

Integration Guide

Novell® ZENworks® Application Virtualization

7.0

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About This Guide

This guide provides information about using Novell® ZENworks® Application Virtualization to prepare Novell products for use in your environment. The information in this guide is organized as follows:

- ♦ Chapter 1, “Overview,” on page 9
- ♦ Chapter 2, “Preparing GroupWise Messenger for Virtualization,” on page 13
- ♦ Chapter 3, “Preparing GroupWise and GroupWise Notify for Virtualization,” on page 17
- ♦ Chapter 4, “Preparing Novell OpenOffice for Virtualization,” on page 21
- ♦ Appendix A, “Using Virtual Applications with ZENworks Configuration Management,” on page 25

Audience

This guide is intended for administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to [Novell Documentation Feedback site \(http://www.novell.com/documentation/feedback.html\)](http://www.novell.com/documentation/feedback.html) and enter your comments there.

Documentation Updates

For the most recent version of the *ZENworks Application Virtualization 7 Integration Guide*, visit the [Novell Documentation Web site \(http://www.novell.com/documentation/zav7\)](http://www.novell.com/documentation/zav7).

Additional Documentation

ZENworks Application Virtualization is supported by other documentation (in PDF format) that you can use to learn about and implement the product. For additional documentation, see the [ZENworks Application Virtualization Web site \(http://www.novell.com/documentation/zav7/index.html\)](http://www.novell.com/documentation/zav7/index.html). You can also click *Help > Novell ZENworks Application Virtualization* from within the program to access this information.

Documentation Conventions

In Novell documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux* or UNIX* , should use forward slashes as required by your software.

Novell® ZENworks® Application Virtualization lets you convert applications that run on Microsoft* Windows* into self-contained virtual applications. After being virtualized, an application becomes a single, isolated file that runs instantly from anywhere, including a thumb drive or other removable media. Unlike traditional installation methods, the single virtual application file does not require a separate setup process, and does not rely on external components and runtimes, reboots, or administrative privileges. The application is now isolated from other system applications, preventing DLL conflicts and other deployment nightmares, yet the experience for the application's user is unchanged.

ZENworks Application Virtualization lets you use the Configuration Wizard to prepare Novell GroupWise®, GroupWise Messenger, and Novell OpenOffice for virtualization.

To virtualize GroupWise, GroupWise Messenger, and Novell OpenOffice, you have the following options:

- ◆ Use the options in the Configuration Wizard to virtualize these applications. This process is recommended for first time users.

For more information, see [Section 1.1, “Using the Configuration Wizard to Prepare Applications for Virtualization,”](#) on page 9.

- ◆ Configure these applications manually.

This guide provides step-by-step information to help you use Novell ZENworks Application Virtualization to create virtual executable files to run Novell GroupWise, GroupWise Notify, GroupWise Messenger, and Novell OpenOffice.

You can use the information in this guide to customize the virtualized files or you can use the information to better understand the virtualization process. For more information, see [Section 1.2, “Manually Preparing Applications for Virtualization,”](#) on page 11.

If you use Novell ZENworks Configuration Management in your environment, you can configure your virtual application so that it checks to ensure that the ZENworks Adaptive Agent is installed on the device and that the device is registered to your ZENworks Management Zone before the application can be launched. You can also Use ZENworks Application Virtualization to publish ZENworks bundles that you can distribute using ZENworks Configuration Management. For more information, see [Appendix A, “Using Virtual Applications with ZENworks Configuration Management,”](#) on page 25.

1.1 Using the Configuration Wizard to Prepare Applications for Virtualization

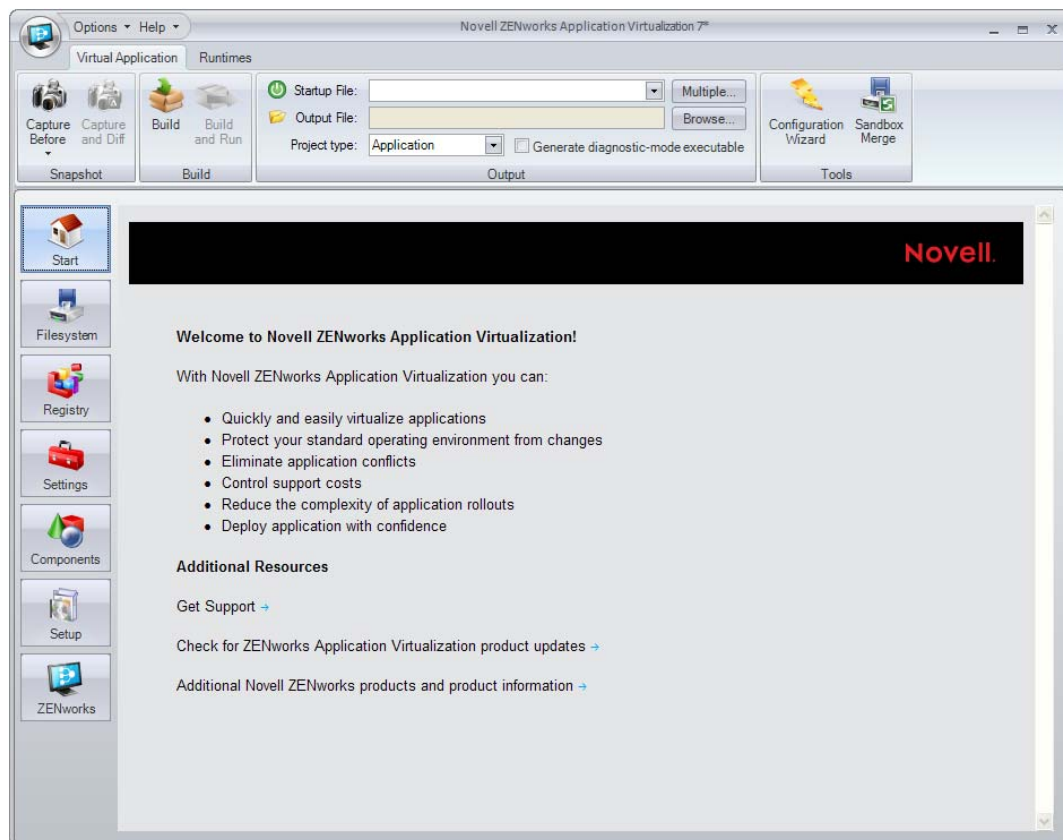
ZENworks Application Virtualization includes a Configuration Wizard that helps you prepare the following common applications for virtualization:

- ◆ **7-Zip:** An open-source utility used to manipulate archives.
- ◆ **Adobe* Reader:** An application used to view and print PDF files.
- ◆ **Gimp:** An open-source application used to process digital graphics and photographs.
- ◆ **Google* Talk:** An application used for instant messaging and PC-to-PC voice calls.

