

# V-locity® 3 Installation Guide

## **Overview**

V-locity 3.0 has a guest and a host component (V-locity Host Agent for VMware<sup>®</sup> ESX/ESXi platforms and V-locity Host for Microsoft<sup>®</sup> Hyper-V.) V-locity 3.0 Guest provides numerous features that improve performance and reduce I/O requests of the guest VM. V-locity Host is an interface that provides information about the VMs running V-locity 3.0 Guest.

### This installation guide covers the following topics:

- General Installation Information
  - For VMware<sup>®</sup> Environments
  - For Microsoft® Hyper-V Environments
  - o Minimum System Resource Requirements for Installation
    - V-locity Host Agent
    - V-locity Host
    - V-locity Guest
- Installing the V-locity 3.0 Host Agent (VMware Environments only)
- Installing V-locity 3.0 Host (Microsoft Hyper-V Environments only)
- Installing V-locity 3.0 Guest on your Network (also applies to V-locity Host for Hyper-V installation.)
  - Option 1 Using Diskeeper Administrator (Recommended for Guest installations of 20 or more systems.)
  - Option 2 Using a network software distribution program to perform a silent installation from the command line.
  - Option 3 Creating an Administrative Install (e.g. for Active Directory® deployment).

## **General Installation Information**

#### For VMware Environments:

For VMware environments you will need to install V-locity Guest and V-locity Host Agent. Install V-locity Guest on any virtual guest system with a Windows install running and install the V-locity Host Agent on any virtual guest or any physical box within the same subnet.

When installed on your virtual guest systems, V-locity Guest will keep that system running at peak performance. Using InvisiTasking<sup>®</sup>, V-Aware<sup>™</sup>, and CongniSAN<sup>™</sup> technologies, V-locity Guest will also communicate with other virtual guest systems within your network that have V-locity Guest installed and will coordinate resource usage with each other.

The V-locity Host Agent is designed to meet the needs of corporate computer users using Windows based virtual machines created on VMware ESX and ESXi platforms. V-locity Host Agent is designed to run in conjunction with V-locity Guest components to ensure peak performance of virtual machines. The main function of this component is to provide visibility of all the Windows based virtual systems on your ESX and ESXi servers that have V-locity Guest installed. (See the corresponding help systems to learn more about specific functionality)

Note: The way V-locity works is that the Host Agent listens for incoming connections from Guests. The Guests then request specific information and the Host Agent responds to these requests.

Because V-locity Host Agent tracks the disk type (e.g. Linked Clone, snapshot, etc...) of the guests and sends data to the Guest when the type changes, it needs to be installed on a system that is constantly up. This is important because some virtual disks may become linked clones or snapshots that should not be defragmented. The V-locity Host Agent gets this data from VMware and passes the information to the Guests. V-locity Host Agent can be installed on a physical system or a virtual system - frequently virtual systems have the same or better uptime than physical systems due to live vMotion™, HA clusters, etc. It is recommended to install at least two V-locity Host Agents per network, as the additional Host Agents offer redundancy in the event any virtual machine with a Host Agent is not available. Please note that each instance of V-locity Guest will only communicate with one host at a time and will thus only appear in only one host interface.

Additional Notes: The V-locity Host agent runs as a Windows service and uses minimal resources; about 1-2 MB of memory. The discovery process between the V-locity Guest and the V-locity Host Agent requires that any IP routing device(s) allow multicasting if the two V-locity components are not located in the same IP subnet. An option in environments with multiple subnets with restrictive IP routing is to install at least one V-locity Host Agent per subnet. If automatic Host Agent discovery is impossible (blocked multicast between the Host Agent and the Guest), the name or the IP address of the Host Agent can be specified during the V-locity Guest setup as a command line parameter:

Setup.exe /s /v"HOSTNAME=HostAgentName /qn"

#### For Microsoft Hyper-V Environments:

For the Microsoft Hyper-V environment you will need to install both the V-locity Guest and the V-locity Host. Install V-Locity Guest on any virtual guest system with a Windows install running and install V-locity Host on the host Windows 2008 Server with the Hyper-V hypervisor.

