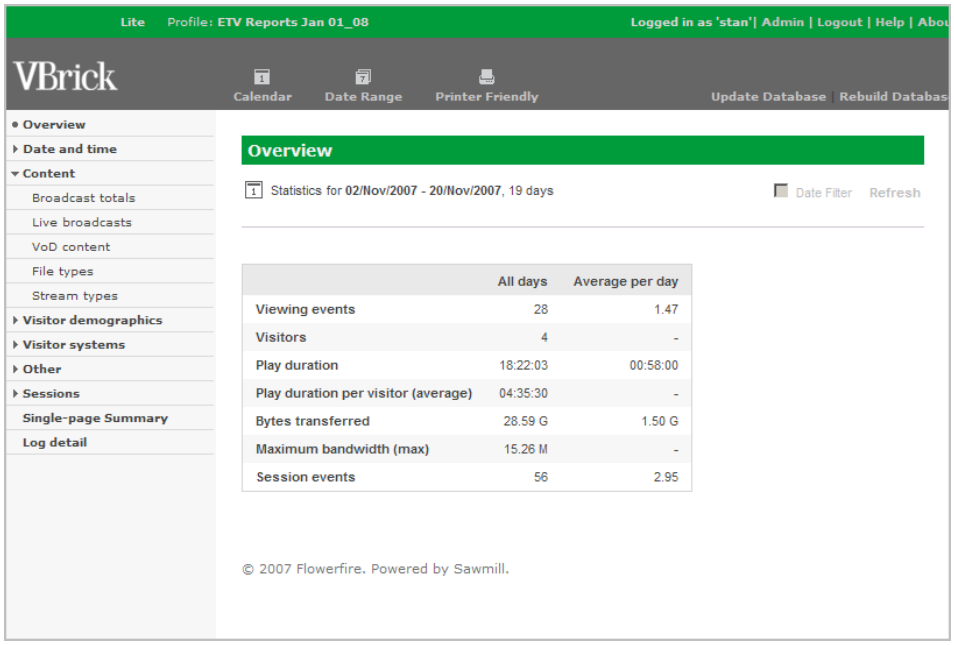
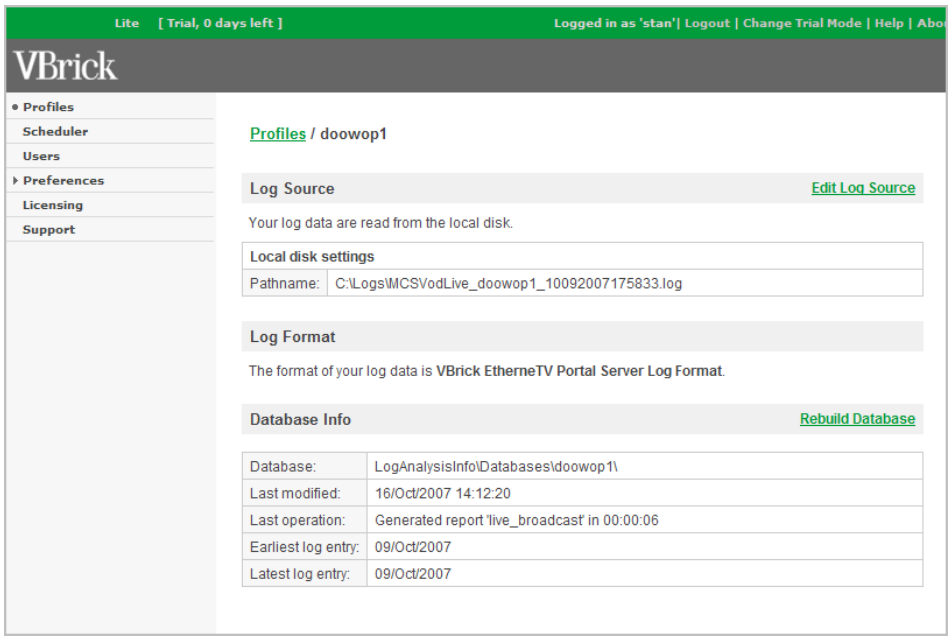
View Reports

The window lets you select and view any report in the Report Menu on the left.



View Config

This window shows how the current profile is configured. It is unlikely you will ever need to change this information.



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Chapter 4

Sample ETV Reports

This chapter shows an example of each type of report you can generate. The navigation pane on the left shows all of the reports available from the report logs associated with the current profile. Click on any report and wait a few moments while the report generates. Then use any of the options and controls to view specific report data. See Using the Interface on page 19 for more information about the controls.

Topics in this document

Overview 29
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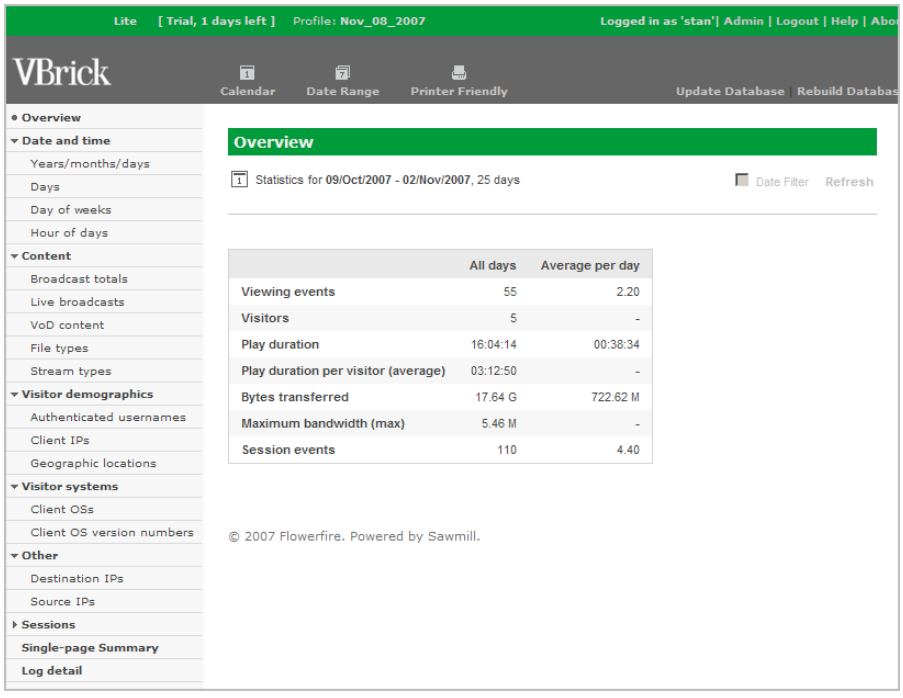
Content 33
Visitor Demographics 36
Visitor Systems. 37
Other 38
Sessions 39
Single-page Summary. 41
Log Detail 42