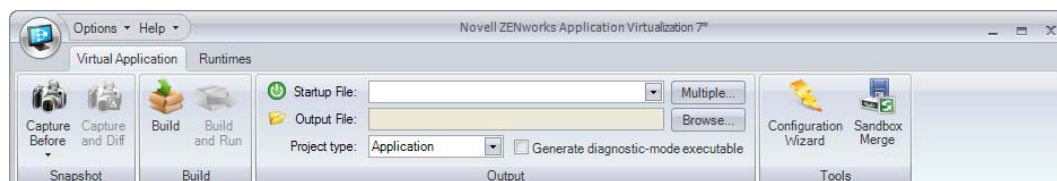
- ♦ **Internet Explorer*:** An application used to browse the Internet.
- ♦ **Microsoft Office:** A suite of office-productivity applications.
- ♦ **Microsoft Project:** An application used to manage projects.
- ♦ **Microsoft Visio*:** An application used to create diagrams.
- ♦ **Mozilla* Firefox*:** An open-source application used to browse the Internet.
- ♦ **Novell GroupWise Client:** A collaboration software solution used to provide information workers with e-mail, calendaring, instant messaging, task management, and contact and document management functions.
- ♦ **Novell GroupWise Messenger:** A corporate, cross-platform instant messaging application used to send instant messages in a secure environment and to create contact lists.
- ♦ **Novell OpenOffice:** A suite of office-productivity applications, including a word processor, presentation and spreadsheet applications, an HTML editor, and a drawing tool. Novell OpenOffice contains enhancements and bug fixes that are not available in the standard edition.
- ♦ **OpenOffice:** A suite of office-productivity applications, including a word processor, presentation and spreadsheet applications, an HTML editor, and a drawing tool.

To use the Configuration Wizard to virtualize GroupWise, GroupWise Messenger, or Novell OpenOffice:

- 1 Click *Start > Programs > Novell ZENworks Application Virtualization 7 > Novell ZENworks Application Virtualization 7* to start the application.



- 2 Click the *Configuration Wizard* button in the *Tools* section of the *Virtual Application* ribbon.



- 3 Click *Build a virtual application from a template*.
- 4 Select the desired application from the *Application* drop-down list.
- 5 Click *Next*, then follow the instructions in the wizard.

1.2 Manually Preparing Applications for Virtualization

Most commercial applications, including GroupWise and Novell OpenOffice, require complex combinations of file system and registry entries to function properly. To facilitate virtualization of these applications, ZENworks Application Virtualization creates snapshot application installations and automatically configures itself based on modifications made to the host system during application setup.

Snapshotting uses images of the host machine that are taken at different points in time to determine the virtual application configuration.

Prior to installing the application to be virtualized, a snapshot is taken that captures the state of the host device without the target application installed. After installing the application, a second snapshot is taken that captures all changes to the host device. ZENworks Application Virtualization then computes the changes, or delta, between the snapshots, and inserts these changes into the configuration.

You can use the configuration information to create executable files that behave differently, depending on the application you are preparing to use:

- ♦ **A Single Executable File to Launch an Application:** To prepare GroupWise Messenger, you can create a single executable file to launch the program. For more information, see [Chapter 2, “Preparing GroupWise Messenger for Virtualization,”](#) on page 13.

To prepare Novell OpenOffice, you have the option to create a single executable file to launch the OpenOffice.org Quickstarter, which lets users choose the program to launch (Writer, Calc, Draw, Impress, or Math). For more information, see [Chapter 4, “Preparing Novell OpenOffice for Virtualization,”](#) on page 21.

- ♦ **A Single Executable File to Simultaneously Launch Multiple Applications:** To prepare GroupWise and Notify, you can create a single executable file to launch both programs simultaneously. For more information, see [Chapter 3, “Preparing GroupWise and GroupWise Notify for Virtualization,”](#) on page 17.
- ♦ **A Single Executable File to Expose Multiple Executable Startup Files:** To prepare Novell OpenOffice, you can create a single executable file to expose multiple executable startup files (Writer, Calc, Draw, Impress, or Math). ZENworks Application Virtualization allows multiple entry points into the virtual application to be triggered based on a command line argument to the virtual application executable. If you use Novell ZENworks Desktop Management or

ZENworks Configuration Management to distribute applications, command line arguments let you use the same application object for all OpenOffice.org programs. For more information, see [Chapter 4, “Preparing Novell OpenOffice for Virtualization,” on page 21](#).

