



Red Hat Development Suite 1.2 Installation Guide

Installing Red Hat Development Suite

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Abstract

Information for users installing Red Hat Development Suite. This guide describes all prerequisites for a successful installation of the product.

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PREFACE

Red Hat Development Suite combines Red Hat development tools such as Red Hat JBoss Developer Studio, the Red Hat Container Development Kit, and OpenJDK into a single, integrated developer experience. Combining these powerful tools into a single integrated development environment results in Red Hat Development Suite - one of the most effective, powerful, and efficient development environments for all kinds of developers.

CHAPTER 1. RED HAT DEVELOPMENT SUITE SUPPORT INFORMATION

Red Hat Development Suite 1.2 includes products such as Red Hat JBoss Developer Studio 10.2 and Red Hat Container Development Kit 2.3, as well as some dependencies for each of these products. One or more of the products that Red Hat Development Suite installs may have a separate Red Hat subscription. Development support for any of the installed products requires an active Red Hat subscription for that product.

The Red Hat Development Suite installers are now available for Windows and macOS. Support information for Red Hat Development Suite 1.2 is as follows:

- ✦ Both the Online and Bundled installers are supported for Windows 7, 8, and 10.
- ✦ Both the Online and Bundled installers are experimental and unsupported for macOS. These installers run on macOS 10.9 or newer.

CHAPTER 2. RED HAT DEVELOPMENT SUITE COMPONENT DETAILS

The Red Hat Development Suite 1.2 installer installs the following components and their dependencies:

- ✦ Red Hat JBoss Developer Studio 10.2.0.GA
 - OpenJDK 8.0 Build 111
- ✦ Red Hat Container Development Kit 2.3
 - Vagrant 1.8.1
 - Cygwin 2.6.0
 - Oracle VirtualBox 5.0.26



Important

On macOS 64-bit hosts, VirtualBox works with versions 10.9 (Mavericks), 10.10 (Yosemite), and 10.11 (El Capitan). Intel hardware is required for these hosts. See <https://www.virtualbox.org/manual/ch14.html> for details.

Red Hat Development Suite uses the **PATH** environment variable to detect existing installations of Java, Cygwin, VirtualBox, and Vagrant.

If some components in the list are not detected, they are installed. If Red Hat Development Suite detects any of the listed components, it compares the installed version against the required version and acts based on the results:

- ✦ If the installed version matches the supported version, Red Hat Development Suite marks the component as available and correct.
- ✦ If the installed version does not match the supported versions for the component, an error displays. The user must exit Red Hat Development Suite and manually uninstall the component and then restart Red Hat Development Suite.

CHAPTER 3. SYSTEM REQUIREMENTS

The minimum system requirements for Red Hat Development Suite are:

- ✦ 8 GB RAM
- ✦ 20 GB disk space
- ✦ CPU Intel i3 2GHz Processor

The recommended system requirements for Red Hat Development Suite are:

- ✦ 16 GB RAM
- ✦ 47 GB disk space
- ✦ CPU Intel i5 2GHz or better

CHAPTER 4. INSTALLING RED HAT DEVELOPMENT SUITE

4.1. INSTALLATION OPTIONS

Red Hat Development Suite 1.2 includes the following installation options:

- ✦ Windows-only Installers (Supported)
 - A Bundled Installer that includes all the required components for installation.
 - An Online Installer that is a 40 Mb download and downloads the required components during the installation process.
- ✦ macOS-only Installers (Experimental and Unsupported)
 - A Bundled Installer that includes all the required components for installation.
 - An Online Installer that is a 54 Mb download and downloads the required components during the installation process.

4.2. INSTALLATION PREREQUISITES

4.2.1. General Prerequisites

The following are general prerequisites for Windows and macOS. Ensure that you refer to the Windows or macOS specific prerequisites after ensuring the general requirements are met.