When installed on your virtual guest systems, V-locity Guest will keep that system running at peak performance. (See the help system to learn more about specific functionality)

When installed on your virtual host system(s), V-locity Host keeps the host system running at peak performance and also provides a compaction utility for vhd files. (See the help system to learn more about specific functionality)

## Minimum System Resource Requirements for Installation:

The V-locity 3.0 package will use 275 MB when extracted by the installation wizard.

- For V-locity Host Agent (VMware environments)
  - 110 MB of space will be used after installation
- For V-locity Host (Hyper-V environments)
  - If Microsoft .Net 4.0 is already installed 30 MB of space will be used after installation
  - If installing Microsoft .Net 4.0, and the product 1.25 GB of space will be used after installation
- o For V-locity Guest (all virtual guest machines)
  - 110 MB of space will be used after install

## Installing the V-locity Host Agent (VMware Environments)

The V-locity Host Agent is installed on a Windows machine with a network connection to your VMware servers or a vCenter Server used to manage your servers. The Host Agent is used to monitor your ESX and ESXi host systems and virtual machines. Simply open the installation wizard and click on the V-locity Host Agent link in the menu on the target computer and complete the installation wizard steps.

| V-locity<br>Software Installation          | 3<br>Additional Resources      | Diskeeper   |
|--|--------------------------------|---|
|  | Guest<br>Host Agent for VMware | Click here to install V-<br>locity Host Agent on<br>your local machine. |
| Note: Install requires internet connection | Host for Hyper-V               |   |

# Installing V-locity Host (Hyper-V Environments)

V-locity Host, is installed on a Windows 2008 Server operating system that is running Hyper-V. Simply open the installation wizard on the target server, click on the V-locity Host link and complete the installation wizard steps.

| V-locity<br>Software Installation          | 3<br>Additional Resources                          | <b>D</b> | skeeper   |
|--|--|----------|---|
|  | Guest<br>Host Agent for VMware<br>Host for Hyper-V |          | Open this menu on<br>your Windows 2008<br>Server running Hyper-<br>V and then click here<br>to install V-locity Host. |
| Note: Install requires internet connection | on.  |          | 8   |

## Installing V-locity Guest on Your Network

V-locity Guest can be installed in a variety of ways. If you are installing V-locity onto a single virtual machine, no special actions are needed. Simply double-click the V-locity installation file you downloaded on the target computer and complete the installation wizard steps.

If you are installing the software onto multiple virtual machines in a network you have several options outlined below.

Note: Although you can use the following options to install V-locity Host (Hyper-V environments only), these options are primarily used to install multiple instances of V-locity Guest to your virtual machines on your network. You cannot use the following options to install the V-locity Host Agent for VMware environments.

### **Option 1 - Using Diskeeper Administrator (Recommended)**

- First, install Diskeeper Administrator edition with V-locity 3 support on the Windows machine you use to manage your virtual environment. If you do not already have Diskeeper Administrator, you can download fully functional 45-day trialware from www.diskeeper.com/downloads and use the software – during the trial period – to quickly and easily deploy V-locity across your network. If you have more than 10-20 machines to which you plan to install software, Diskeeper Administrator will save you significant time.
- 2. After installing Diskeeper Administrator, return to the V-locity installation package file(s) you downloaded and double-click the VL*Language*V-locity.exe file (this is a self-extracting file).



3. The installation wizard will automatically start and the setup files will be extracted. When you get to this screen, cancel out of the installation process (unless you want to also install V-locity on the local system.)

| V-locity                                   | 3                     | Diskeeper             |
|--|-----------------------|-----------------------|
| Software Installation                      | Additional Resources  | 7-1-1                 |
|  | Guest                 |                       |
|  | Host Agent for VMware |                       |
| -  | Host for Hyper-V      | Click here to cancel. |
| Note: Install requires internet connection |                       | 8                     |

The V-locity software files extract into the C:\ program files \ Diskeeper Corporation \ V-locity Setup Files \ Autoplay folder (or on 64 bit operating systems: C:\ program files (86) \ Diskeeper Corporation \ V-locity Setup Files \ Autoplay folder).