Preparing GroupWise Messenger for Virtualization

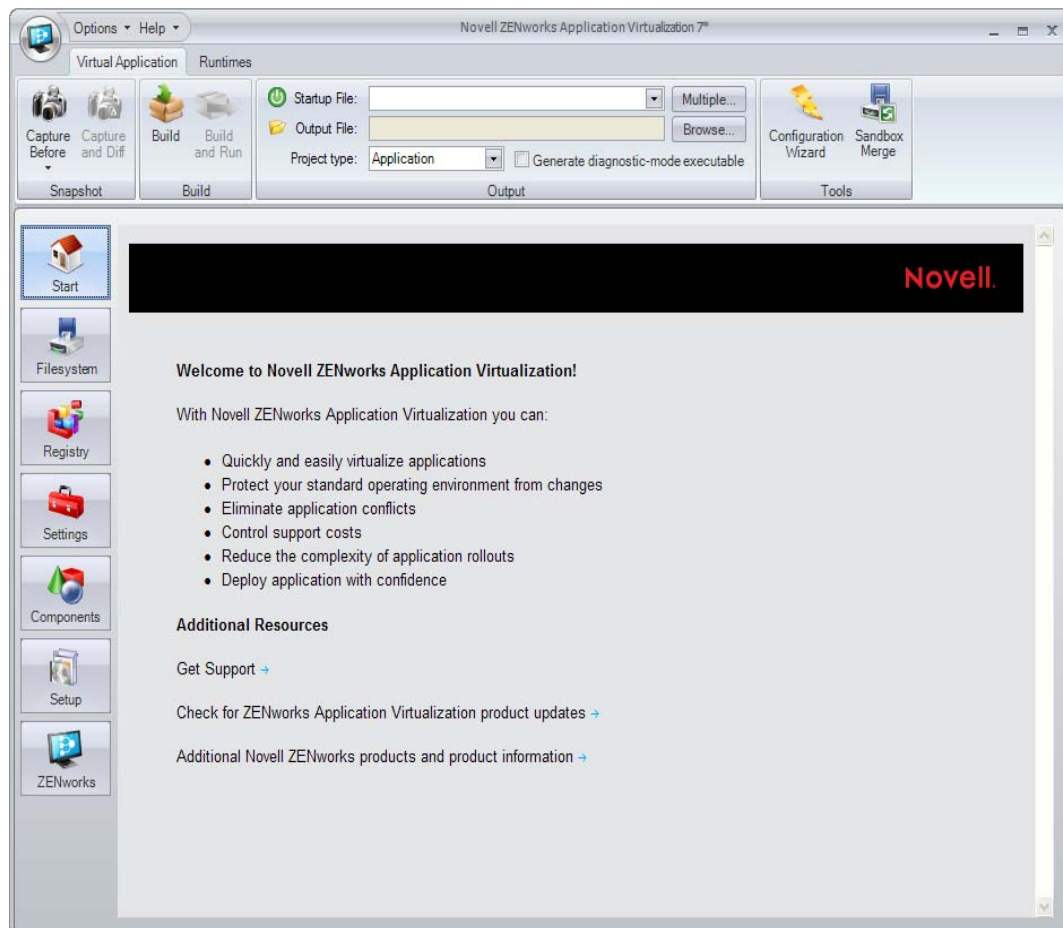
2

The section contains step-by-step information to help you use Novell® ZENworks® Application Virtualization to prepare Novell GroupWise® Messenger to run as a virtual application.

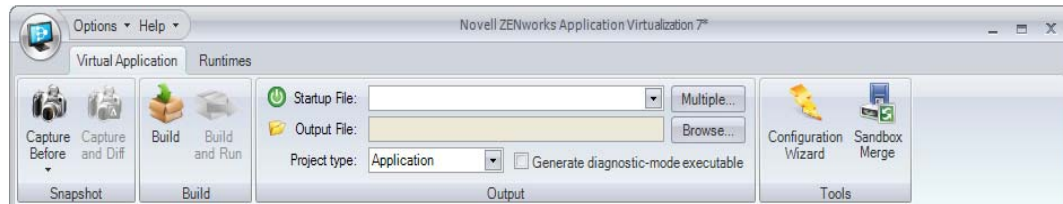
- 1 Install ZENworks Application Virtualization onto a clean machine.

You can prepare a clean machine by uninstalling GroupWise Messenger. However, we recommend that you start the process on a machine that has only the desired Windows OS, any applicable OS service packs, and ZENworks Application Virtualization installed. Starting with a machine that includes only these items helps to ensure that your virtual application does not contain settings that might cause conflicts.

- 2 Click *Start > Programs > Novell ZENworks Application Virtualization 7 > Novell ZENworks Application Virtualization 7* to start the application.



- 3 Click *Capture Before* in the *Snapshot* section of the *Virtual Application* ribbon.



This process captures the first snapshot image. Snapshotting iterates through the file system and registry, and therefore might take several minutes to complete.

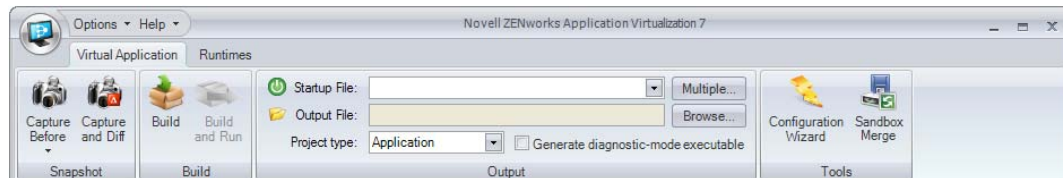
- 4 (Optional) Click the down-arrow on the bottom of the *Capture Before* button, then click *Save Snapshot*.

Saving the first snapshot lets you skip this step when snapshotting subsequent applications from the same clean machine image.

- 5 Install GroupWise Messenger on the clean machine.

For installation instructions, see the [GroupWise Documentation Web site \(http://www.novell.com/documentation/groupwise.html\)](http://www.novell.com/documentation/groupwise.html). Depending on the version of GroupWise Messenger that you want to deploy in your environment, click the appropriate link, then locate and display the *Installation Guide*.

- 6 Click *Capture and Diff* in the *Snapshot* section of the *Virtual Application* ribbon.



- 7 Browse to and select the destination folder to store the snapshot, then click *OK*.

This process captures the second snapshot, computes the delta between the two snapshots, and populates the virtual application with the delta entries. This process might take a few minutes.

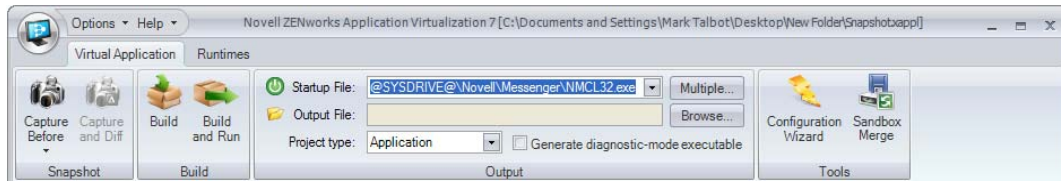
- 8 (Optional) Click the *Filesystem* button on the left side of the ZENworks Application Virtualization console to review the file system and registry entries.

You can remove any files or settings that are not required for proper execution of your virtual application. Removing unused entries reduces virtual application size. However, accidental removal of a required resource might cause your virtual application to not function properly.