Overview

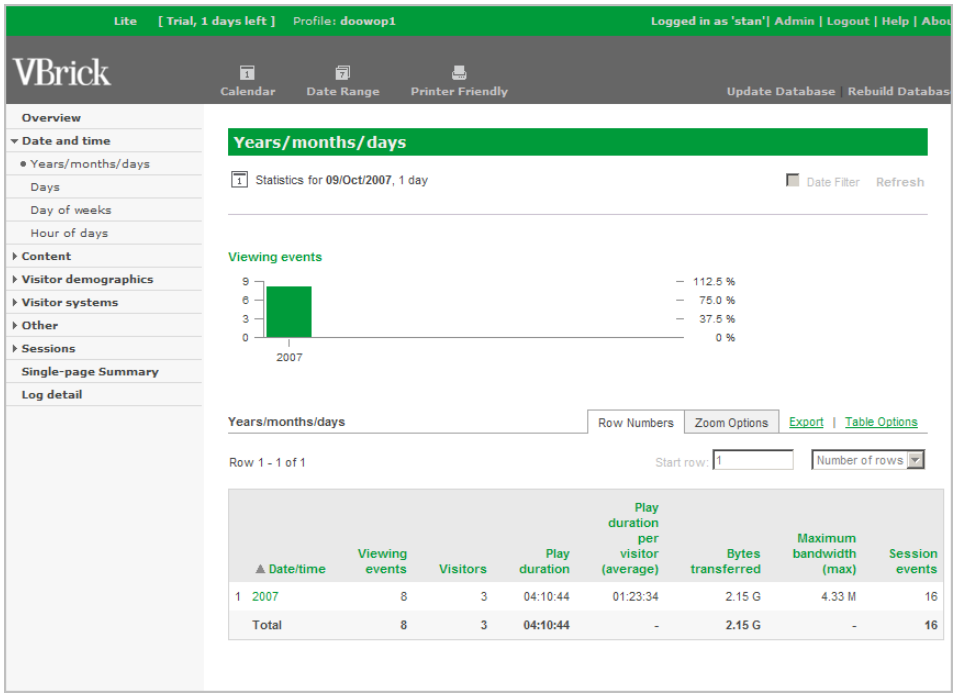
This report provides a snapshot showing the overall usage of the entire system.



Date and Time

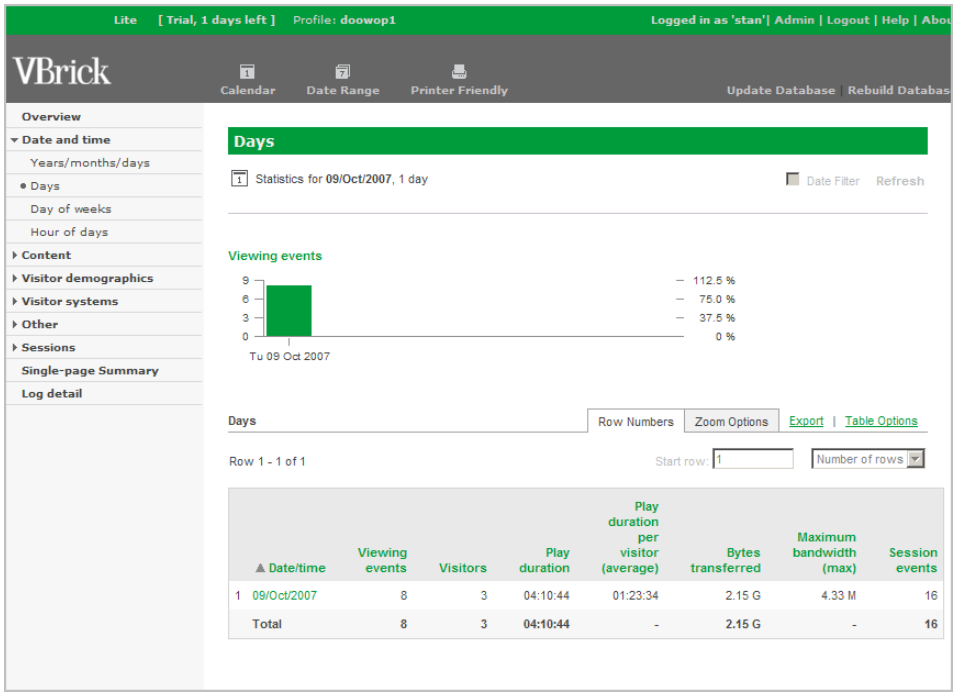
Years/months/days

This report shows viewing events broken down by years, months, or days.



Days

This report shows viewing statistics for each day in the selected date range.



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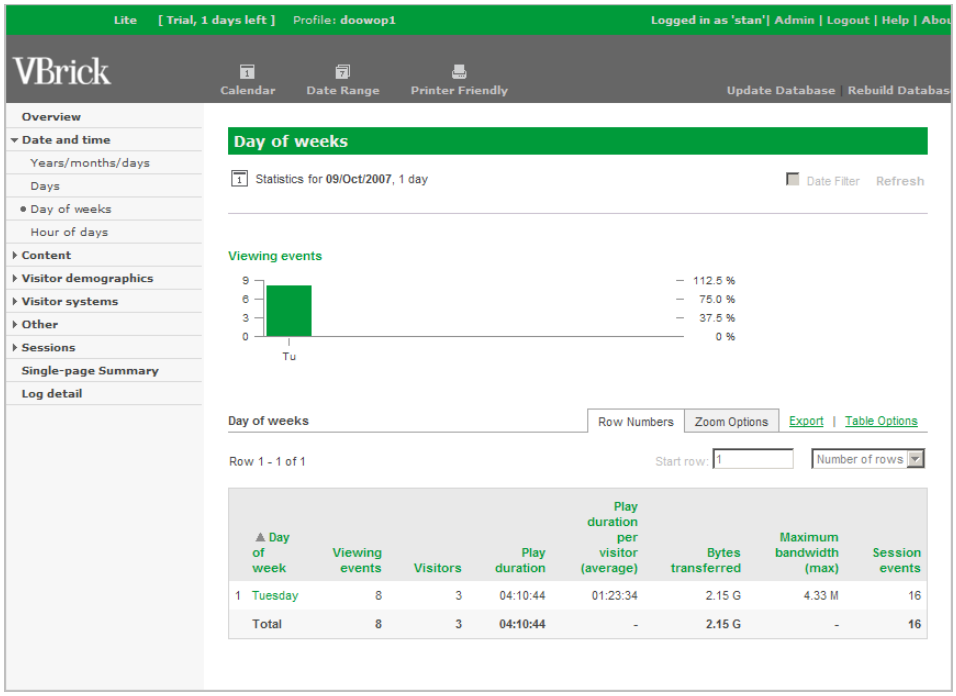
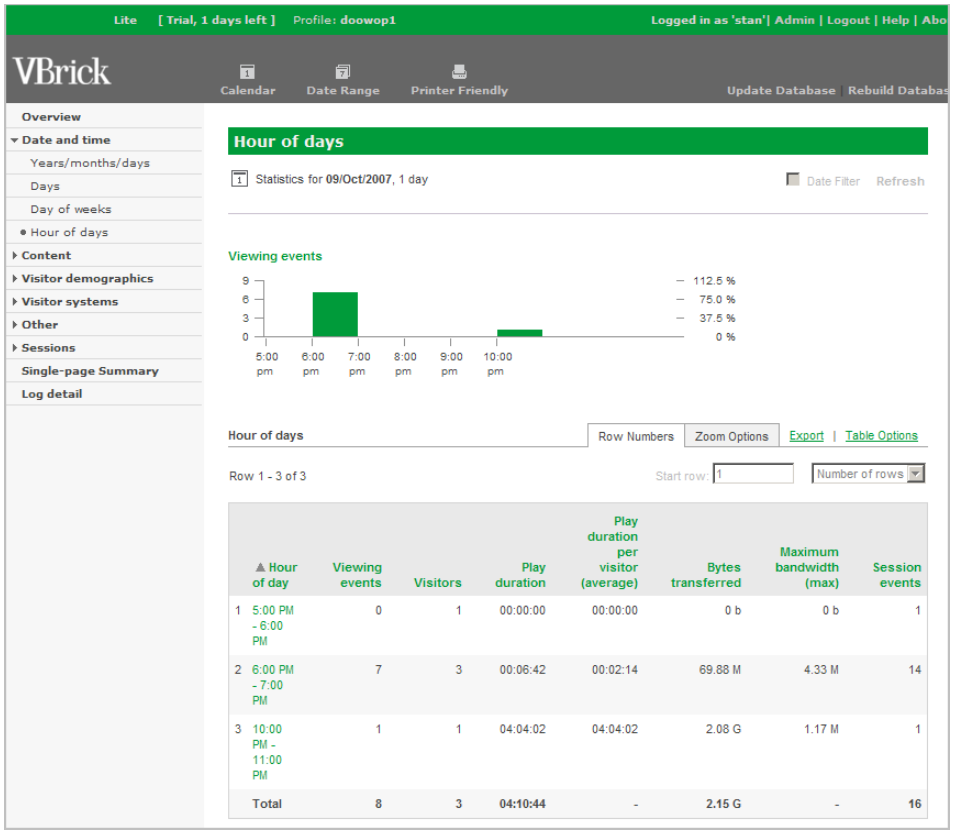
Day of weeks