- ✦ **Sign Up for a Red Hat Developer Account:** Use the **Register** link at <http://developers.redhat.com/> to create a new Red Hat Developer account. After signing up, you must wait approximately fifteen minutes to allow the new account information to propagate to the Red Hat Subscription Management system.
- ✦ **Acquire a Red Hat Enterprise Linux Developer Suite Subscription:** You must have the Red Hat Enterprise Linux Developer Suite subscription to download and run Red Hat Development Suite. Sign up for this subscription here: <http://developers.redhat.com/>. This subscription is unsupported, may not address known security vulnerabilities, and is only intended for development purposes and therefore must not be used in production environments.
- ✦ **(Optional) Install Docker individually to use Docker for Windows:** Red Hat Development Suite includes the Docker tooling, but to use the full version of Docker for Windows (Docker Machine or Boot2Docker), you must install Docker and test it before installing any Eclipse Docker tools. This is only applicable to using Docker out of JBoss Developer Studio, such as Docker for Windows or Docker for macOS.

4.2.2. Windows Prerequisites

Ensure that the following prerequisites are met when installing Development Suite on Windows (supported):

- ✦ **Install Microsoft Visual C++ 2010 SP1 Redistributable Package (x86).** Ensure that this package is downloaded and installed (<https://www.microsoft.com/en-us/download/details.aspx?id=8328>) before running the installer.

- ✦ **Ensure that Virtualization is enabled in your machine's BIOS settings.** If Red Hat Development Suite is run on a new system, ensure that Virtualization is enabled in the BIOS settings. This is required to run VirtualBox and Vagrant. For further information, consult your system's documentation for instructions to change BIOS settings.
- ✦ **Ensure that you are logged in using an Administrator account.** Red Hat Development Suite adds drivers and changes environment variables and therefore requires Administrator permissions. Do not run Red Hat Development Suite using a non-Administrator account with the **Run as Administrator** option because this not supply the required permissions.

4.2.3. macOS Prerequisites

Ensure that the following prerequisites are met when installing Development Suite on macOS (unsupported):

- ✦ **Ensure that you are logged in as root.** Red Hat Development Suite adds drivers and changes environment variables and therefore requires root permissions.
- ✦ **Ensure that Java SE 1.8.0 is installed:** Download and install Java SE 1.8.0 Build 111 from the Oracle website: <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
- ✦ **Ensure that Virtualization is enabled for your machine.** In a terminal, run the `sysctl -a | grep machdep.cpu.features` command. The result will be a string of features, for example:

```
machdep.cpu.features: FPU VME DE PSE TSC MSR PAE MCE CX8 APIC SEP
MTRR PGE MCA CMOV PAT PSE36 CLFSH DS ACPI MMX FXSR SSE SSE2 SS HTT TM
PBE SSE3 PCLMULQDQ DTES64 MON DSCPL *VMX* EST TM2 SSSE3 CX16 TPR
PDCM SSE4.1 SSE4.2 x2APIC POPCNT AES PCID XSAVE OSXSAVE TSCTMR AVX1.0
RDRAND F16C
```