- 9 (Conditional) If you use ZENworks Configuration Management in your environment and you want to control how virtual applications are used or to create and publish ZENworks bundles, click the *ZENworks* button on the left side of the ZENworks Application Virtualization console to display the ZENworks options.

For more information, continue with the instructions in [Appendix A, “Using Virtual Applications with ZENworks Configuration Management,”](#) on page 25.

- 10 From the *Startup File* drop-down list, select the GroupWise Messenger executable file (NMCL32.exe).



- 11** Click *Build* in the *Build* section of the *Virtual Application* ribbon to process the application.
- 12** Specify the location and filename of the virtual application executable file.
- 13** Test the virtual application executable file on another machine.

The executable file is now ready to distribute to users. You can use any method you want to distribute the file, including USB thumb drives.

You can also use Novell ZENworks or Novell ZENworks Configuration Management to distribute the file. For more information, see the [ZENworks Documentation Web site \(http://www.novell.com/documentation/zenworks.html\)](http://www.novell.com/documentation/zenworks.html).

Users must authenticate to the GroupWise Messenger system after they launch the virtual application.

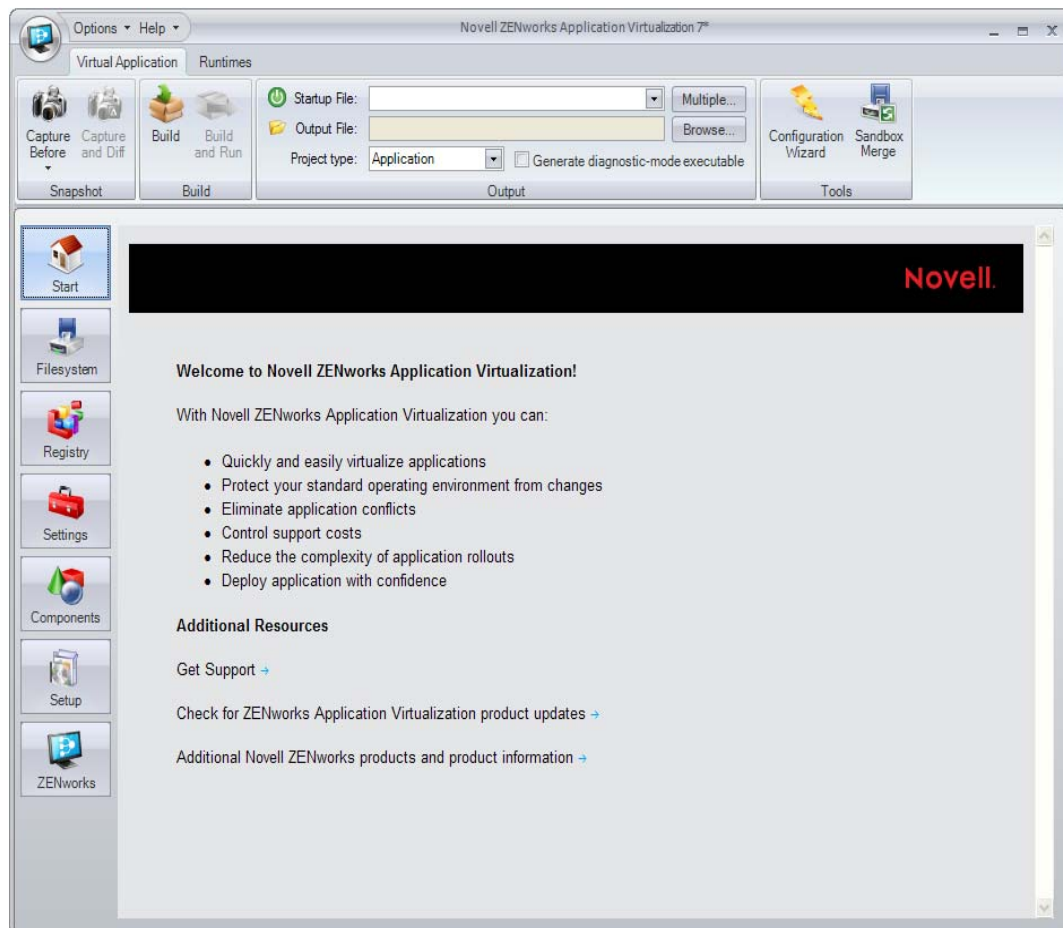
Preparing GroupWise and GroupWise Notify for Virtualization

The section contains step-by-step information to help you use Novell® ZENworks® Application Virtualization to prepare Novell GroupWise® and GroupWise Notify to run as virtual applications.

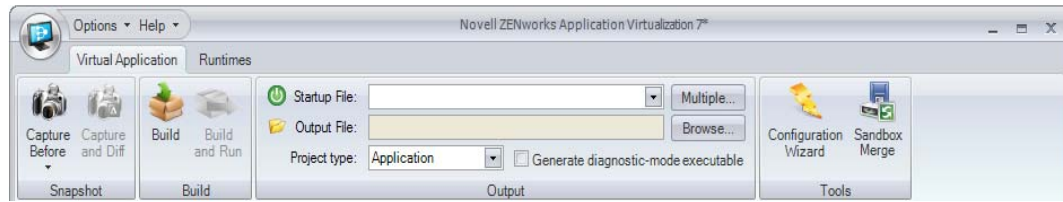
- 1 Install ZENworks Application Virtualization onto a clean machine.

You can prepare a clean machine by uninstalling GroupWise and GroupWise Notify. However, we recommend that you start the process on a machine that has only the desired Windows OS, any applicable OS service packs, and ZENworks Application Virtualization installed. Starting with a machine that includes only these items helps to ensure that your virtual application does not contain settings that might cause conflicts.

- 2 Click *Start > Programs > Novell ZENworks Application Virtualization 7 > Novell ZENworks Application Virtualization 7* to start the application.



- 3 Click *Capture Before* in the *Snapshot* section of the *Virtual Application* ribbon.



This process captures the first snapshot image. Snapshotting iterates through the file system and registry, and might take several minutes to complete.