This report shows viewing statistics for each day of the week in the selected date range.



Hour of days

This report shows viewing statistics for each hour of the day in the selected date range.



	Hour of day	Viewing events	Visitors	Play duration	Play duration per visitor (average)	Bytes transferred	Maximum bandwidth (max)	Session events
1	5:00 PM - 6:00 PM	0	1	00:00:00	00:00:00	0 b	0 b	1
2	6:00 PM - 7:00 PM	7	3	00:06:42	00:02:14	69.88 M	4.33 M	14
3	10:00 PM - 11:00 PM	1	1	04:04:02	04:04:02	2.08 G	1.17 M	1
	Total	8	3	04:10:44	-	2.15 G	-	16

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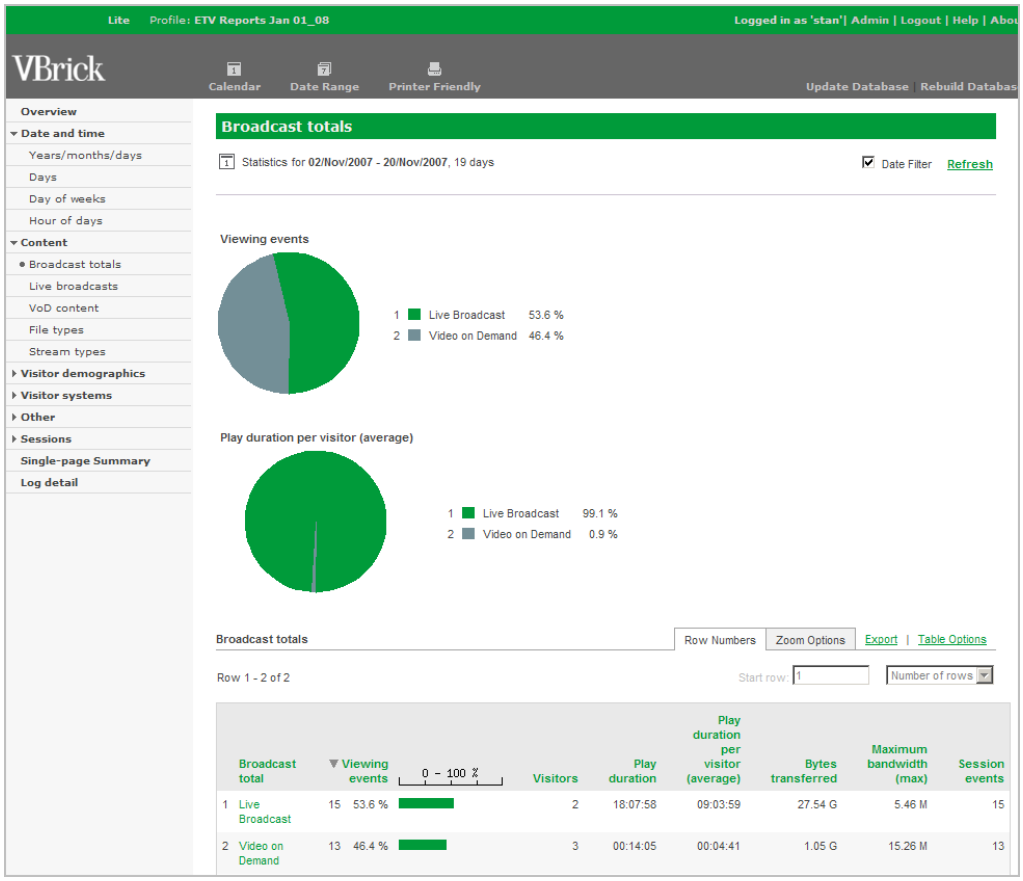
Content