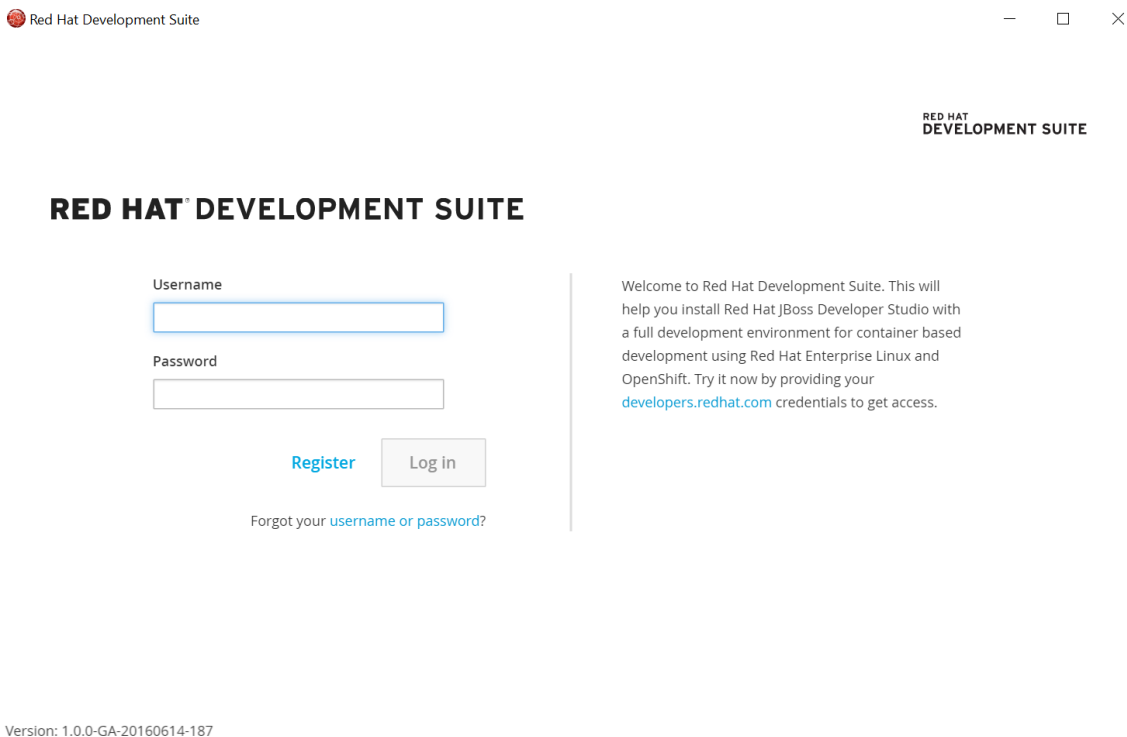
If the output includes **VMX**, as highlighted in the example, the machine has Virtualization enabled.

4.3. INSTALLING RED HAT DEVELOPMENT SUITE

To install Red Hat Development Suite:

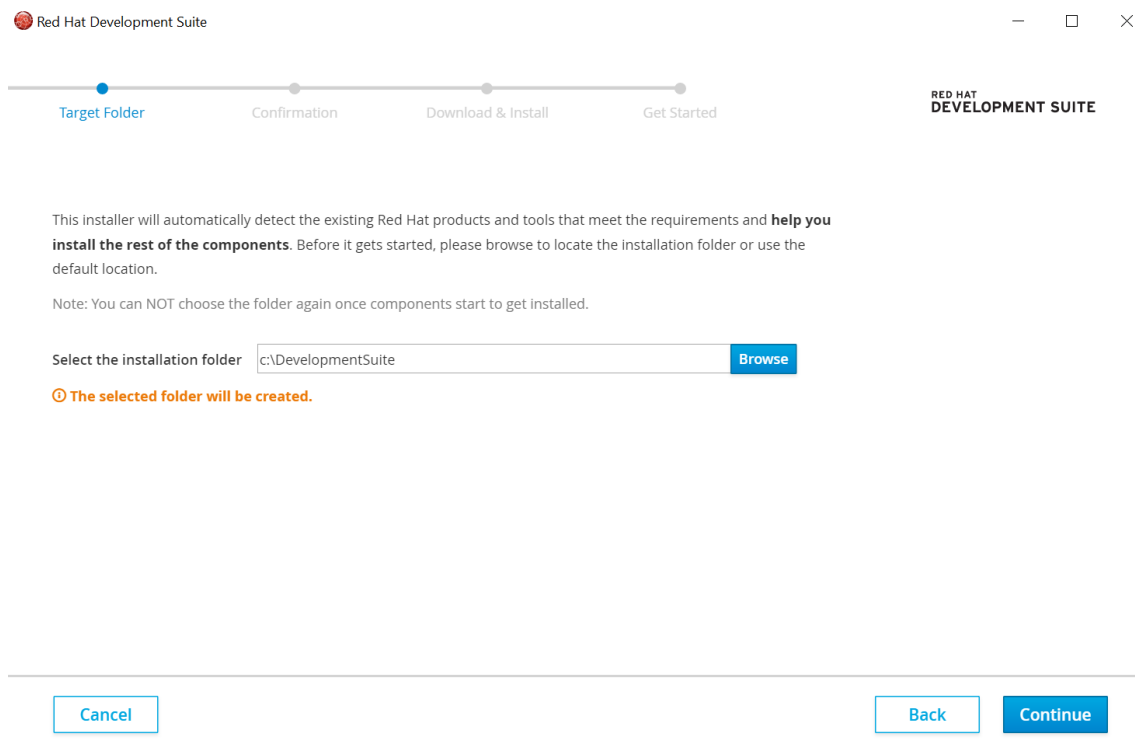
1. Log in and download Red Hat Development Suite from the Red Hat Developers Portal product download page at <http://developers.redhat.com/products/devsuite/download/>.
2. Run the downloaded file installation file (Online or Bundled).
3. At the log in screen, enter your existing Red Hat Developer login credentials to log in.

