



**SHUNRA**

**VE Desktop Professional  
v5.0 for  
Microsoft Visual Studio  
Quickstart**



# About VE Desktop for MS Visual Studio

VE Desktop for MS Visual Studio provides WAN emulation as an integral part of the development process. Developers can obtain a realistic assessment of the network impact on new or modified software in the development environment, before deployment.

This document provides a quick reference to installing and configuring the VE Desktop for MS Visual Studio. If you encounter any problems during or after installation, please contact technical support as described in **Obtaining Technical Support** on page 10.

For users performing load testing with HP Software, refer to the VE Desktop for HP Software Quickstart and VE Desktop Professional for HP Software User Manual.

For users performing manual testing or automated functional testing with tools such as HP QuickTest Pro, Shunra provides a separate package called VE Desktop Professional. Refer to the VE Desktop Professional User Manual for additional information.

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# System Requirements

The minimum system requirements for VE Desktop for MS Visual Studio are:

|                                                 |                                                                                                                             |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Processor</b>                                | Intel Pentium IV Class PC or AMD Athlon XP (32 bit) (multiple processors supported)                                         |
| <b>Memory</b>                                   | 512 MB RAM or more (1GB recommended)                                                                                        |
| <b>Free Hard Disk Space</b>                     | 5 GB of free disk space                                                                                                     |
| <b>Network Adapter</b>                          | Ethernet or Fast Ethernet Network Interface Card                                                                            |
| <b>Browser</b>                                  | Internet Explorer 7.0 (recommended)<br>Internet Explorer 6.0 (supported)                                                    |
| <b>Operating System (English versions only)</b> | Windows 2003 Server (Enterprise or Standard Edition) SP3, SP2<br>Windows XP Professional<br>Windows Vista Business (32 bit) |
| <b>Virtual Machine</b>                          | VMware Workstation 6.0 or later (recommended)<br>VMware ESX 3.0 or later (supported)                                        |

# Installing VE Desktop for MS Visual Studio

The VE Desktop integration with MS Visual Studio can be installed for either MS Visual Studio 2005 or 2008.

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**Note:** MS Visual Studio must be closed during installation and during uninstall.

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## To install VE Desktop for MS Visual Studio:

1. On a machine that meets the system requirements, from the installer, in the VED for Visual Studio folder, open the VEDforVS.exe and follow the instructions.
2. After restart, open the MS Visual Studio. The WAN Emulation menu is present in the toolbar.

# Licensing VE Desktop Client

VE Desktop for MS Visual Studio comes with a trial license that provides 10 WAN emulations of up to 30 minutes each; post-test analysis for 24 hours is also included. Each trial test must complete in less than 30 minutes. Once the evaluation license has expired, a license must be obtained from Shunra.

The license status and type can be seen in the Shunra VE Desktop Client License Manager (via Start > Programs) on the machine on which MS Visual Studio is installed.

If the VE Desktop Client is in a standalone configuration, see the VE Desktop Client User Manual for licensing information. If your configuration includes a Shunra VE Desktop Server, refer to the VE Desktop Professional user manual. For further information regarding the configuration with HP Software, refer to the Shunra VE Desktop for HP Software User Manual.

## Requesting a License Key

Licensing VE Desktop involves sending to Shunra your Host ID (displayed in the VE Desktop License Manager). Shunra then generates a license key and sends it back to you by e-mail. This license key is then entered into the VE Desktop License Manager to activate the application.

## **To request a License Key:**

- 1.** On the machine on which MS Visual Studio is installed, from the Start menu, choose **Programs > Shunra Virtual Enterprise > VE Desktop License Manager**; the Shunra VE Desktop Client License Manager opens.
- 2** Click **[Email Host ID...]**; a pre-formatted and addressed e-mail opens; or you can request a license by sending an email to: [license@shunra.com](mailto:license@shunra.com).
- 3** In the body of the email, complete the information as requested, including:
  - ❖ Product Type and version ((VE Desktop for HP Software 5.0))
  - ❖ Product Serial Number
  - ❖ Host ID
  - ❖ Company name
- 4** Click **[Send]**; the email is sent.
- 5** In the body of the e-mail, complete the information as requested.
- 6** Click **[Send]**; the e-mail is sent.