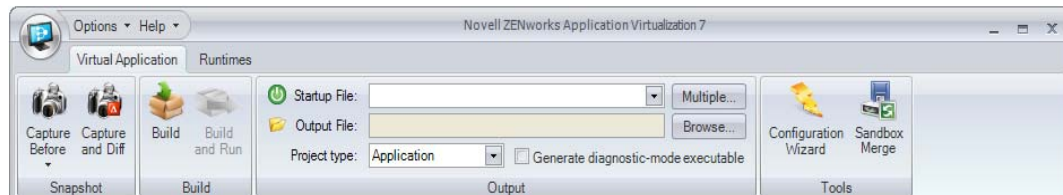
- 4 (Optional) Click the down-arrow on the bottom of the *Capture Before* button, then click *Save Snapshot*.

Saving the first snapshot lets you skip this step when snapshotting subsequent applications from the same clean machine image.

- 5 Install GroupWise on the clean machine.

For installation instructions, see the [GroupWise Documentation Web site \(http://www.novell.com/documentation/groupwise.html\)](http://www.novell.com/documentation/groupwise.html). Depending on the version of GroupWise that you want to deploy in your environment, click the appropriate link, then locate and display the *Installation Guide*.

- 6 Click *Capture and Diff* in the *Snapshot* section of the *Virtual Application* ribbon.



- 7 Browse to and select the destination folder to store the snapshot, then click *OK*.

This process captures the second snapshot, computes the delta between the two snapshots, and populates the virtual application with the delta entries. This process might take a few minutes.

- 8 (Optional) Click the *Filesystem* button on the left side of the ZENworks Application Virtualization console to review the file system and registry entries.

You can remove any files or settings that are not required for proper execution of your virtual application. Removing unused entries reduces virtual application size. However, accidental removal of a required resource might cause your virtual application to not function properly.

- 9 (Conditional) If you plan to use the GroupWise Caching mode or the Archive feature, click the *Filesystem* button on the left side of the ZENworks Application Virtualization console, then add the sandbox data area folders you want to embed in the application executable to store cached or archived data. For example, you could create a *Cache* folder and an *Archive* folder for users.

Caching mode stores a copy of a user's network mailbox, including messages and other information, on a local drive. The archive saves mail or phone messages, appointments, reminder notes, or tasks to a designated database on a local drive. For more information, see the [GroupWise Documentation Web site \(http://www.novell.com/documentation/groupwise.html\)](http://www.novell.com/documentation/groupwise.html).

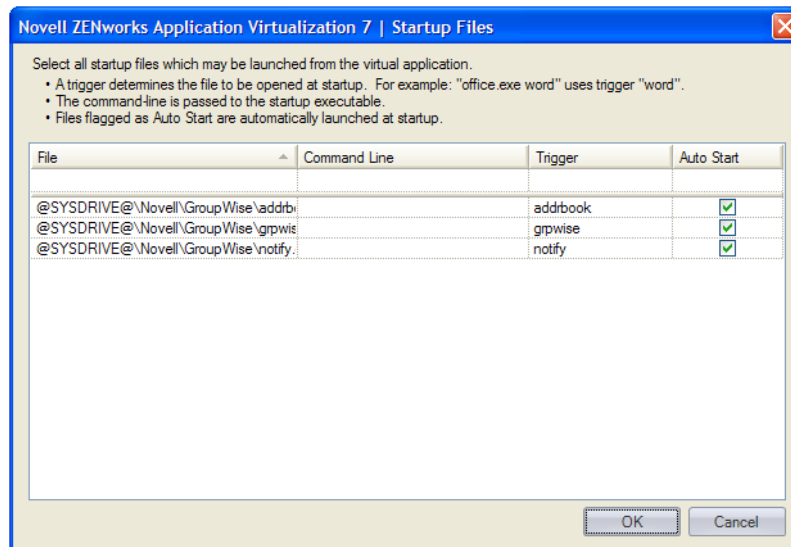
Ensure that you have enough disk space in your ZENworks Application Virtualization sandbox to store that mailbox. For information, see the *Configuring the sandbox location* topic in online help (click *Help* > click *Novell ZENworks Application Virtualization Documentation 7* >

expand the *Virtual Application Customization* book > click *Configuring the sandbox location* or see the *Editing the virtual filesystem* topic in the online help (expand the *Configuring Virtual Applications* book > click *Editing the virtual filesystem*).

- 10 (Conditional) If you use ZENworks Configuration Management in your environment and you want to control how virtual applications are used or to create and publish ZENworks bundles, click the *ZENworks* button on the left side of the ZENworks Application Virtualization console to display the ZENworks options.

For more information, continue with the instructions in [Appendix A, “Using Virtual Applications with ZENworks Configuration Management,”](#) on page 25.

- 11 Click the *Multiple* button on the right side of the *Startup File* drop-down list to display the Startup Files dialog box.



ZENworks Application Virtualization lets you launch both GroupWise, GroupWise Notify, and the GroupWise Address Book when users click the virtual application executable file.

- 12 Click the *Auto Start* check box next to the desired files so that they always automatically launched on virtual application startup, then click *OK*.

The *Auto Start* flag can be specified for multiple startup files to automatically launch multiple applications that are typically used together in a single session (also known as shotgunning).

- 13 Click *Build* in the *Build* section of the *Virtual Application* ribbon to process the application.
- 14 Specify the location and filename of the virtual application executable file.
- 15 Test the virtual application executable file on another machine.

The executable file is now ready to distribute to users. You can use any method you want to distribute the file, including USB thumb drives.

You can also use Novell ZENworks or Novell ZENworks Configuration Management to distribute the file. For more information, see the [ZENworks Documentation Web site \(http://www.novell.com/documentation/zenworks.html\)](http://www.novell.com/documentation/zenworks.html).

Users must authenticate to the GroupWise system after they launch the virtual application. The virtual application executable, as configured above, does not populate the username, password, or post office information. When the user logs in to the virtual GroupWise application the first time, the user can choose to save this information.

Users can use the virtualized GroupWise application on a machine that already has GroupWise installed. However, both instances of GroupWise cannot run at the same time. The authentication and post office information for the installed instance are not used for the virtualized instance of GroupWise.

The virtual executable file can be used to run GroupWise in Online, Remote, or Caching mode. For more information on these modes, see the [GroupWise Documentation Web site \(http://www.novell.com/documentation/groupwise.html\)](http://www.novell.com/documentation/groupwise.html).