Figure 4.1. Enter Your Login Credentials



- At the **Target Folder** screen, add a path to the target directory for the Red Hat Development Suite installation. The default path for Windows is **c:\DevelopmentSuite** and the default path for macOS is **/var/root/DevelopmentSuite**.

Figure 4.2. Set the Target Directory



If your Windows user has a space in the username, for example, **Example User**, the installer displays an error. See [Section 7.1, “Username Space Error”](#) for troubleshooting information for this error.

- The **Confirmation** screen lists the components that Red Hat Development Suite downloads and installs. Red Hat Development Suite detects components based on the

PATH environment variable. If none of the components are installed, no changes are required. If an older version of a component is detected, exit Red Hat Development Suite, uninstall the component, and then start Red Hat Development Suite.

a. To Install Red Hat Development Suite:

- i. All required components are already selected by default.
- ii. Click **Download & Install** to continue.

b. To only install Red Hat Container Development Kit:

- i. Deselect the Red Hat JBoss Developer Studio and OpenJDK. You must deselect JBoss Developer Studio before its dependency (OpenJDK) is available to select.
- ii. Click **Download & Install** to continue.

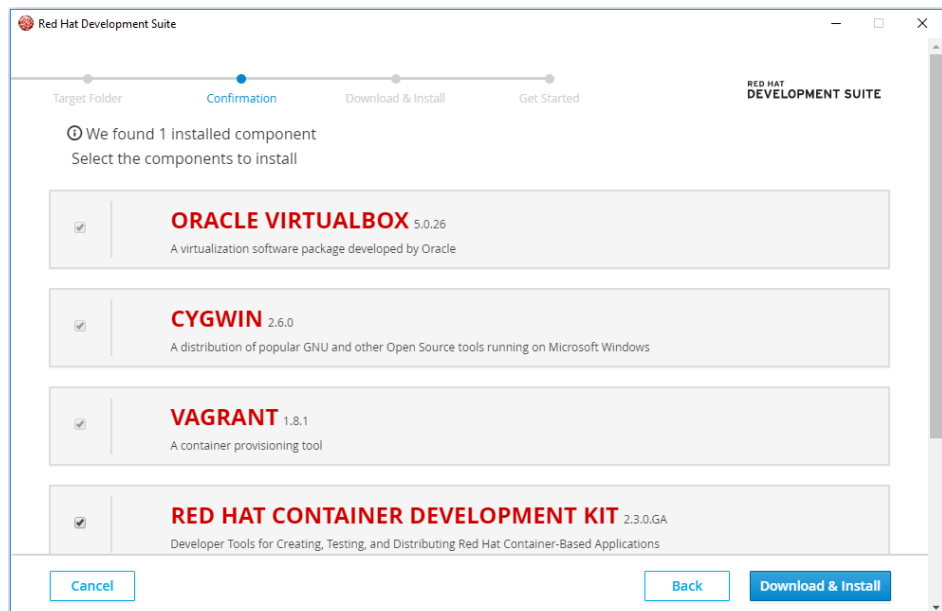
c. To only install JBoss Developer Studio:

- i. Deselect the Red Hat Container Development Kit, Vagrant, Cygwin, and Oracle Virtualbox options. You must deselect the Container Development Kit option before its dependencies are available to select.
- ii. Click **Download & Install** to continue.

d. To only install any of the dependencies (Oracle Virtualbox, Cygwin, Vagrant, OpenJDK):

- i. Deselect the Red Hat Container Development Kit and JBoss Developer Studio options.
- ii. Select and deselect any of the other components as desired.
- iii. Click **Download & Install** to continue.