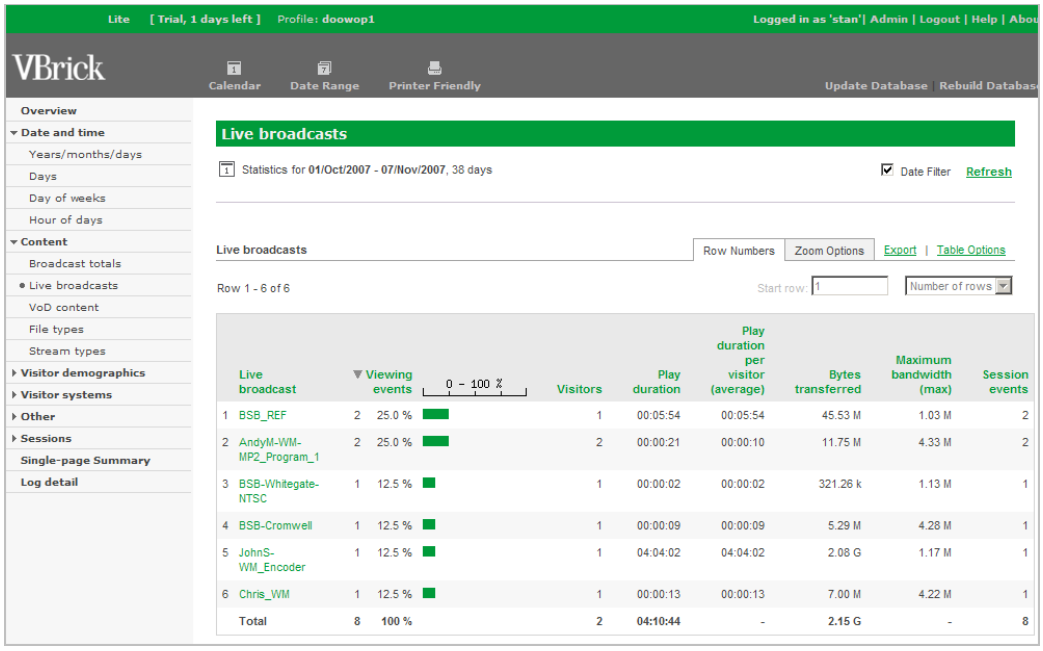
Broadcast totals

This report shows broadcast totals for both **Live Broadcast** and **Video on Demand** viewing.



Live broadcasts

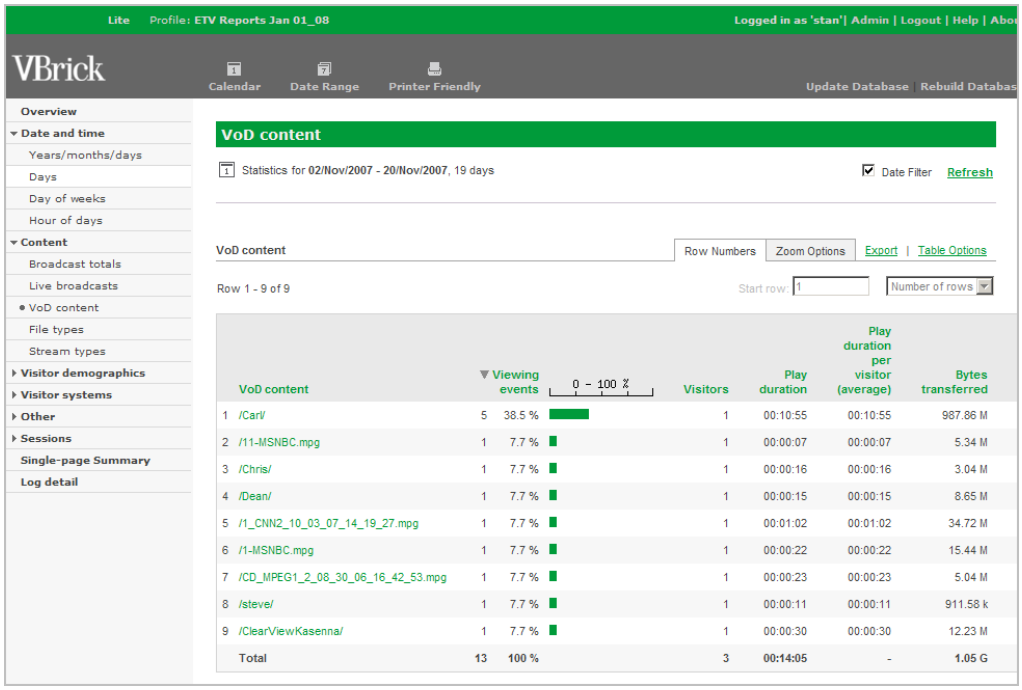
This report shows viewing data for all live VBrick streams on the network.



Note In this example and others, the percentage and the bar graph are set for the first column only. This option is set in **Table Options**.

VoD content

This report shows viewing data for all stored Video on Demand (VoD) content.



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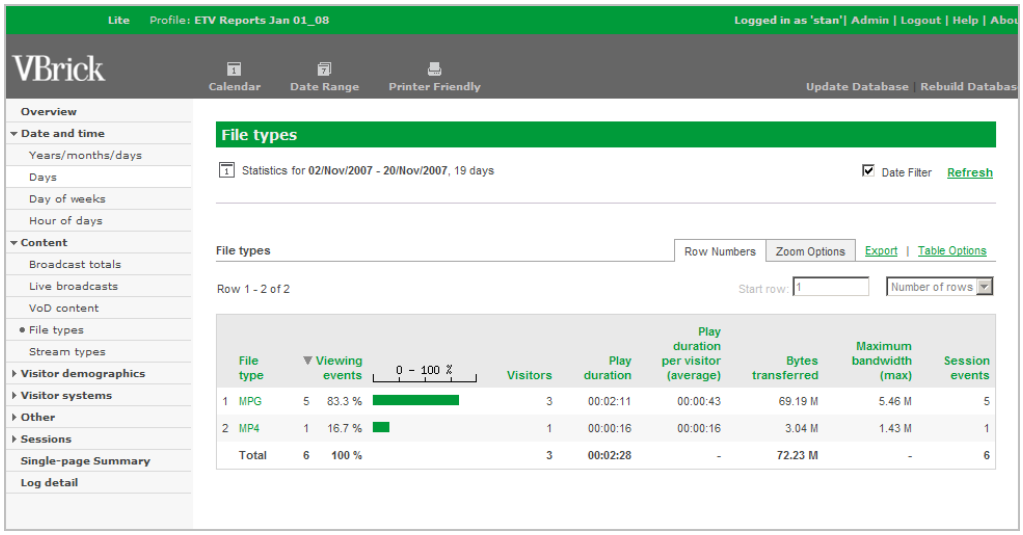
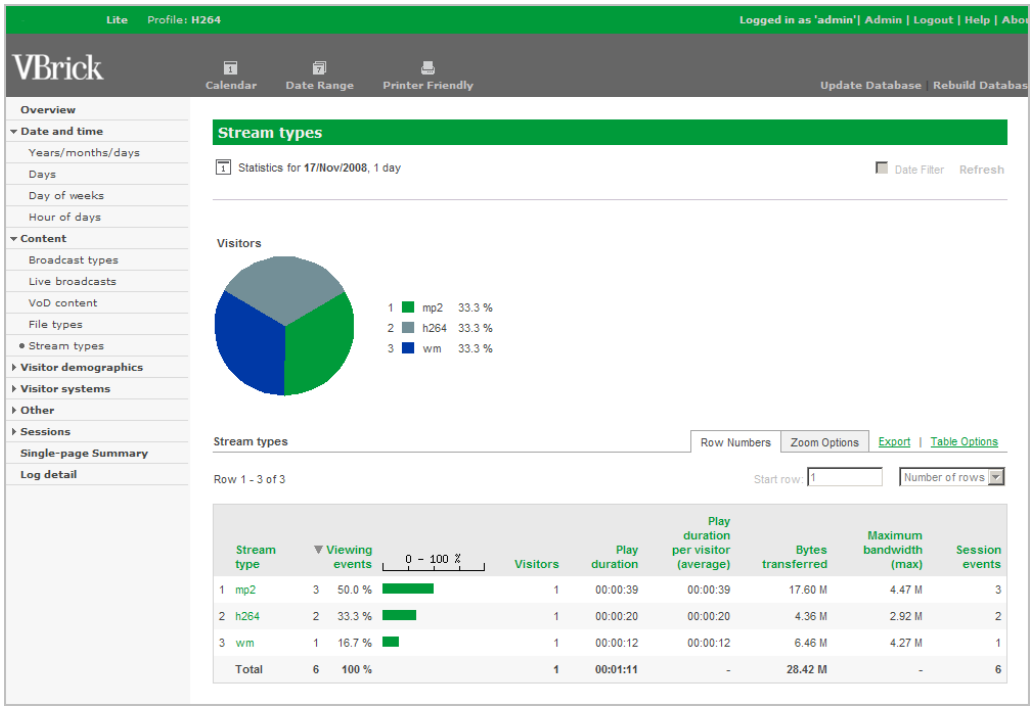
File types