Preparing Novell OpenOffice for Virtualization

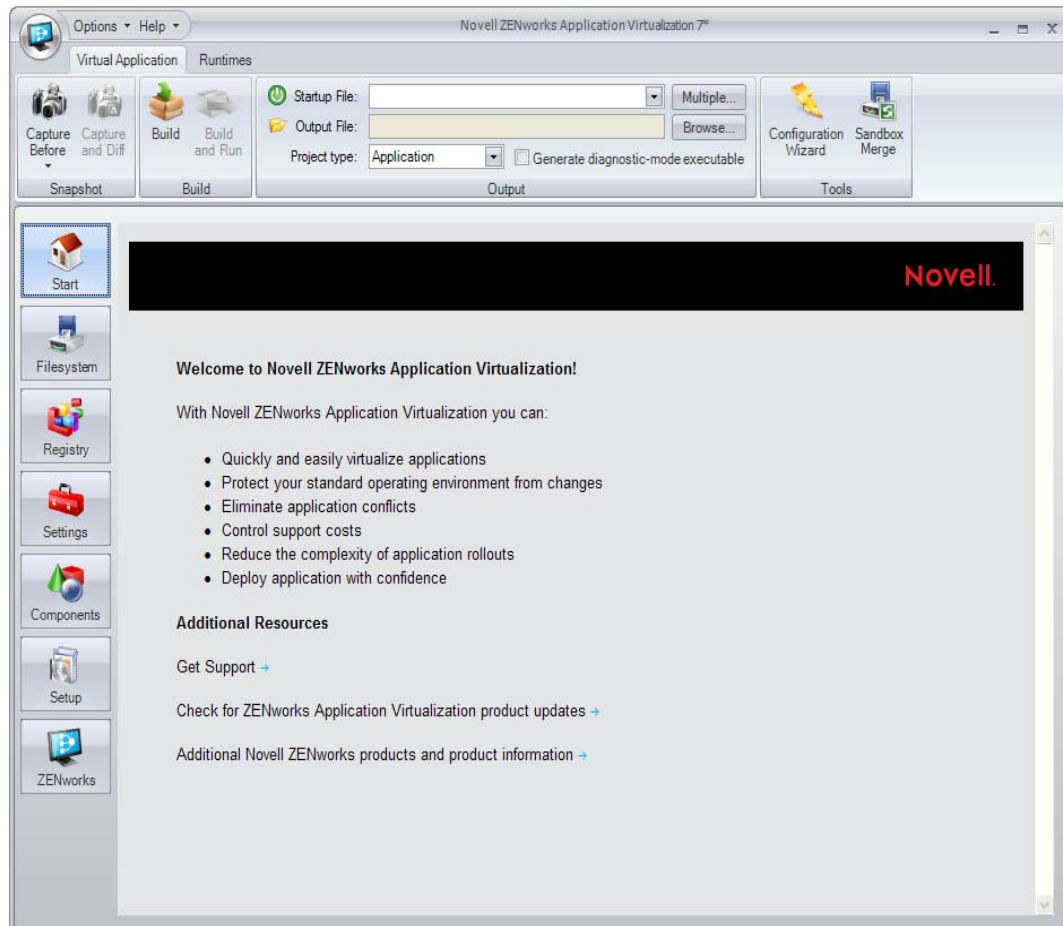
4

The section contains step-by-step information to help you use Novell® ZENworks® Application Virtualization to prepare the programs in Novell OpenOffice to run as virtual applications.

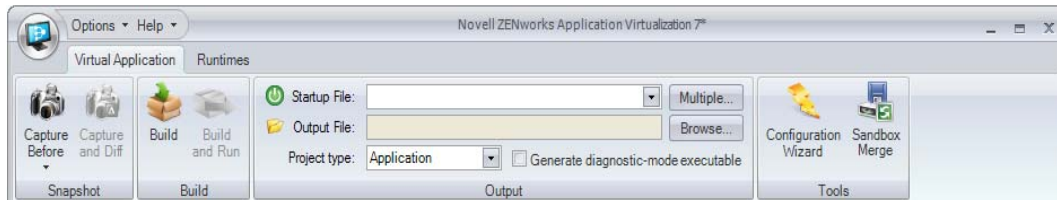
- 1 Install ZENworks Application Virtualization onto a clean machine.

You can prepare a clean machine by uninstalling Novell OpenOffice. However, we recommend that you start the process on a machine that has only the desired Windows OS, any applicable OS service packs, and ZENworks Application Virtualization installed. Starting with a machine that includes only these items helps to ensure that your virtual application does not contain settings that might cause conflicts.

- 2 Click *Start > Programs > Novell ZENworks Application Virtualization 7 > Novell ZENworks Application Virtualization 7* to start the application.



- 3 Click *Capture Before* in the *Snapshot* section of the *Virtual Application* ribbon.



This process captures the first snapshot image. Snapshotting iterates through the file system and registry, and might take several minutes to complete.

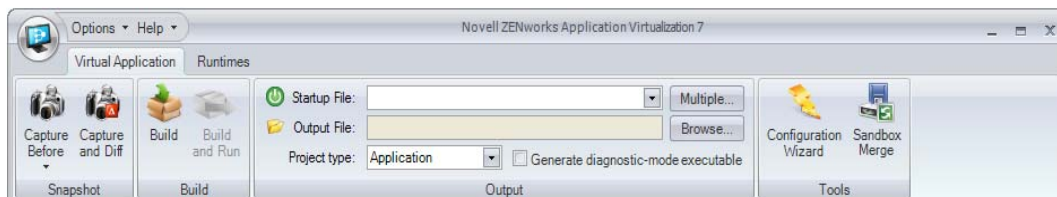
- 4 (Optional) Click the down-arrow on the bottom of the *Capture Before* button, then click *Save Snapshot*.

Saving the first snapshot lets you skip this step when snapshotting subsequent applications from the same clean machine image.

- 5 Install Novell OpenOffice.org on the clean machine.

You can download Novell OpenOffice from the [Novell Downloads page \(http://download.novell.com\)](http://download.novell.com).