Figure 4.3. Download and Install the Components



6. The Online installer then downloads the selected components and installs it. This process involves large file downloads and can take some time to complete. The Bundled installer includes the components and directly installs them.
7. When complete, Red Hat Development Suite indicates that the download and install were successful and provides a link to the Red Hat Container Development Kit Getting Started page. Depending on what you want to do next, you can either:
 - a. Click the **Open Red Hat JBoss Developer Studio** button to start using the Red Hat Container Development Kit Server Adapter.
 - b. Visit <http://developers.redhat.com/products/cdk/get-started/> to learn about using Red Hat Container Development Kit.
8. To run Red Hat Development Suite, click the **Open Red Hat JBoss Developer Studio** button:
 - a. Set up a workspace folder, as prompted.
 - b. Click the **Servers** tab to view the configured Red Hat Container Development Kit server adapter.
 - c. Right-click the server and select **Start** to initiate the Red Hat Container Development Kit server.
 - d. When prompted, enter your Red Hat Customer Portal credentials and click **OK**. The **Console** tab displays the details of the Red Hat Container Development Kit server.
 - e. When prompted, read the details of the new SSL certificate for OpenShift and click **Yes** to accept it.
 - f. Click the **OpenShift Explorer** tab to view the new OpenShift server and sample project.

CHAPTER 5. NEXT STEPS

After installing Red Hat Development Suite, see the **Automatic Installation and Configuration** section in [Developing Using Containers and the Cloud](#).

CHAPTER 6. UPGRADING RED HAT DEVELOPMENT SUITE

There is no current path to upgrade from Red Hat Development Suite 1.1 to 1.2. To use version 1.2, uninstall Red Hat Development Suite 1.1 and then install Red Hat Development Suite 1.2.

Note the following considerations when uninstalling to upgrade to the newer version of Red Hat Development Suite:

- ✦ If a Vagrant version older than 1.8.1 is installed, manually uninstall this component before you upgrade.
- ✦ For VirtualBox only version 5.0.26 or newer within the 5.0.x stream is supported. For example, the installation does not work with version 5.1. If a VirtualBox version older than 5.0.26 or version 5.1.x is installed, manually uninstall this component before you upgrade.
- ✦ Both the Online and Bundled Red Hat Development Suite installers require a manual uninstall and then a fresh installation with the new version of the installer.

CHAPTER 7. TROUBLESHOOTING

To troubleshoot a general installation failure, see the contents of the **installer.log** file. The installer log file is automatically created in the installation target directory. Depending on when the installation failed, the directory can contain additional log files for Vagrant and VirtualBox.

7.1. USERNAME SPACE ERROR

If your Windows username includes a space, an error appears:

+ image::space_error.png[Error due to Space in Installation Path for Vagrant]

+ To resolve the issue: . In the **Control Panel**, type **Environment variables** in the search box and click on the **Environment Variable** option in the search results. . In the **User variables for \$YourUsername** section, select **New...** . Create a new variable with the name **VAGRANT_HOME** and set the value to a valid path. . Click **OK** to exit the **Environment Variables** options and restart the installer.

7.2. CYGWIN DETECTION ISSUE

When detecting components, Red Hat Development Suite assumes that the **cygwin/bin** folder is added to the **PATH** environment variable. The Cygwin detection process determines whether Cygwin and its dependencies, OpenSSH and rsync, are installed because Red Hat Container Development Kit requires OpenSSH for **ssh-fs** and Red Hat JBoss Developer Studio's **ocrsync** uses rsync.

If Red Hat Development Suite detects Cygwin, OpenSSH, and rsync, the Cygwin component is marked as detected and skipped during installation. Manually select Cygwin to override this and reinstall all three components, if required. If any of the three components are not found, Cygwin and the two dependencies are installed.

