**THE TRAFFIC GENERATOR**

The Traffic Generator simulates network traffic in accordance with specified request parameters, and extends Sitecore to allow evaluation of these requests. The traffic generator allows developers and business people to develop scenarios and emulate specific traffic scenarios on the site (for example, for presenting web-traffic is presented in the Executive Dashboard).

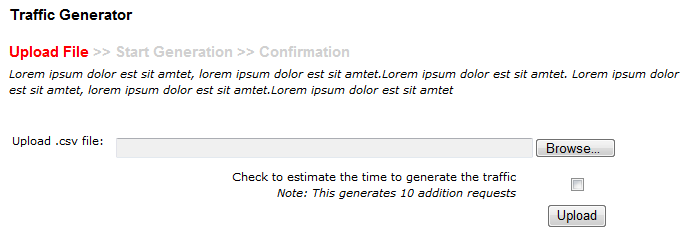
**INSTALLING**The Traffic Generator can be installed from Sitecore Installation Wizard using the included Sitecore Installation Package. The package includes

* **Files**
  + Precompiled .dlls which are added to the bin folder of the web-site
  + Config file that is added to the App\_Config/Indclude file
  + Sublayout files, which are added to the \_layouts/modules folder
* **Sublayout**
  + The Traffic Generator Sublayout folder and item that is added to the Sublayout folder in Sitecore
* **Config Files** 
  + To allow the Traffic Generator to insert data into the database, it is necessary to disable auto detection of robot traffic in the Sitecore.Analytics.Config file in the the App\_Config/Indclude folder. This is done by setting the Analytics.AutoDetectBots to false.   
      
    <setting name="Analytics.AutoDetectBots" value="false" />  
      
    Please note: That this setting is for development and testing purposes only!

Alternatively, it is possible to use the included source-code.

**INSERTING**The Traffic Generator is implemented as a web-based tool that needs to be inserted on the page – as a sub layout – and must be inserted on an existing Sitecore web page.   
  
The Traffic Generator is located under   
**/sitecore/layout/Sublayouts/Modules/TrafficGenerator/DmsTrafficEmulatorSublayout**

Once the Traffic Generator Sublayout has been added to a page and published, the following presentation should be available from your site.



**CONFIGURING**To configure the traffic generator, you must first configure a scenario in an Excel Spreadsheet (csv). The following table describes the parameters, which can be used to specify the traffic:

|  |  |  |
| --- | --- | --- |
| **Column/Parameter** | **Description** | **Example** |
| Url | The Url of the referred visitors (request source). | www.sitecore.net |
| Ip | The IP of the referred visitors (request source). | 74.124.9.9 |
| Referral Type | The Referral Type indicates which referring sites led to the visits. It should be set to one of the following:   * Direct * Email * Organic * Organic Branded * Paid * Referred - Analyst * Referred - Blog * Referred - Community * Referred - Conversations * Referred - News * Referred - Wiki * Referred Other * RSS * Unknown   These referral sources may be used to emulate the sources your audience use the most. A referral from google.com.qa might be Search Engine – Organic or Search Engine - Branded | Direct |
| Campaign | The id of the campaign item which led to the visit.  The id of the campaign must match the specific campaign in Sitecore, see /sitecore/system/Marketing Center/Campaigns  Note: All Campaigns must be manually deployed in Sitecore upon first usage. |  |
| Referral Keyword | The search keyword used by the referred visitors to locate your site.  When using search keywords the Referral Type should be set accordingly, and specify whether a search engine search is organic or branded.  Organic branded search keyword should be defined in /sitecore/system/Settings/Analytics/Organic Branded Keywords |  |
| Date From | Date from enables you to specify the start time within the time range of the traffic.  The Date From should be in a DD-MM-YYYY format. | 01-11-2011 |
| Date To | Date to enables you to specify the end time within the time range of the traffic.  The Date to should be in a DD-MM-YYYY format. | 30-11-2011 |
| Traffic Level (Requests) | The number for requests that should be generated from the referred visitors (request source). | 500 |
| Traffic in Same Session | If true traffic will be generated as a single user browsing the site with multiple requests.  If false traffic will be generated as multiple users browsing the site with a single request. | False |
| Traffic Mode | The traffic mode must be set to either:   * Specific – the entry pages of the referred visitors is specified in the Traffic Urls parameter. * Random – the entry pages of the referred visitors is picked randomly from the site. | Random |
| Traffic Urls | The entry pages of the referred visitors.  Multiple urls can be entered as a comma delimited list. The number of requests for each URL will be evenly distributed. |  |
| Engagement Level (%) | The level of engagement or conversion rate i.e. how much traffic will result in a conversion. | 10 |
| Engagement Mode | The traffic mode should be set to either:   * Specific – the goals triggered at the conversion is specified under Engagement Goals. * Random – the goals triggered at the conversion is picked randomly from /sitecore/system/Marketing Center/Goals. |  |
| Engagement Goals | The name of the goal that should be used to trigger the conversion.   Multiple goals can be entered as a comma delimited list. The number of conversion for each goal will be evenly distributed. |  |