- 6 Click *Capture and Diff* in the *Snapshot* section of the *Virtual Application* ribbon.



- 7 Browse to and select the destination folder to store the snapshot, then click *OK*.

This process captures the second snapshot, computes the delta between the two snapshots, and populates the virtual application with the delta entries. This process might take a few minutes.

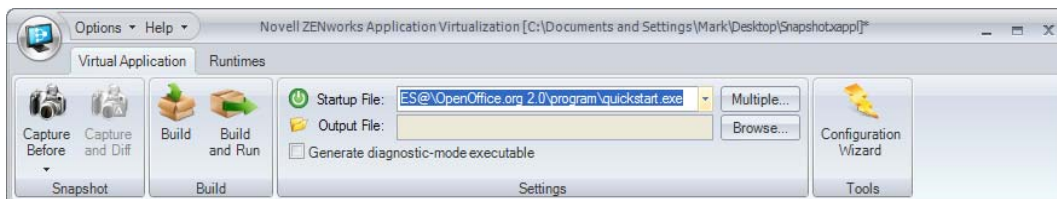
- 8 (Optional) Click the *Filesystem* button on the left side of the ZENworks Application Virtualization console to review the file system and registry entries.

You can remove any files or settings that are not required for proper execution of your virtual application. Removing unused entries reduces virtual application size. However, accidental removal of a required resource might cause your virtual application to not function properly.

- 9 (Conditional) If you use ZENworks Configuration Management in your environment and you want to control how virtual applications are used or to create and publish ZENworks bundles, click the *ZENworks* button on the left side of the ZENworks Application Virtualization console to display the ZENworks options.

For more information, continue with the instructions in [Appendix A, “Using Virtual Applications with ZENworks Configuration Management,”](#) on page 25.

- 10 From the *Startup File* drop-down list, select the `quickstart.exe` file.

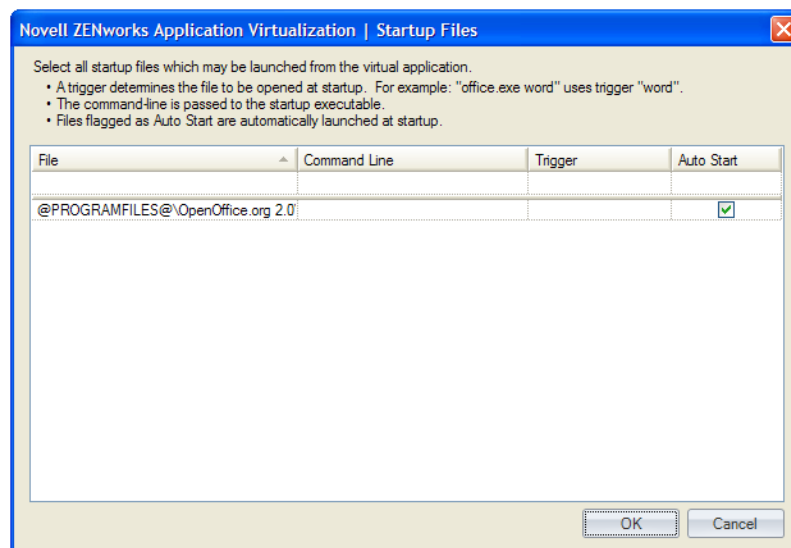


Selecting the `quickstart.exe` file causes the resulting executable file to launch the OpenOffice Quickstarter. The OpenOffice Quickstarter, which displays in the notification area, lets users choose which OpenOffice application to launch (Writer, Calc, Draw, Impress, or Math).

You can also create a single executable file to expose multiple executable startup files (Writer, Calc, Draw, Impress, or Math). ZENworks Application Virtualization allows multiple entry points into the virtual application to be triggered based on a command line argument to the virtual application executable. If you use Novell ZENworks or Novell ZENworks Configuration Management to distribute applications, command line arguments let you use the same application object for all OpenOffice.org programs.

If you want to use the OpenOffice Quickstarter, skip to **Step 12**. If you want the virtual application executable file to expose multiple applications, continue with **Step 11**.

- 11** (Optional) Click the *Multiple* button on the right side of the *Startup File* drop-down list to display the Startup Files dialog box.



- 11a** Click the *File* column on the first empty row in the startup file list, select `scal.c.exe`, then press Enter.

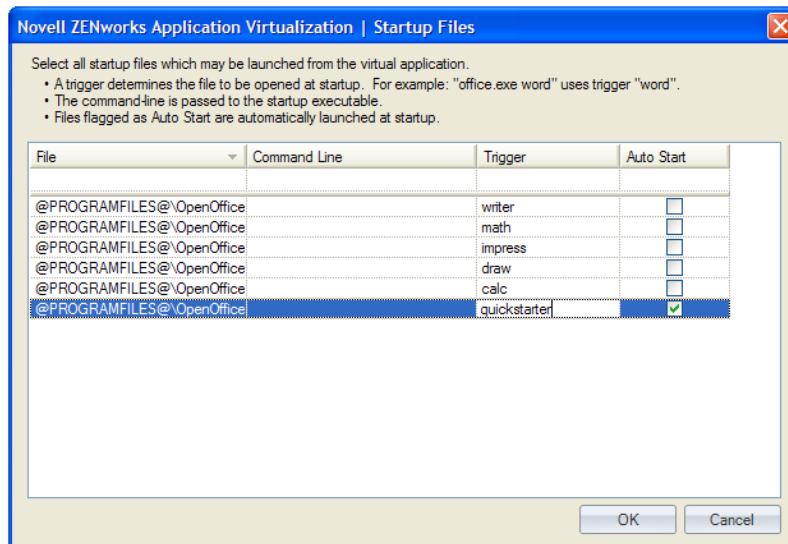
NOTE: If you cannot see the entire path to the `scal.c.exe` file, expand the *File* column. To expose the drop-down arrow to select the executable file, click in the *File* field.

- 11b** Click the *File* column on the first empty row in the startup file list, select `sdraw.exe`, then press Enter.
- 11c** Click the *File* column on the first empty row in the startup file list, select `simpress.exe`, then press Enter.
- 11d** Click the *File* column on the first empty row in the startup file list, select `smath.exe`, then press Enter.
- 11e** Click the *File* column on the first empty row in the startup file list, select `swriter.exe`, then press Enter.
- 11f** Specify the desired command line trigger in the *Trigger* column for each row.