# Installing a New License

## To install a new License:

1. On the HP LoadRunner Controller, from the Start menu, choose **Programs > Shunra Virtual Enterprise > VE Desktop License Manager**; the Shunra VE Desktop Client License Manager opens.
2. In the License Key text field, enter the License Key provided by Shunra; the **[Activate]** button becomes active.
3. Click **[Activate]**; your product has been activated.
4. Click **[Close]**.

# Incorporating WAN Emulation in MS Visual Studio

Within the integration you can use one of these modes of operation to define WAN emulation impairments, refer to the VE Desktop for HP Software and MS Visual Studio User Manual for further information:

- ◆ **Basic mode:** enables selection of a pre-configured source and destination for traffic, connection quality and connection type; these parameters can also be customized for specific scenarios.

To define a remote WAN location that is not included in the predefined locations listed, you need a license for Professional mode. With Professional mode you can import an .ntx file obtained in the VE Network Catcher, or modify a file using the VE Network Editor, refer to the VE Network Editor User Manual.

You can also use a simple Ping to or from the remote location to the server location. The approximate latency to enter will be half of the total round trip time as measured by the ping.

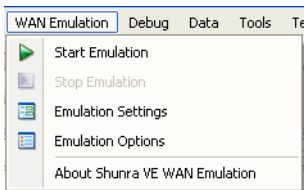
- ◆ **Advanced mode:** enables entry of specific network parameters for packet loss, latency and bandwidth limitation to reflect the desired WAN conditions

### 👉 To display the WAN Emulation toolbar:

1. As in standard MS Windows applications, click the Add or Remove Buttons at the right side of the toolbar(s), and select or deselect **WAN Emulation**; or from Add or Remove Buttons, click **Customize** and in the Toolbars tab, select or deselect **WAN Emulation**.

### 👉 To define WAN emulation parameters:

1. When you open a MS Visual Studio project with the VE Desktop integration installed, the WAN Emulation dropdown menu is located in the toolbar.



2. Select **Start Emulation** to enable WAN emulation for a specific project. For WAN emulation to always start automatically when debugging starts, select

## WAN Emulation > Emulation Options > Start WAN Emulation on Debugging.

- 3** To delay the debugging process until the WAN Emulation is running, select **Delay start Debugging until WAN Emulation begins**.
- 4** To automatically save the results of the WAN emulation to a file, select **WAN Emulation** (menu option or button) > **Shunra VE WAN Emulation Options > Save WAN Emulation Settings in StartUp Project**.
- 5** To configure specific parameters for WAN emulation, select **Emulation Settings**; the Shunra WAN Emulation Settings window displays in Basic Mode. You can also use Advanced Mode, which enables the configuration of impairments that include latency, bandwidth and packet loss.
- 6** To end the WAN emulation, select **Stop Emulation**. WAN emulation stops automatically when debugging finishes if **Start WAN Emulation on Debugging** is selected.

## **Configuring Additional Settings**

In the Shunra WAN Emulation Options you can also define other Additional Settings, refer to the VE Desktop for HP Software and MS Visual Studio User Manual for further information.

## **WAN Emulation Footprint**

When a WAN emulation test is running, it allocates memory for calculating statistics. During the test, the memory usage may grow to about 140Mb. If packet capture is enabled, the memory usage continues to grow as packets are cached. The amount of the memory allocated depends on the packet list size as defined by the user, and whether the 'Capture Packets for TCP analysis' option is enabled.

## **Obtaining Technical Support**

Technical Support is available to all Shunra customers through the Shunra Web site at [www.shunra.com](http://www.shunra.com). Using the Web site is the best way to obtain technical support. You may also send an e-mail with your customer details and a description of the problem to [support@shunra.com](mailto:support@shunra.com).