This report shows viewed VoD content by file type, for example MPEG-2, MPEG-4, H.264 or Windows Media.



Stream types

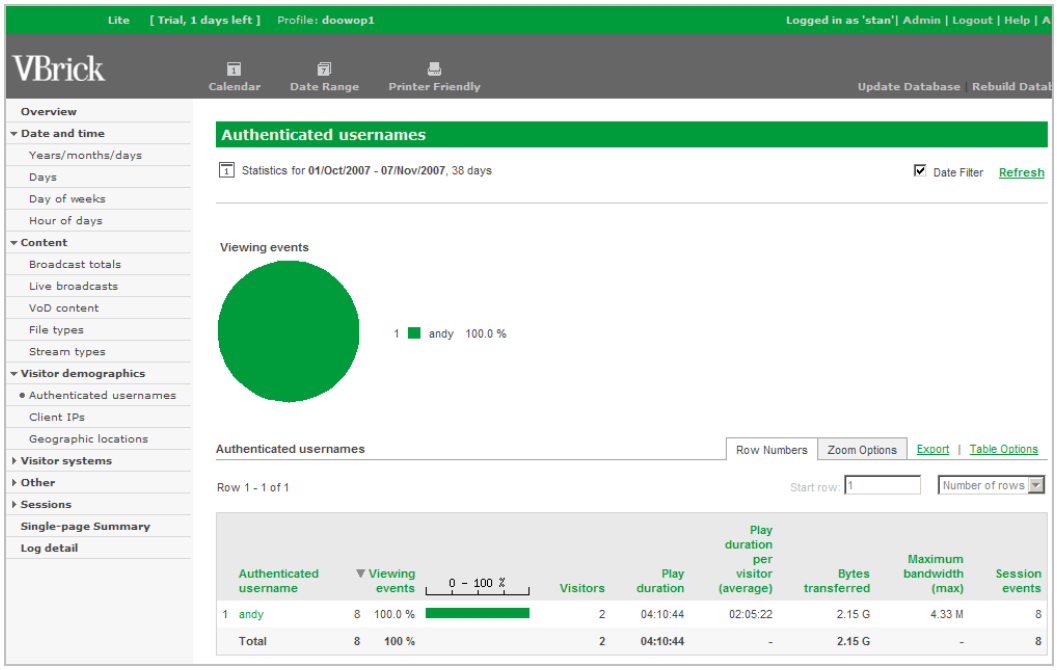
This report shows viewed live content by stream type, for example MPEG-2, MPEG-4, H.264 or Windows Media.



Visitor Demographics

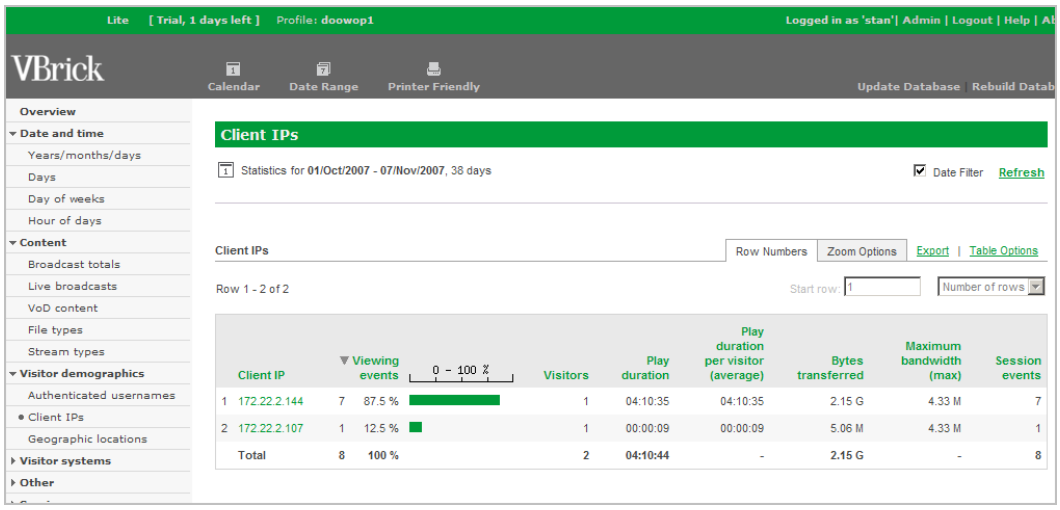
Authenticated usernames

This report shows viewers on the system by user name.



Client IPs

This report shows clients (viewers) on the system by IP address.