If you create a trigger for each application in Novell OpenOffice, you can use the trigger as a command line option in ZENworks Desktop Management or ZENworks Configuration Management to launch the desired application from an application object. For example, if you specify `writer` for the trigger for OpenOffice Writer, you could use `writer` as the command line option to open Writer when the user opens the executable.

- 11g** (Conditional) Click the *Auto Start* check box next to any startup files that you want to always automatically launch on virtual application startup.

The *Auto Start* flag can be specified for multiple startup files to automatically launch multiple applications that are typically used together in a single session (also known as shotgunning).



- 11h** Click *OK*.

- 12** Click *Build* in the *Build* section of the *Virtual Application* ribbon to process the application.
- 13** Specify the location and filename of the virtual application executable file.
- 14** Test the virtual application executable file on another machine.

The executable file is now ready to distribute to users. You can use any method you want to distribute the file, including USB thumb drives.

You can also use Novell ZENworks or Novell ZENworks Configuration Management to distribute the file. For more information, see the [ZENworks Documentation Web site \(http://www.novell.com/documentation/zenworks.html\)](http://www.novell.com/documentation/zenworks.html).

Using Virtual Applications with ZENworks Configuration Management

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If you use Novell® ZENworks® Configuration Management in your environment, you can control how virtual application are used and you can create and publish ZENworks bundles used to distribute virtual applications to users.

The following sections contain more information:

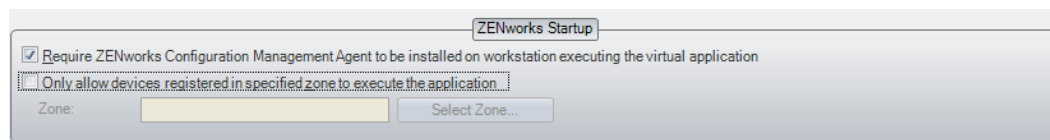
- [Section A.1, “ZENworks Startup Options,” on page 25](#)
- [Section A.2, “ZENworks Bundle Publishing,” on page 26](#)

A.1 ZENworks Startup Options

ZENworks Application Virtualization can be configured to require the ZENworks Adaptive Agent to be installed on the host device executing the virtual application. By default, virtual applications built with ZENworks Application Virtualization do not require the ZENworks Adaptive Agent.

To configure the ZENworks Startup options:

- 1 While configuring the virtual application, click the *ZENworks* button on the left side of the ZENworks Application Virtualization console to display the ZENworks Startup settings.



- 2 Select the *Require ZENworks Configuration Management Agent to be installed on workstation executing the virtual application* check box.

The ZENworks Adaptive Agent is part of the ZENworks Configuration Management software that is installed on each managed device to let the ZENworks administrator manage devices over the network.

If the ZENworks Adaptive Agent is not installed on the device attempting to launch the virtual application, it cannot be launched.

- 3 (Conditional) Select the *Only allow devices registered in specified zone to execute the application* check box, click *Select Zone*, specify the ZENworks Server Address and the Zone, then click *OK*.

The Management Zone is the management domain that includes the ZENworks Primary Servers and managed devices in your ZENworks system.

When specifying the ZENworks Server Address, you might need to use the secure HTTP prefix (`https://`) to connect to a secure ZENworks Configuration Management Server. If the ZENworks Configuration Management Server has been configured to use a custom port number, you might need to use a port number suffix (`:81`).

If the device attempting to launch the virtual application is not registered to the specified Management Zone, the application cannot be launched.

- 4 Continue with the steps for configuring the virtual application:
 - ♦ GroupWise Messenger: [Step 10 on page 14](#).
 - ♦ GroupWise and GroupWise Notify: [Step 11 on page 19](#).
 - ♦ Novell OpenOffice: [Step 10 on page 22](#).

A.2 ZENworks Bundle Publishing

The ZENworks Bundle Publishing options let you create a ZENworks Configuration Management bundle that contains the virtualized application and publish the bundle to your ZENworks system.

Software is distributed by ZENworks Configuration Management through the use of bundles. A bundle consists of all the files, configuration settings, installation instructions, and so forth required to deploy and manage the application or files on a device.

- 1 While configuring the virtual application, click the *ZENworks* button on the left side of the ZENworks Application Virtualization console to display the ZENworks Bundle Publishing settings.

- 2 Fill in the fields:

Project Type: Select *MSI* or *Executable*. The MSI or Executable must be built before publication.

Zone: Click *Select Zone*, specify the ZENworks Server Address, click *Connect*, log in to the ZENworks Server with the appropriate Username and Password, then click *OK*.

The Management Zone is the management domain that includes the ZENworks Primary Servers and managed devices in your ZENworks system.

Bundle Name: Specify a name for the bundle.

Bundle Folder: Specify the name of the ZENworks Control Center folder where you want the bundle to reside.

A folder is an organizational object. Folders are used to structure bundles and bundle groups into a manageable hierarchy for the ZENworks system.

Install Path: Specify the installation path that you want to use for the application on managed devices.

Account: Specify the ZENworks Configuration Management administrator username and password.

- 3 (Optional) Select the *Store Zone credentials in .xapple file* option to avoid being prompted to specify the administrator username and password in the future.

IMPORTANT: This is a potential security risk because the ZENworks credentials are stored in the `.xapple` configuration file as plain text.

- 4 (Optional) Select the *Automatically publish applications as ZENworks bundle after successful build* option to automatically create the ZENworks bundle after it is built.

- 5 (Conditional) Select the *Automatically publish applications as ZENworks bundle after successful build* option to automatically publish the bundle to the folder you specified in [Step 2](#).

or

Click *Publish Now* to publish the bundle to the folder you specified in [Step 2](#).

6 (Conditional) If you selected the *Automatically publish applications as ZENworks bundle after successful build* option, continue with the steps for configuring the virtual application:

- ♦ GroupWise Messenger: [Step 10 on page 14](#).
- ♦ GroupWise and GroupWise Notify: [Step 11 on page 19](#).
- ♦ Novell OpenOffice: [Step 10 on page 22](#).