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| Organize 🔻 😭 Open Burn New                | folder             |                 | •== •    | 0 |
| Name                                      | Date modified      | Туре            | Size     |   |
| \mu Audio                                 | 4/28/2011 12:03 PM | File folder     |          |   |
| 퉬 Images                                  | 4/28/2011 12:03 PM | File folder     |          |   |
| 퉬 V-locity_Guest                          | 4/21/2011 11:02 AM | File folder     |          |   |
| \mu V-locity_Host                         | 4/21/2011 11:02 AM | File folder     |          |   |
| 🔁 Installing-V-locity-on-your-Network.pdf | 8/24/2010 10:54 AM | Adobe Acrobat D | 1,363 KB |   |
| V-locity3.cdd                             | 4/28/2011 11:54 AM | CDD File        | 14 KB    |   |
| 🌗 V-locityHostAgent                       | 7/11/2011 10:28 AM | File folder     |          |   |
|   |                    |                 |          |   |

When the extraction process is complete, you will see something similar to this:

4. Download the V-locity license (.VLL) files from your online account at <u>www.condusiv.com</u>.

| Order Number:   | NFR-00029608   | 8   |  |
|---|--|---|--|
| Company: All in   | one corporation  |   |  |
| The following dow<br>Once the file dow<br>downloading one | vnload(s) are con<br>vnload(s) comple<br>file at a time. | nplete packages with your license<br>te, open the downloaded file and i | built-in. When prompted, click "Save".<br>nstall the product. We recommend |
| * If you are <i>not</i> us<br>bundled with the            | sing Diskeeper Ac<br>product.                            | Iministrator, the "Admin License"                                       | file is not necessary. The license is                                      |
| Items   | Qty.   | Click To Download   | Diskeeper Admin License  |
| V-locity 3.0  | 1  | Processing  | V-locity Host License<br>V-locity Guest License *                          |

Select the **Admin License** link for V-locity Guest License and save the license to the folder where you downloaded the V-locity installation package in the V-locity Guest folder.

**Note:** If you are installing V-locity Host for Hyper-V via Diskeeper Administrator you should also download that license file at this time and save it to a different folder than the license file for the Guest (the installer cannot differentiate between the two .VLL files if they are in the same folder, so it is important to keep these files separate).

|   | • • •             | Search V-locity_Gue | est  | - 0    | x<br>P |
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| Name  | Date modified     | Туре                | Size |        |        |
| 鷆 X64   | 6/23/2011 5:39 PM | File folder         |      |        |        |
| 퉬 Х86   | 5/16/2011 9:51 AM | File folder         |      |        |        |
| 🤯 Autorun.exe   | 6/9/2011 5:07 PM  | Application         |      | 302 KB |        |
| V-locity_Guest.VLL  | 7/5/2011 10:45 AM | VLL File            |      | 2 KB   |        |
|   |                   |                     |      |        |        |
|   |                   |                     |      |        |        |
|   |                   |                     |      |        |        |
|   |                   |                     |      |        | _      |

(example showing V-locity Guest)

5. Launch Diskeeper Administrator and run the Add License Files wizard.



Browse to the License.VLL file for each V-locity component you plan to deploy (Guest or Host for Hyper-V). (These license files will be located in the folders you specified when you downloaded them.) **Note:** To be able to browse to a folder on a remote machine, ensure the folder on the remote machine with the V-locity license and installation files is "shared".