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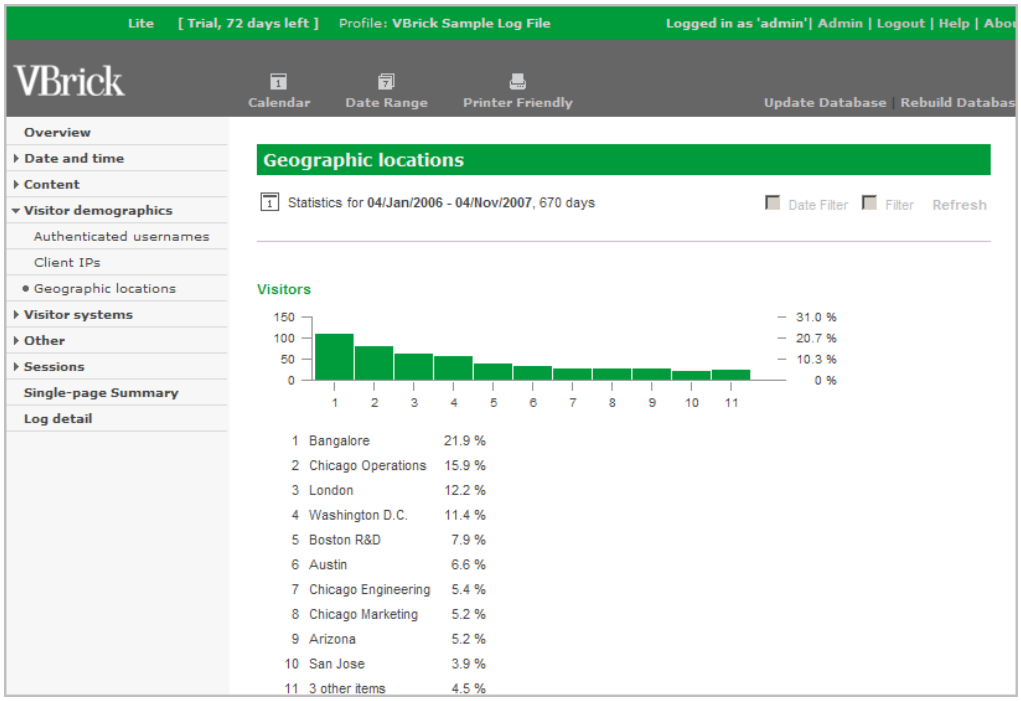
Geographic locations

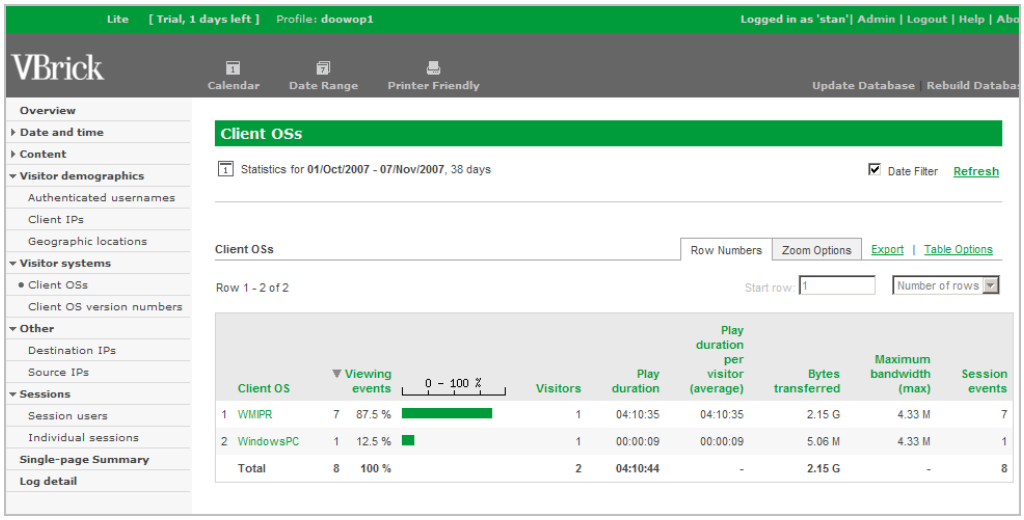
This report shows the geographic location of all viewers. The "location name" to "client id" mapping must be configured in advance. See Geographic Location Mapping on page 15 for details.



Visitor Systems

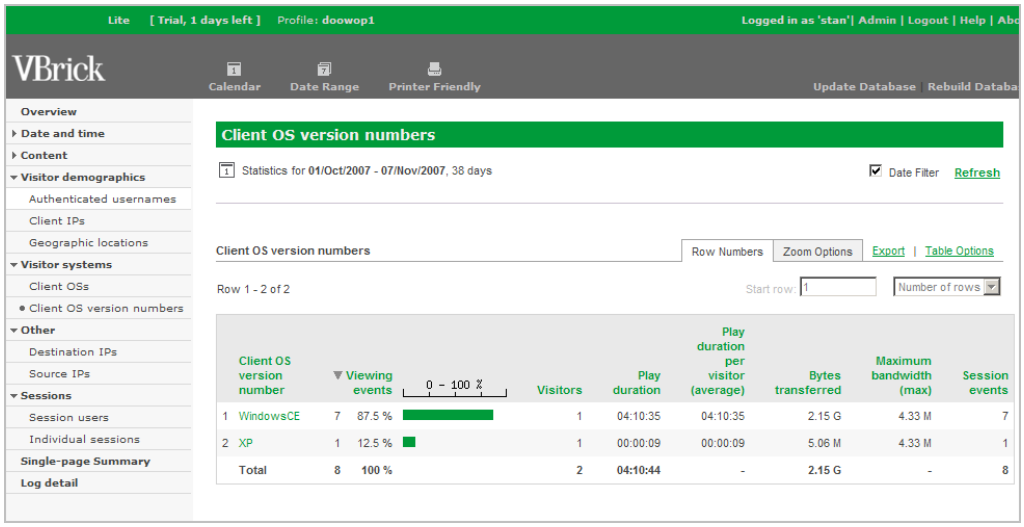
Client OSs

This report shows the client viewer's operation system (OS) type, including the WM IP Receiver (WMIPR).



Client OS version numbers

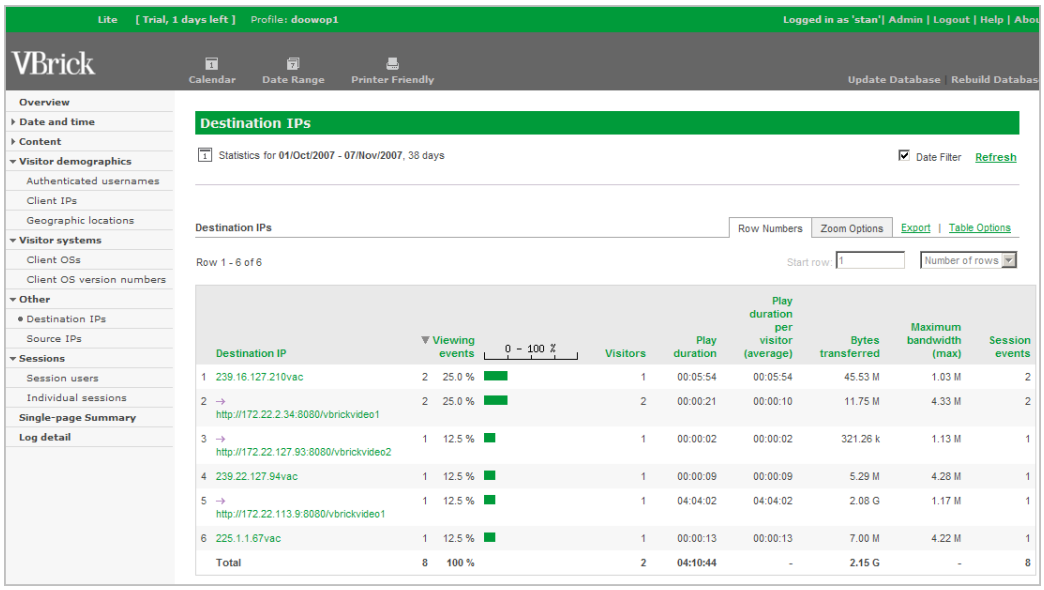
This report shows the client viewer's operating system (OS) version, for example XP is a Windows *version*.