*Note: An example .xlsx and .csv file has been included in the project.*

**SIMULATING TRAFFIC SCENARIOS**

To run the traffic generator, you must have a pre-configured traffic scenario stored in a csv file, and follow the following three-step procedure:

|  |  |
| --- | --- |
| **Upload File** This step allows you to upload this pre-configured traffic scenario csv file to the generator.   1. Upload this pre-configured traffic scenario csv file to the traffic generator by using the browse button. 2. *Mark the check-box if you want to estimate the time to complete the traffic generation prior execution.* 3. Click Upload to upload the file. |  |
| **Generate Traffic**  This step allows you to verify that the csv file has been loaded correctly and see the estimated time of execution   1. Verify the number of requests matches your specifications – and – that the table corresponds to the settings of the .csv file. 2. Check the Estimated time to process.  *If the processing time is too long consider dividing the .csv file into smaller pieces.* 3. Click Generate Traffic to start processing |  |
| **Confirmation** Thisstep list the requests used to emulate the traffic.   1. Verify that the session has completed 2. Verify that the detected number of errors is 0.   *Note: The numbers of errors are only the detected ones. Zero does not mean that errors could not have happened.* 3. Click Done to complete |  |

**VIEW RESULTS**  
The results may be viewed directly in the analytics database or the Executive Dashboard.

|  |  |
| --- | --- |
| **Database**  The result can be confirmed directly from the database.   1. Use the following script to verify the result.   select count(\*) from Visitors  Try to rerun the traffic simulation to monitor the number of added records between each run. | Number of Visitor records:  before first run: \_\_\_1\_\_\_\_  after first run: \_\_\_61\_\_\_  *It make take a few minutes for the database to get updated as the records are stored in memory  Please note: That the number of Visitors only equals the number of requests if all Traffic Use Same Session properties are set to false.* |
| **Executive Dashboard** Theresult can also be seen from the the Executive Dashboard. |  |

**QUESTION AND ANSWER**

**Q: Why do I receive a timeout before the confimation page is rendered?**The Execution Timeout indicates the maximum number of seconds a request is allowed to execute before being automatically shut down by ASP.NET. The default is 110 seconds. This time-out applies only if the debug attribute in the <compilation> element is set to false.

For development environments the Execution Timeout may be raised to allow more extensive data load. This can be done using the the executionTimeout of the web.config file can be adjusted i.e.

<httpRuntime maxRequestLength="512000" executionTimeout="TODO" enableKernelOutputCache="false"/>

**Q: Why can’t I see the Traffic Generator Sublayout?**   
The Traffic Generator Sublayout should be available upon package install. Please make sure that you have published the Sublayout and its folder.   
  
Also make sure that the .ascx field, in the Data Section of the /sitecore/layout/Sublayouts/Modules/TrafficGenerator/DmsTrafficEmulatorSublayout item points to the /layouts/Modules/TrafficGenerator/DmsTrafficEmulatorSublayout.ascx file – and – this file is located in the root of your web-site.

**Q: Why can’t I see the traffic in the Executive Dashboard?**The Dashboard is not designed to show live data. This feature may be implemented by Sitecore in future releases.

According to the dashboard rules to group/show data, the starting data of a data set is visible only when it fully covers the selected Resolution. For example, in Week resolution, you will only see data starting from a Monday (or Sunday according to the culture). In Month resolution you will lonely see data starting from the first day of a month, and so on for Quarter Half Year, Year resolution.

For Traffic Overview query, the data is grouped by day, so you should be able to see the data in DAY resolution (only available for the first 30 days).

If you want to create live or custom reports you should use Engagement Reports instead.