6. Once your license files have been added to the Diskeeper Administrator database, click on the Install Software wizard.

| Diskeeper 2010 Administrator  | r               |   |  |
|---|-----------------|---|--|
| She Yiew Getting Started Dash   | hboard (        | Banage Diskeeper Baports Job Queue Confli   | hguration Help   |
| Quick Launch  |                 | Task Overview   |  |
| Getting Started   | 0               | There are recommended Dick earlier Orbit  | event are task to be used to be a derivation of that task to show here for a derivation of that task                 |
| Diskeeper Administrator<br>Task Overview  |                 | and other useful information. Click on any I  | vlak to learch 1 Click here  |
| Guides you through recomme<br>and optional tasks performed<br>centrally manage Diskeeper o<br>your network. | nded<br>to<br>m |   | The Initial Diskeeper One Time   |
| Diskeeper 2010<br>Administrator Overview  |                 | Install Diskeeper One Time  | You can easily instal Diskeeper on one or more computers via central management with Diskeeper Administrator. Select |
| Describes new features, key<br>concepts and best practices.   |                 | Install Diskeeper Using Policies  | (i) You can initial, uninitial, upgrade, and update Diskeeper across your network from the Initial and Uninitial     |
| Frequently Asked Questions<br>Common questions and answers<br>about Diskeeper Administrator                 | Scen Computers  | <ul> <li>Diskepper option under Marage Diskepper Administrator in the Quick Lourich task, pane on the left, or the Manage<br/>Diskepper menu option at the top of the Diskepper Administrator conside.</li> </ul> |  |
| Complete descriptions of<br>Diskeeper Administrator feature<br>and operation.                               | ie:             | Create Reports  |  |
|   |                 | Remote Control Diskeeper  |  |
| ashboard  | ۲               |   |  |
| fanage Diskeeper  | 0               |   |  |
| Automatic Defrag Management   | ۲               |   |  |
| Reports   | ۲               | L   |  |
| Diskeeper Job Queue   | 0               |   | нер  |
| Configure   | 0               |   |  |

7. After selecting the V-locity component, when prompted, browse to the respective **Setup.exe** file for that component. (Keep in mind that you may possibly have X32 and X64 versions, so be sure to specify the correct one.)

| leps                       | Select Edition and                                    | Package                     |                                    |  |   |                        |
|----------------------------|---|-----------------------------|------------------------------------|--|---|------------------------|
| ntroduction                | Select the Diskeep                                    | er edition y                | ou want to insta                   | all on your computers, an<br>selected Disk enser edition   | d select the installation file                          | to use. You can choose |
| Select Edition and Package | a shared network fr                                   | older or CD                 | ROM. Select fr                     | om these options and cl                                    | ck Next to continue.                                    |                        |
|                            | Select Installa                                       | tion File                   |                                    |  |   | 6                      |
| elect Computers            | O Download an   | d install the               | latest build fro                   | m the Diskeeper Corpora                                    | tion website  |                        |
|                            | Select this op  | tion to dow                 | nload and insta                    | I the latest build of the D                                | liskeeper edition you sele                              | ted above.             |
|                            | <ul> <li>Specify or bro<br/>Select this op</li> </ul> | wse to the<br>tion if you a | Setup.exe inst<br>already have the | allation file in a shared fo<br>e Setup.exe file for the D | lder or on a network CD-F<br>iskeeper edition and build | OM you want to         |
|                            | install. You ca                                       | n browse t                  | o the location o                   | f the file, or enter the file                              | location manually.                                      |                        |
|                            | Diskeeper E   | dition                      | Version                            | Package Type   | Package Location  |                        |
| lummary                    |   |                             |                                    |  |   |                        |
|                            | <   |                             | 11                                 |  |   | >                      |
|                            | Open  |                             |                                    |  | 28  | Browse                 |
|                            | Look p  | E setup.exe                 |                                    |  |   |                        |
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|                            | 6   |                             |                                    |  |   |                        |
|                            | Decktop   |                             |                                    |  |   |                        |
|                            | Mr Documents  |                             |                                    |  |   |                        |
|                            |   |                             |                                    |  |   |                        |
|                            | 50  |                             |                                    |  |   |                        |

8. Continue the installation until complete.

# Option 2 - Using a network software distribution program to perform a silent installation from the command line

Most software distribution programs rely on access to a **Setup.exe** file. Follow these steps to extract the Setup.exe file necessary for installation with this type of tool:

1. Begin by double-clicking the VLLanguageV-locity.exe file you downloaded (this is a selfextracting file).



2. The installation wizard will automatically start and the setup files will be extracted. When you get to this screen, cancel out of the installation process (unless you want to also install V-locity on the local system.)

| V-locity<br>Software Installation       | Additional Resources  | Diskeeper             |
|---|-----------------------|-----------------------|
|   | Guest                 |                       |
|   | Host Agent for VMware |                       |
|   | Host for Hyper-V      | Click here to cancel. |
| Note: Install requires internet connect | tion.                 | ω.                    |

The V-locity software files extract into the C:\ program files  $\ \$  Diskeeper Corporation  $\ V$ -locity Setup Files  $\ \$  Diskeeper Corporation  $\ V$ -locity Setup Files  $\ \$  Diskeeper Corporation  $\ V$ -locity Setup Files  $\ \$  Autoplay folder).

When the extraction process is complete, you will see something similar to this:

|   |                    |                 |       |    | x |
|---|--------------------|-----------------|-------|----|---|
| 🕞 🕞 🗢 🕌 « VolumeLicense 🕨 AutoPlay        | ► <del>•</del> 47  | Search AutoPlay |       |    | Q |
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| 퉬 Audio                                   | 4/28/2011 12:03 PM | File folder     |       |    |   |
| 🌗 Images                                  | 4/28/2011 12:03 PM | File folder     |       |    |   |
| 🐌 V-locity_Guest                          | 4/21/2011 11:02 AM | File folder     |       |    |   |
| \mu V-locity_Host                         | 4/21/2011 11:02 AM | File folder     |       |    |   |
| 🔁 Installing-V-locity-on-your-Network.pdf | 8/24/2010 10:54 AM | Adobe Acrobat D | 1,363 | KB |   |
| V-locity3.cdd                             | 4/28/2011 11:54 AM | CDD File        | 14    | KB |   |
| 퉬 V-locityHostAgent                       | 7/11/2011 10:28 AM | File folder     |       |    |   |

3. After canceling, you will find a **Setup.exe** file in the **X86** or **X64** folders as appropriate for your installation. Use this Setup.exe file, along with any installation parameters needed, with your software distribution tool.

## Option 3 - Creating an Administrative Install (e.g. for Active Directory® deployment).

Another installation option is to create an "administrative install" using a .msi (Microsoft® Installer) server image for installation. Follow these steps to create the .msi package for administrative installations:

1. Begin by double-clicking the VLLanguageV-locityProductComponentName.exe file you downloaded (this is a self-extracting file).



2. The installation wizard will automatically start and the setup files will be extracted. When you get to this screen, cancel out of the installation process (unless you want to also install V-locity on the local system.)

| V-locity<br>Software Installation       | Additional Resources  | Diskeeper             |
|---|-----------------------|-----------------------|
|   | Guest                 |                       |
|   | Host Agent for VMware |                       |
|   | Host for Hyper-V      | Click here to cancel. |
| Note: Install requires internet connect | ion.                  | ×                     |

The V-locity software files extract into the C:\ program files \ Diskeeper Corporation \ V-locity Setup Files \ Autoplay folder (or on 64 bit operating systems: C:\ program files (86) \ Diskeeper Corporation \ V-locity Setup Files \ Autoplay folder).

When the extraction process is complete, you will see something similar to this:

|   |                               |                 |          | x   |
|---|-------------------------------|-----------------|----------|-----|
| 🕞 🕞 🗢 📕 « VolumeLicense 🕨 AutoPlay        | ► <del>•</del> 4 <sub>7</sub> | Search AutoPlay |          | ٩   |
| Organize 🔻 🔚 Open Burn New                | folder                        |                 | = - 1    | (?) |
| Name                                      | Date modified                 | Туре            | Size     |     |
| 🐌 Audio                                   | 4/28/2011 12:03 PM            | File folder     |          |     |
| 퉬 Images                                  | 4/28/2011 12:03 PM            | File folder     |          |     |
| 퉬 V-locity_Guest                          | 4/21/2011 11:02 AM            | File folder     |          |     |
| 🌗 V-locity_Host                           | 4/21/2011 11:02 AM            | File folder     |          |     |
| 🔁 Installing-V-locity-on-your-Network.pdf | 8/24/2010 10:54 AM            | Adobe Acrobat D | 1,363 KB |     |
| V-locity3.cdd                             | 4/28/2011 11:54 AM            | CDD File        | 14 KB    |     |
| 퉬 V-locityHostAgent                       | 7/11/2011 10:28 AM            | File folder     |          |     |
|   |                               |                 |          |     |

3. After closing the menu, you will find a **Setup.exe** file in the **X86** or **X64** folders as appropriate for your installation. Use this file to create the **V-locity.msi** file used for administrative installations by issuing this command at the Windows command prompt. Note: You must issue this command from the directory where the Setup.exe file resides, or include the path to the file in the command:

#### setup.exe /a

4. This command starts the creation of a server image of the V-locity installation. Click Next when the installation Welcome screen is displayed:



5. In the next window, click Change to specify the folder where you want the server image to be saved, then click Install.

| 😸 V-locity 3.0 Guest - InstallShield Wizard  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Network Location           Specify a network location for the server image of the product.         V-locity 3  |  |  |  |  |  |  |
| Enter the network location or click Change to browse to a location. Click Install to create a<br>server image of V-locity 3.0 Guest at the specified network location or click Cancel to exit<br>the wizard. |  |  |  |  |  |  |
| Network location:  |  |  |  |  |  |  |
| <u>C</u> hange   |  |  |  |  |  |  |
| Click here to proceed.   |  |  |  |  |  |  |
| < <u>B</u> ack Install Cancel  |  |  |  |  |  |  |

**Note:** The location you specify must be on a network share accessible to the computers on which you are installing V-locity.

6. The final window confirms the operation is complete. Click Finish to close the window.

| 🛃 V-locity 3.0 Guest - InstallSk | nield Wizard  |  |  |  |
|----------------------------------|---|--|--|--|
|                                  | InstallShield Wizard Completed  |  |  |  |
| V-locity 3                       |   |  |  |  |
|                                  | The InstallShield Wizard has successfully installed V-locity 3.0<br>Guest. Click Finish to exit the wizard. |  |  |  |
|                                  |   |  |  |  |
|                                  |   |  |  |  |
|                                  |   |  |  |  |
|                                  |   |  |  |  |
|                                  | Click here to finish.   |  |  |  |
|                                  |   |  |  |  |
|                                  | < Back Finish Cancel  |  |  |  |

7. After the server image has been created, the V-locity.msi file necessary for administrative installations will be in the location you specified in the earlier step.

|                               |                    |                    |       |      | x |
|-------------------------------|--------------------|--------------------|-------|------|---|
| 🕞 ◯ 🗢 🕌 « X86 ► MSI Package ► |                    | Search MSI Package | 2     |      | ٩ |
| Organize 🔻 Burn New folder    |                    |                    | •     |      | 0 |
| Name                          | Date modified      | Туре               | Size  |      |   |
| 퉬 Common                      | 7/11/2011 10:37 AM | File folder        |       |      |   |
| 퉬 CommonAppData               | 7/11/2011 10:37 AM | File folder        |       |      |   |
| 퉬 program files               | 7/11/2011 10:37 AM | File folder        |       |      |   |
| 🐌 Win                         | 7/11/2011 10:37 AM | File folder        |       |      |   |
| 😼 V-locity 3.0 Guest.msi      | 7/11/2011 10:37 AM | Windows Installer  | 4,012 | 2 KB |   |
|                               |                    |                    |       |      |   |
|                               |                    |                    |       |      |   |
|                               |                    |                    |       |      | _ |

8. Use any software installation routine to launch the .msi file as you normally would, adding the parameters of your choice. For example:

#### V-locity.msi /qn

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