

IntervalZero

Silent Installation Guide for RTX 2011 with Service Pack 1

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Contents

About the RTX 2011 with Service Pack 1 Runtime Silent Installer	4
System Requirements.....	4
Getting the Installation Package.....	4
Installing RTX 2011 Runtime from the Command Line	5
Installation Options.....	6
Format.....	7
Additional Options.....	7
Silent Installation of OEM Evaluation Kit.....	8
Silent Warning Messages.....	8
Post-Installation Verification by Other Programs.....	8
Uninstalling Using the Command Line	9
Getting Support	10
Third-Party Support.....	10
Before Calling Technical Support.....	10
Your Support ID.....	10
The Version Number of Your RTX Software.....	10
IntervalZero Web Site.....	10
Contacting Technical Support by Phone.....	11
Appendix A: Installation Warnings	12

About the RTX 2011 with Service Pack 1 Runtime Silent Installer

This document describes the RTX 2011 with Service Pack 1 Runtime Silent Installer that provides a command line interface to the RTX Runtime product installation. The command line interface can be invoked from the command line or used within your own product installation process so as not to require user interaction during the installation process.

System Requirements

The RTX 2011 with Service Pack 1 Runtime Silent Installer has the same system requirements as RTX 2011 with Service Pack 1 Runtime. See the *RTX 2011 with Service Pack 1 Installation Guide* for complete details.

Getting the Installation Package

This release is available as a Windows Installer package (.msi) that can be downloaded from IntervalZero's website or copied from the IntervalZero CD.

Note: The RTX 2011 with Service Pack 1 Runtime components are also available as merge modules that can be included in the installation of an OEM product.

Installing RTX 2011 Runtime from the Command Line

The silent installer provides the ability to install the RTX Runtime from the command line. This makes it possible to install the RTX runtime within another product installation. Take note of the following information before you begin.

Reboot after installation — A system reboot is required after the installation of RTX. Without the reboot, RTX cannot work properly. It is the responsibility of the process that spawns the RTX silent installation from the command-line to reboot the system when the installation has completed.

Administrator privileges are required — Installation must be done from an account that has administrator privileges. This can be done in one of several ways:

From any version of Windows:

- Right-click to start a command prompt and select **Run as...** from the pop-up menu.
 - In the Run As window, select an account with administrative privileges.
 - After the command prompt appears, run the installer using the options described in the *Installation Options* section of this document.

From a pre-Vista version of Windows:

- Log onto an account with administrative privileges and begin the installation as described in this document.

Obtain an OEM PAC — Make sure you have an RTX 2011 Site/OEM PAC number for license key entry. You can obtain one from your software provider.

Evaluation Note: Due to the way that licenses are registered, an evaluation PAC can only be used once per Windows installation. If a silent install was performed using an evaluation kit, it can be removed, but it cannot be reinstalled on the same system. A new evaluation kit cannot be installed on top of an existing installation.

Installation Options

Arguments to the RTX 2011 with Service Pack 1 Silent Installer OPTIONS parameter are shown in the table below.

Option	Description
LICENSE=<License#>	<p>Required. The Site/OEM PAC Number for the RTX 2011 Runtime version.</p> <p>The <i>LICENSE#</i> is used to ensure you are using a valid copy of RTX.</p>
TARGETDIR=<Directory>	<p>Optional. Installation directory. If you omit this parameter, the installation process installs RTX 2011 Runtime into this directory:</p> <p><WINDISK>\Program Files\IntervalZero\RTX</p> <p>where <WINDISK> represents the disk on which Windows is currently installed. If you use this parameter, your installation process is responsible for verifying that the disk exists and the directory is valid and writeable.</p>
DT_ICONS	<p>Optional. The DT_ICONS parameter instructs the installer to add RTX icons to the desktop. If you want RTX to be hidden from the user, do not use this parameter.</p>
SM_ICONS	<p>Optional. The SM_ICONS parameter instructs the installer to add RTX to the Start menu. If you want RTX to be hidden from the user, do not use this parameter. Users can still access RTX Properties from the Control Panel. When this parameter is not specified, no start menu icons are displayed.</p>
MANAGED	<p>Optional. The MANAGED parameter is used to include RTX Win32 Managed Code Support. If this parameter is not present, managed code support will not be included.</p>
NO_RTXUAC	<p>Optional. The NO_RTXUAC parameter is used to suppress installation of the RTX User Account Control Override service. When this parameter is used, processes need elevated privileges to interact with the RTSS. By default, the RTX User Account Control Override service is installed so that RTX can override Windows User Account Control.</p>
RTXUSB	<p>Optional. The RTXUSB parameter instructs the installer to include support for the RTX USB stack. This option is dependent upon TCP/IP being installed.</p>

