



Red Hat Development Suite 1.4 Installation Guide

Installing Red Hat Development Suite

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Team

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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.

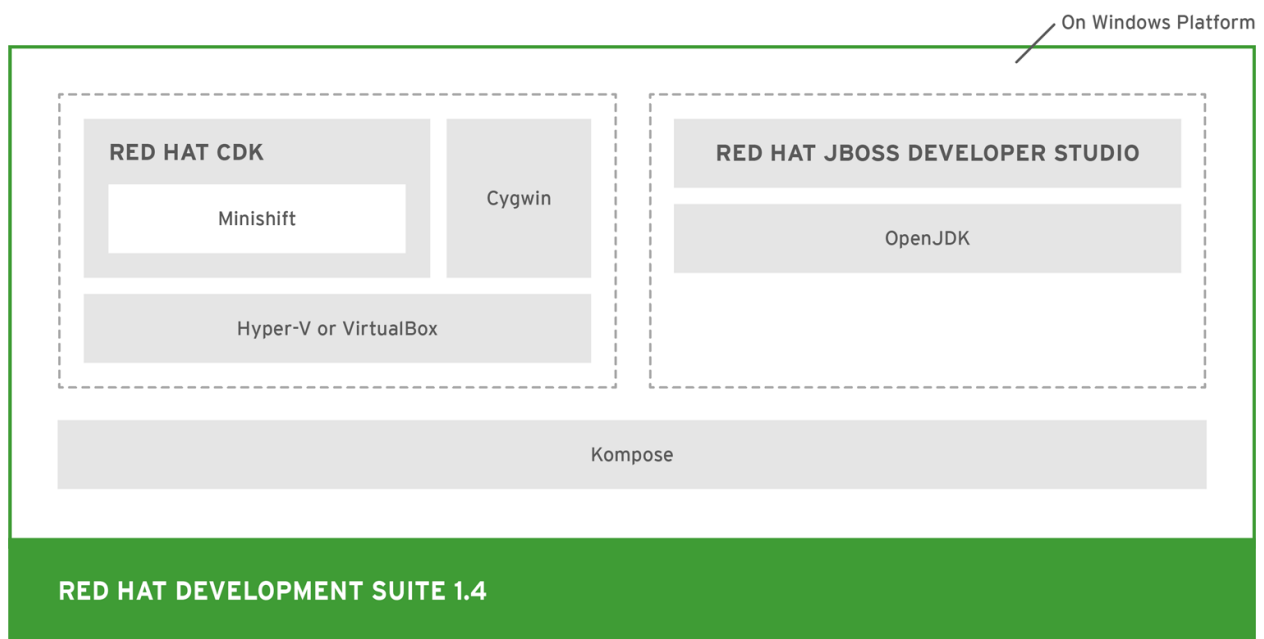
CHAPTER 1. RED HAT DEVELOPMENT SUITE SUPPORT INFORMATION

Red Hat Development Suite 1.4 includes products such as Red Hat JBoss Developer Studio 10.4 and Red Hat Container Development Kit 3.0, as well as some dependencies for each of these products. Red Hat Development Suite 1.4 also includes Kompose. One or more of the products that Red Hat Development Suite installs may have a separate Red Hat subscription.

Support information for Red Hat Development Suite 1.4 is as follows:

- ✦ Both the Online and Bundled installers are supported for Windows 7, 8, and 10.
- ✦ Both the Online and Bundled installers are supported for macOS. These installers run on macOS 10.9 or newer.
- ✦ Supported for Red Hat Enterprise Linux 7 using the standard package management system as a Technology Preview feature. For more information on Technology Preview features support scope, see [Technology Preview Features Support Scope](#).

Figure 1.1. Red Hat Development Suite 1.4



DEVELOPMENTSUITE_443452_017

CHAPTER 2. RED HAT DEVELOPMENT SUITE COMPONENT DETAILS

Table 2.1 Component Details shows a list based on platforms of the Red Hat Development Suite 1.4 components along with their dependencies. On Windows, Red Hat Container Development Kit 3.0 can use either Hyper-V or VirtualBox as the hypervisor. Red Hat Development Suite 1.4 will automatically use Hyper-V with CDK if Hyper-V is already enabled. If Hyper-V is not enabled, Red Hat Development Suite 1.4 will allow the user to enable either Hyper-V or install VirtualBox.

Table 2.1. Component Details

Windows	macOS	Red Hat Enterprise Linux
Red Hat JBoss Developer Studio 10.4	Red Hat JBoss Developer Studio 10.4	Red Hat JBoss Developer Studio 10.4
OpenJDK 1.8.0_131	Oracle Java SE	
Red Hat Container Development Kit 3.0	Red Hat Container Development Kit 3.0	Red Hat Container Development Kit 3.0
Hyper-V, VirtualBox 5.1.22	VirtualBox 5.1.22	KVM
Kompose 0.6.0	Kompose 0.6.0	
Cygwin 2.8.0		



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 [VirtualBox Manual](#) for details.

Hyper-V is available on 64-bit versions of Windows Professional, Enterprise, and Education in Windows 8 and later. It is not available on Windows Home edition. See [Hyper-V Manual](#) for details.

Red Hat Development Suite uses the **PATH** environment variable to detect existing installations of OpenJDK, Cygwin, VirtualBox, and Kompose. Red Hat Development Suite does not detect existing installation of Kompose. Visit [Kompose](#) for details on Kompose.

