Shunra's Deep Analysis analyzes the data from the Modeler's Packet Capture, and stores the analysis in the Reporter Database.

The Deep Analysis Export utility is a Windows™-based command-line tool that exports Deep Analysis results in Comma-Separated Value (CSV) format. This makes the data immediately accessible to spreadsheet applications (e.g., Microsoft Excel), scripts (e.g., PERL) and report generation (e.g., HTML, Microsoft Word).

The Deep Analysis Export utility:

- Converts the analysis into Java Script Object Notation (JSON) and
- Summarizes that information in a pair of CSV files (two files per test run)

Two files are created:

- **HTTP analysis**: results of the Deep Analysis; contain the detailed transaction data shown in the Deep Analysis Waterfall diagram data; the CSV columns include one row per resource request. File name ends in "http.csv"
- **Optimization**: contains the remediation analysis; includes a "scenario" column that indicates whether the recommendation applies to Desktop, Mobile or both. Name ends with "best practices.csv"

To install the Deep Analysis Export utility, unzip the contents of DeepAnalysisExport.zip file into a convenient folder.

Note: If you receive an error, it may be an indication that Visual C runtime DLL is not installed. For example, the system may display an error such as "The application has failed to start because its side-by-side configuration is incorrect" on a 64-bit operating system.
For more information on this issue, please see http://www.microsoft.com/downloads/details.aspx?FamilyID=9b2da534-3e03-4391-8a4d-074b9f2bc1bf&displaylang=en

To verify that the Deep Analysis Export utility installed correctly, issue the following command from the directory where ExportDeepAnalysis.exe resides:

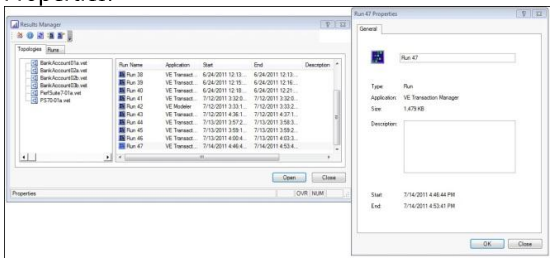
```
ExportDeepAnalysis.exe -h
```

Verify that the command-line Help instructions appear.

The utility will search for a test result whose name matches that in the command-line "-t" parameter. By default, Deep Analysis names each successive run by the name "Run ##" where ## is the next sequential number.

```
-t "Run 72"
```

Since the default test name contains a space, the command-line utility must reference it with quotes. Alternately, rename the test within the Results Manager to create a test name that has no spaces, thus obviating the quotes. Run names can be changed in Results Manager by right-clicking the Run Name and selecting Properties:



For PerformanceSuite users, it is mandatory to match the SQL database username and password (by default, "root" and "root").
To specify a different username, e.g., "root", with **-u** and a different password, e.g., "123" with **-p**, enter:

```
ExportDeepAnalysis.exe -t "Run 48" -u root -p 123
```

Tips for using the CSV file with Wireshark

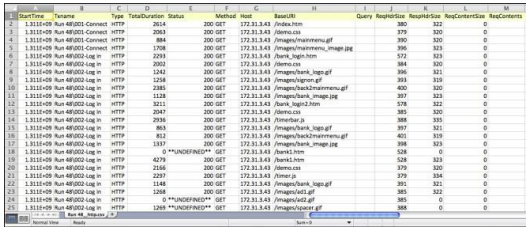
1. The StartTime column can be used to filter packets in Wireshark, using a filter such as **frame.time_epoch > xxx && frame.time_epoch < yyy**
2. The TcpSession column can be used to filter packets in Wireshark, using a filter such as **tcp.stream eq xx**

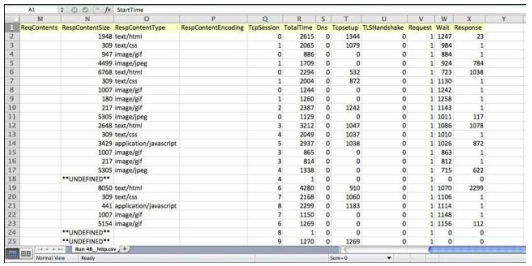
Command Options

Using the **-h** parameter (help) will display the command line options that are available for **ExportDeepAnalysis**.

Usage:

```
ExportDeepAnalysis.exe [-h] [-v] [-s] -t TESTNAME [-w WORKFOLDER] [-u USERID] [-p PASSWORD] [--version]
```





The following folder structure is created, with additional subfolders such as \CSV, \JSON, etc. In this example, the Run Name is "Run 48".
C:\DeepAnalysis\workFolder\Run 48 – contains the data for a specific test

For more information about Shunra Analytics and the Deep Analysis Report, refer to the Analytics product manuals, and www.shunra.com