Other

Destination IPs

This report shows the multicast IP address of viewed live streams.



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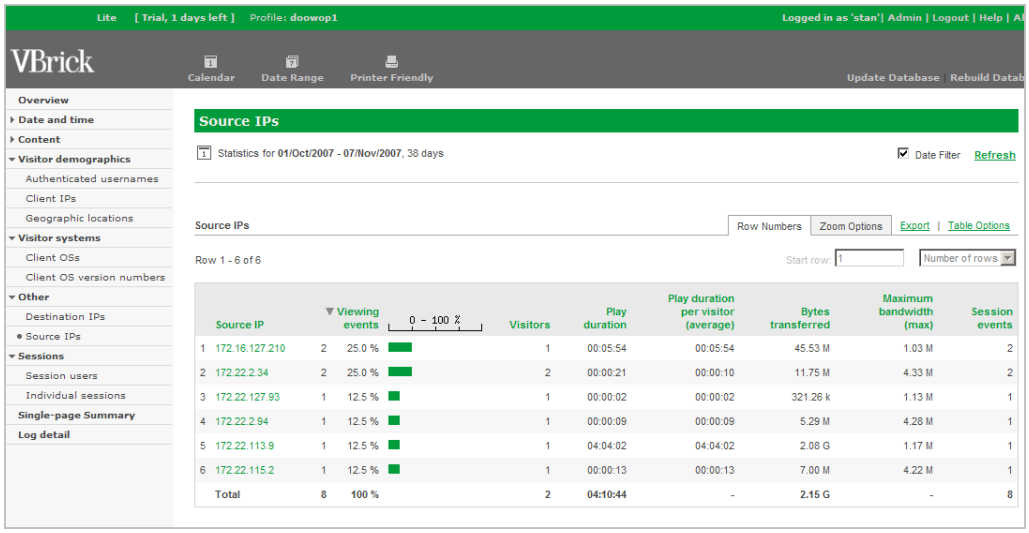
Source IPs

This report shows the client's originating (source) IP address.



Sessions

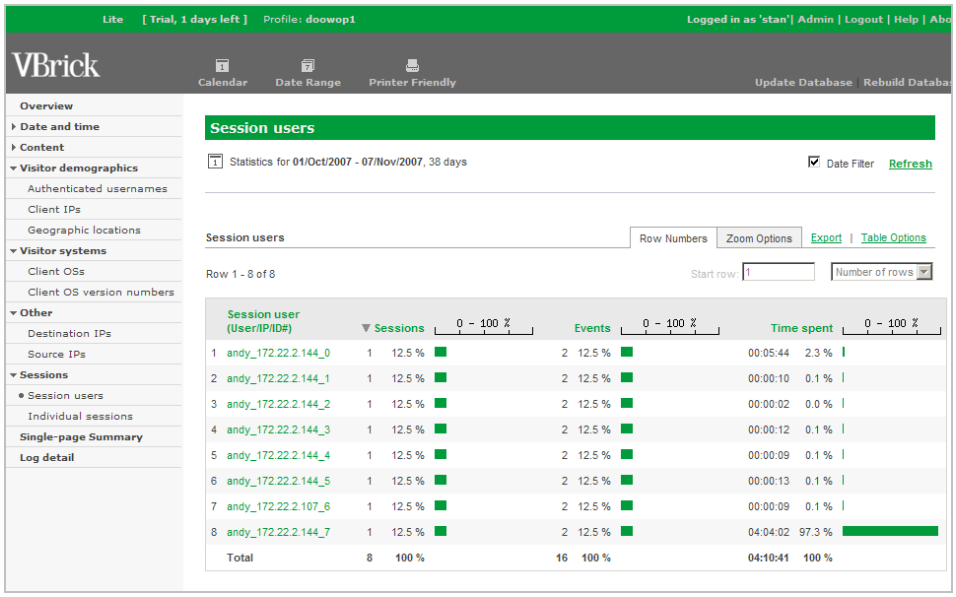
EtherneTV Reporter computes session information by tracking the page, date/time, and hostname (client IP) for each page view. When a session view is requested, it processes all of these page views at the time of the request. EtherneTV Reporter groups the viewing events into initial sessions by assuming that each visitor contributed one session. It sorts the events by date so it has a click-by-click record of the movement of each visitor.

Then it splits the sessions, using the session timeout interval. This is set to 30 minutes by default. Since most websites are accessible without logging in, there is no way for EtherneTV Reporter to know the real time that a user leaves the site; it can only guess by assuming that if they didn't click anything on the site for 30 minutes, they must have finished and left. By splitting the sessions up in this way we are counting more accurately the number of sessions a given visitor has had on the website. It is not a perfect science, but over time, as long as the method of measuring remains the same, a trend can be found. This splitting process increases the number of sessions that EtherneTV Reporter counts, resulting in possibly more than one session per visitor.

EtherneTV Reporter discards sessions over two hours long. Most web sessions are considerably shorter than that, so there's a good chance that any really long session is actually caused by multiple visitors using the same proxy server to visit the site. These look like one long session because all of the hits seem to come from the proxy server (the same IP address). EtherneTV Reporter rejects these because there is no way to tell which events were from a particular visitor.

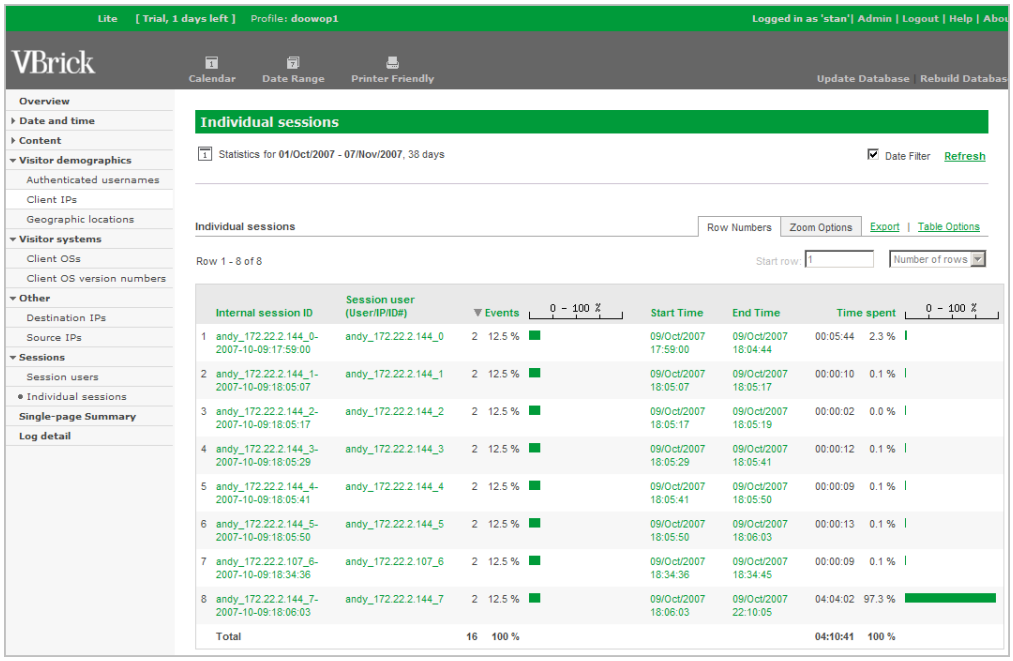
Session users

This report lists all the users on your site and the number and duration of their visits.