7.3. TERMS AND CONDITIONS ERROR

Error: "Terms and Conditions for CDK have not been signed" This error appears on the **Log In** page when installing Red Hat Development Suite. The workaround for this issue is to log into <http://developers.redhat.com> and download Red Hat Container Development Kit. This triggers all the required Terms and Conditions approvals (if any are needed).

If you do not have a Red Hat account, create a new account at <http://developers.redhat.com/>. After signing up for a Red Hat Developers account, you must wait approximately fifteen minutes to allow the new account information to propagate to the Red Hat Subscription Management system.

7.4. BROWSERSIM DOES NOT WORK AFTER INSTALLING RED HAT DEVELOPMENT SUITE

Red Hat JBoss Developer Studio installs OpenJDK 8. BrowserSim requires JavaFX which is not yet available in OpenJDK. As a result, when Red Hat JBoss Developer Studio is used, BrowserSim does not work. As a workaround for this issue, Red Hat recommends installing and using Oracle Java for BrowserSim instead. For further information, see <http://tools.jboss.org/documentation/faq/browsersim.html#general-browsersim>

7.5. OPENSIFT CONSOLE INACCESSIBLE ON MICROSOFT EDGE BROWSER

The OpenShift Console web address does not work on Microsoft's Edge Browser. This is a known issue, and the only workaround is to use a different browser to access the console.

7.6. RED HAT DEVELOPMENT SUITE INSTALLER BEHIND A PROXY SERVER

Red Hat Development Suite Installer can work behind a proxy server by defining environment variables in the following ways:

- ✦ For none authentication proxy server, set **HTTPS_PROXY** to **http(s)://proxyhost:port**
- ✦ For authentication proxy server, set **HTTPS_PROXY** to **http(s)://username:password@proxyhost:port**

If your username or password has the character @ in it, replace @ with %40. For example, **http(s)://usern@me:p@ssword@192.168.0.47:3128** will change to **http(s)://usern%40me:p%40ssword@192.168.0.47:3128**.

7.7. REPORTING AN ISSUE

If you encounter issues other than the ones listed in this section, log an issue at <https://issues.jboss.org/projects/JBDS/summary> under the **Installer** component in the **Red Hat JBoss Developer Studio (devstudio)** project.

CHAPTER 8. UNINSTALLING RED HAT DEVELOPMENT SUITE

8.1. UNINSTALLING RED HAT DEVELOPMENT SUITE ON WINDOWS

On Windows, Red Hat Development Suite includes a new Powershell-based uninstaller in the product's installation directory (**`${target-folder}\uninstaller\uninstall.ps1`**).



Note

Installing Red Hat Development Suite creates an **Uninstall Developer Studio** option in Windows. This uninstaller only removes JBoss Developer Studio, and not any additional components installed for Red Hat Development Suite. Use the following instructions to completely remove all Red Hat Development Suite components from your machine.

The uninstall script removes everything installed into the installation target directory. As a result, previously installed components detected during the installation are not affected.

The uninstaller runs corresponding MSI uninstallers for Vagrant, VirtualBox, and OpenJDK. It also cleans up the **PATH** variables and removes the **`${target-folder}`** folder.

To uninstall Red Hat Development Suite, run the script in one of two ways:

- ✳ use the command prompt (**cmd**) to run the file.
- ✳ use the Powershell with the following command:

```
powershell -ExecutionPolicy bypass -File ${target-  
folder}\uninstaller\uninstall.ps1
```



Note

Do not run the uninstall script from within **`${target-folder}`** or run the **ps1** file from the context menu. This results in locking the **`${target-folder}\uninstaller`** folder and the powershell script is not removed after the uninstall process completes.

CHAPTER 9. UNINSTALLING RED HAT DEVELOPMENT SUITE ON MACOS

For macOS users, uninstall Red Hat Development Suite as follows:

1. Manually delete the installation folder for your Red Hat Development Suite installation.
2. Follow the uninstall instructions for each of the individual components for macOS to remove them manually.