RTTCPIP	Optional. The RTTCPIP parameter instructs the installer to include support for the RTX TCP/IP stack.
TOOLS	Optional. The TOOLS parameter instructs the installer to include RTX tools such as the Object Viewer, Task Manager and Platform Evaluator.
SHARED	Optional. If listed, RTX will create a shared RTX boot configuration.
RTSSPROCS= <i>n</i>	Required. The number (<i>n</i>) of RTSS processors. See the <i>RTX Installation Guide</i> for more information.
WINPROCS= <i>n</i>	Required. The number (<i>n</i>) of Windows processors. See the <i>RTX Installation Guide</i> for more information.

The installer looks through the entire list of OPTION parameters provided, and if an option is found that isn't recognized as a valid switch by the installer, an error message is displayed and the installation will not continue.

Format

The complete format of the installation command is shown below. Installation options are separated by semicolons.

```
"IntervalZero RTX 2011.msi" /qn OPTIONS="LICENSE=<license#>;
TARGETDIR=<Directory>;MANAGED;TOOLS;SAMPLES;RTTCPIP;RTXUSB;
SM_ICONS;DT_ICONS;NO_RTXUAC"
```

Note: Items in boldface are required (including the final ").

For example:

```
"IntervalZero RTX 2011.msi" /qn OPTIONS="LICENSE=12345-12345-
12345-12345-12345; TARGETDIR=c:\Program Files\IntervalZero\RTX;
SM_ICONS;MANAGED;NO_RTXUAC"
```

Additional Options

The RTX 2011 with Service Pack 1 Silent Installer uses the standard Windows Installer Component (`msiexec.exe`) to perform the installation. You can use other supported `msiexec.exe` options if desired. For a list of `msiexec.exe` options, enter this command in a command prompt window:

```
msiexec.exe /?
```

Note the following requirements for the installation command line:

- The `/qn` parameter is required and must be placed before all other parameters in the command line.
- When using `SM_ICON`, the `ALLUSER=1` msi flag must be used to ensure that start menu options are available to all users.

- The following options are not supported. If used, an error message will be displayed and the setup will abort.

`/a` - Administrative install

`/j` - Advertise a product

Note: An administrative install, performed using the `/a` option, is not the same as “running with administrative permissions”. The RTX 2011 with Service Pack 1 Runtime Silent Installation must be run with administrative permissions, as explained in this document. An administrative install is performed to a network for the purpose of making a product available to users in a workgroup. This type of group-wide installation is not supported by RTX.

Silent Installation of OEM Evaluation Kit

If you want to request an OEM evaluation kit for the silent installation of RTX 2011 with Service Pack 1, contact your software provider.

Silent Warning Messages

The Windows Installer public property option can be used to determine where error information will be recorded.

- `RTX_ERROR_DISPLAY=MessageBox` uses the default action of displaying error messages in a pop-up window.
- `RTX_ERROR_DISPLAY=StringRegVal` places the full message text in the registry. The value name will be the error number and the value data will be the error description.
- `RTX_ERROR_DISPLAY=NumRegVal` places the error number of the message in the registry. The value name will be either `InstallError` or `InstallWarning` and the value data will be the error number.

Information about the product, including any install errors or warnings, if applicable, will be found under the following registry key after the installation has completed:

```
HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\{35A2CB52-68DF-4D7C-B09D-5858E76F2456}.
```

See [Appendix A](#) for a list of installation warning messages.

Post-Installation Verification by Other Programs

With the new RTX Properties DLL that comes as part of the SDK, you can verify your RTX installation with the `RtcplGetRuntimeVersion` and `RtcplGetRuntimeDirectory` APIs.

Uninstalling Using the Command Line

The same system configuration changes will result when performing a silent install as would occur when using the Windows Add/Remove program utility. See the *Uninstalling RTX 2011* section of the *RTX 2011 with Service Pack 1 Installation Guide* for complete details.