Individual sessions

This report lists all the sessions on your site.



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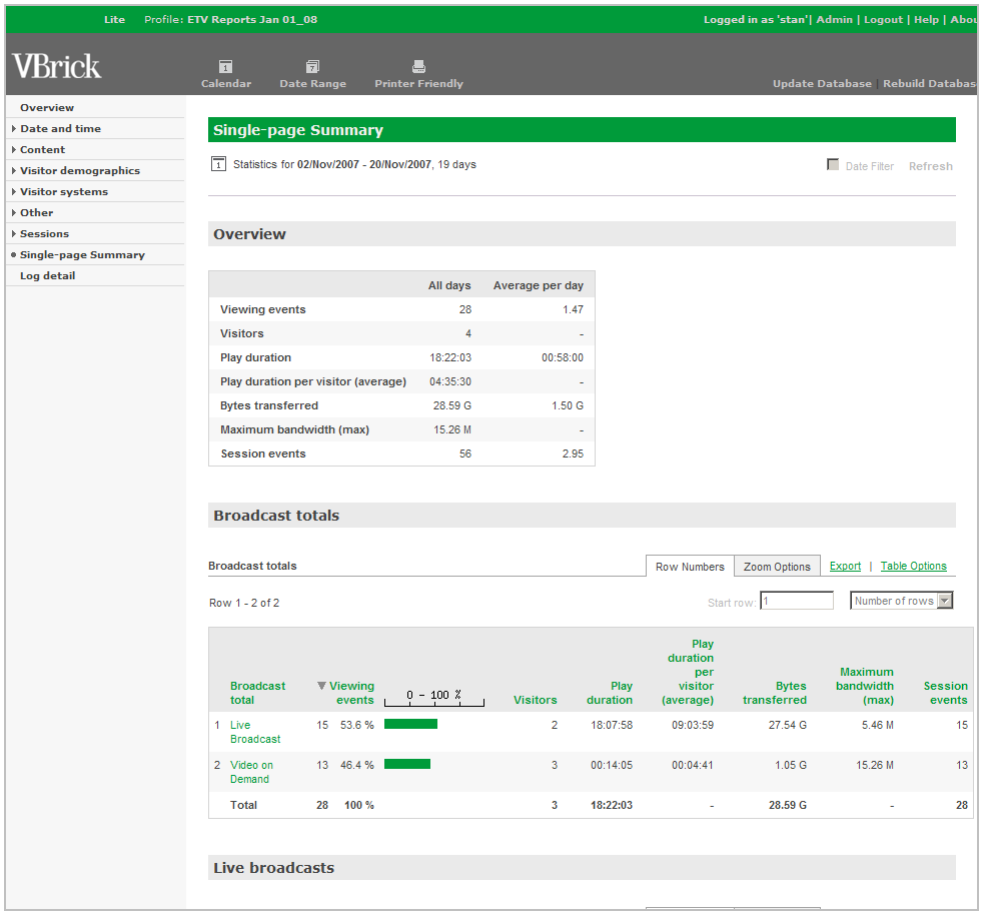
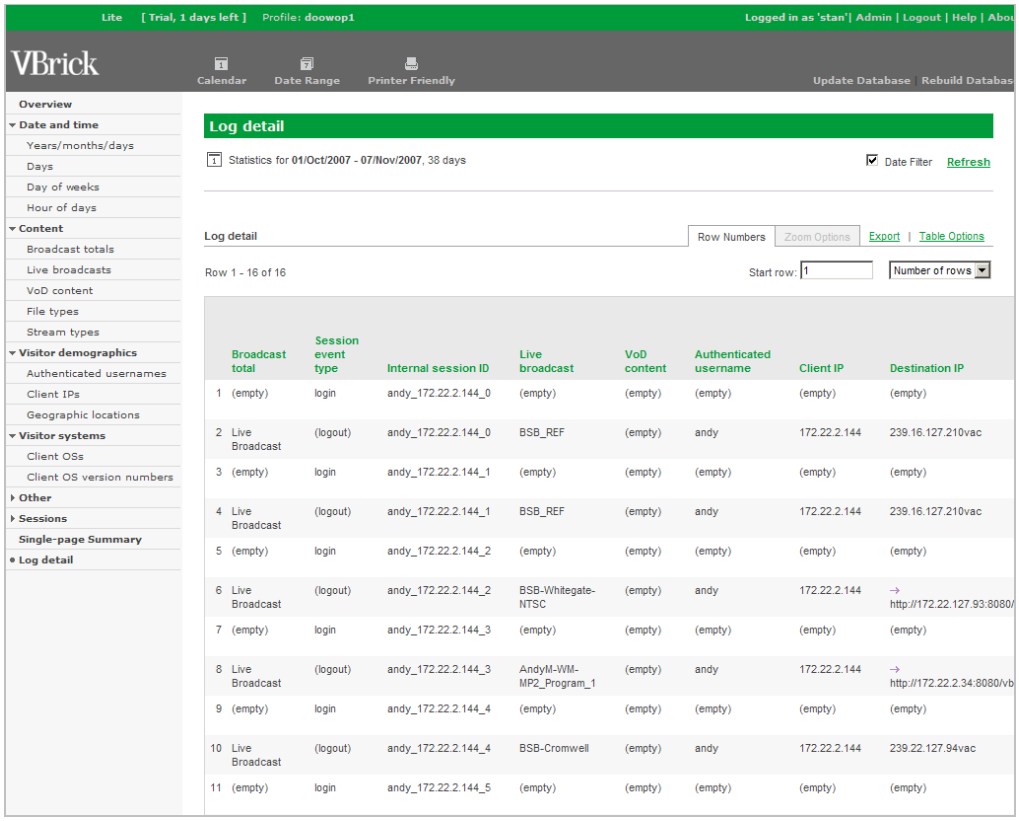
Single-page Summary

This report shows a single-page summary of the entire usage on the system. This report shows a summary of *all* reports. **You must scroll down to see all entries in this summary report**.



Log Detail

This report is a formatted view of each entry in the original ETV Portal Server log file used in this profile.



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