In addition, note the following silent uninstall requirements.

- A system reboot is required to complete the uninstallation process of RTX 2011 with Service Pack 1. It is the responsibility of the program that spawns the RTX 2011 with Service Pack 1 uninstallation to perform the reboot.
- It is the OEM's responsibility to warn the user that the uninstallation process stops all running RTSS processes. The silent installer does not warn the user before stopping RTSS processes.

The complete format of the command line interface for uninstalling RTX 2011 with Service Pack 1 Runtime is:

```
msiexec /qn /x{35A2CB52-68DF-4D7C-B09D-5858E76F2456}
```

Getting Support

IntervalZero offers a number of support options for RTX users, including technical support and the IntervalZero Web site.

Third-Party Support

If you are a customer who purchased an IntervalZero product through a third-party reseller, contact the reseller for support.

Before Calling Technical Support

Please have the following information ready before calling IntervalZero Technical Support:

Your Support ID

Customers who purchase direct support receive an e-mail address and password for use when accessing the IntervalZero support web site.

The Version Number of Your RTX Software

Before calling technical support, determine the version of RTX installed on your system.

To obtain the RTX version number:

1. From the start menu, select **IntervalZero > RTX 2011 > RTX Properties**.
2. Record the RTX version that is shown in the RTX Properties window.

If the RTX Properties window is not available from the Start menu, select it from the Windows Control Panel.

IntervalZero Web Site

The IntervalZero Customer Support Web page is located at:

<http://www.intervalzero.com/support.htm>

The IntervalZero support web pages provide electronic access to the latest product releases, documentation, and release notes. With a valid e-mail address and password, you can access the online problem report database to submit new issues or to obtain the status of previously reported issues.

Contacting Technical Support by Phone

For technical support related to installing and using RTX, you can call technical support at these numbers:

From *inside* the United States, call 1-800-334-8649. At the prompt, press 3 for Support.

From *outside* the United States, call 1-781-996-4481. At the prompt, press 3 for Support.

Hours are Monday - Friday, 8:30 a.m. – 5:30 p.m. US Eastern time (GMT-500), excluding holidays.

Appendix A: Installation Warnings

Possible registry key values in case of a warning during a silent install are shown in the following table.

Nbr	Description of the warning
500	Unable to back up boot.ini file.
501	Unable to back up boot.ini file.
502	Unable to back up boot.ini file.
505	Setup was unable to interface with the power management service. Please note that an RTX-Compatible power configuration will not be created. See the RTX Installation Guide for details on the RTX Recommended power state.
506	Setup was unable to interface with the power management service. Please note that an RTX-Compatible power configuration will not be created. See the RTX Installation Guide for details on the RTX Recommended power state.
507	There was an error enabling the RT-TCP/IP stack.
508	There was an error setting TCP/IP-USB dependency.
509	There was an error enabling the RTX USB stack.
510	Setup was unable to save your current boot configuration. During the upgrade process, the default RTX boot configuration will be created.
511	Setup was unable to save your current boot configuration. During the upgrade process, the default RTX boot configuration will be created.
512	Setup was unable to save your current boot configuration. During the upgrade process, the default RTX boot configuration will be created.
513	Setup was unable to save your current boot configuration.
514	Setup was unable to save your current boot configuration. During the upgrade process, the default RTX boot configuration will be created.
515	Unable to back up boot.ini file.
516	Unable to back up boot.ini file. The upgrade process will revert your RTX boot configuration to RTX defaults.
517	Unable to restore boot.ini file. Your boot configuration settings are saved in boot.ini_bak. You may manually copy this file over the boot.ini file to restore your settings.
518	Before installing RTX 2011 with Service Pack 1, setup created a backup of your original (pre RTX 2011) boot.ini file and named it "boot.ini_". During the current upgrade process, setup copied this backup file before uninstalling RTX 2011 with Service Pack 1. Setup is trying to copy the second backup "boot.ini__bak" back to "boot.ini_" for later use, but failed to do so.
519	There was an error disabling the RTX USB stack.
520	There was an error removing the RT-TCP/IP-USB dependency.
521	Setup failed to stop the RTX Realtime Subsystem or failed to determine its state.