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 version, the installer will notify the user that an older unsupported version is installed. The user can uninstall the unsupported version without exiting the installer. Once the installer detects the supported version, the user can continue with the installation.

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 1.4 includes the following installation options:

✦ Windows-only Installers

- An Installer that has an initial download of approximately 1 GB and includes all Red Hat products, OpenJDK, and Cygwin for installation. VirtualBox and Kompose are not included in the installer and have to be downloaded during the installation time.
- An Online Installer that is a 60 MB download and downloads the required components during the installation process.

✦ macOS-only Installers

- An Installer that has an initial download of approximately 1 GB and includes all Red Hat products, OpenJDK and Cygwin for installation. VirtualBox and Kompose are not included in the installer and have to be downloaded during the installation time.
- An Online Installer that is a 60 MB download and downloads the required components during the installation process.

✦ Red Hat Enterprise Linux (Technology Preview)

- Red Hat Enterprise Linux uses RPM packages to install Red Hat Container Development Kit and Red Hat JBoss Developer Studio.

4.2. INSTALLATION PREREQUISITES

4.2.1. General Prerequisites

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

- ✦ **Sign Up for the Red Hat Developer Program:** Join the program here: [Red Hat Developer Program](#). After signing up, you must wait approximately fifteen minutes to allow the new account information to propagate to the Red Hat Subscription Management system.
- ✦ **(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. Microsoft Windows Prerequisites

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

- ✳ **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. 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 :

- ✳ **Ensure that you are logged in as a user that has permission to administer the computer .** Red Hat Development Suite adds drivers and changes environment variables and therefore requires administrator permissions.
- ✳ **Ensure that Java SE 1.8.0 is installed:** Download and install Java SE 1.8.0 Build 111 from the Oracle website: [Java Download](#).
- ✳ **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.

4.2.4. Red Hat Enterprise Linux Prerequisites

Ensure that the following prerequisites are met on Red Hat Enterprise Linux:

- ✳ Enable the **rhel-server-rhsc1-7-rpms** repository on Red Hat Enterprise Linux Server and **rhel-workstation-rhsc1-7-rpms** repository on Red Hat Enterprise Linux workstation. Run the following command in order to enable the repository on Red Hat Enterprise Linux Server:

```
subscription-manager repos --enable rhel-server-rhsc1-7-rpms
```

Run the following command in order to enable the repository on Red Hat Enterprise Linux Workstation:

```
subscription-manager repos --enable rhel-workstation-rhsc1-7-rpms
```

For more information on enabling the repository, see [Getting Access to Red Hat Software Collections](#).

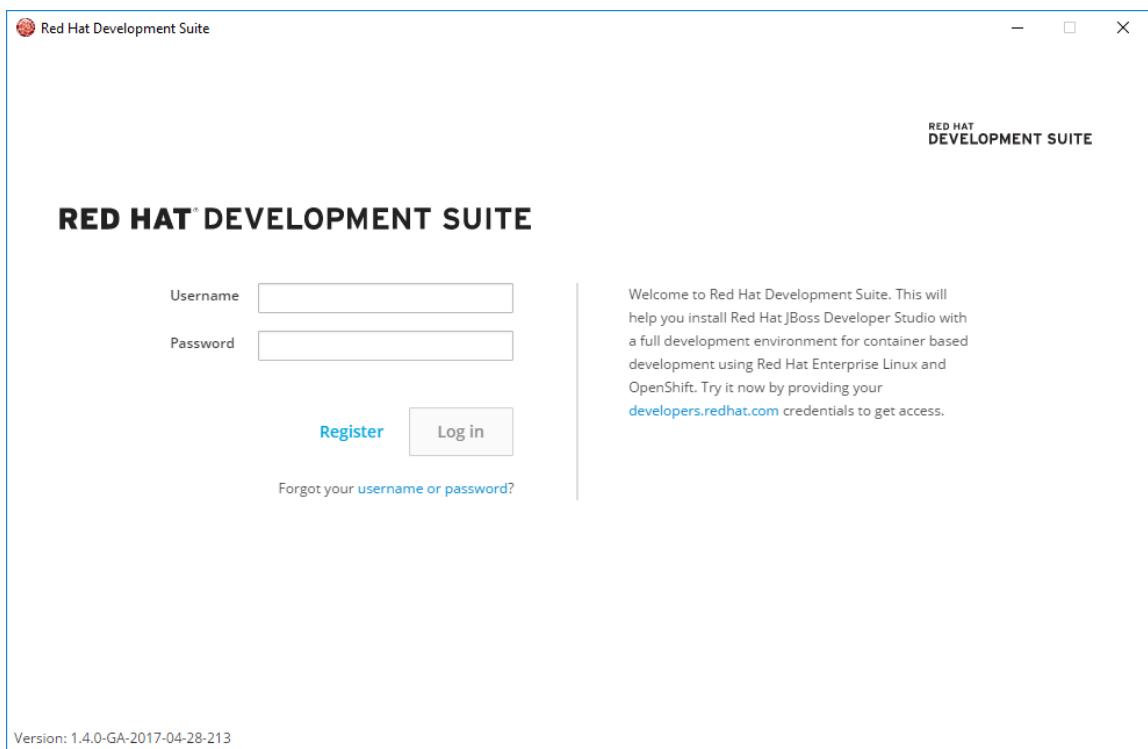
4.3. INSTALLING RED HAT DEVELOPMENT SUITE

4.3.1. Installing Red Hat Development Suite on Microsoft Windows and macOS

To install Red Hat Development Suite:

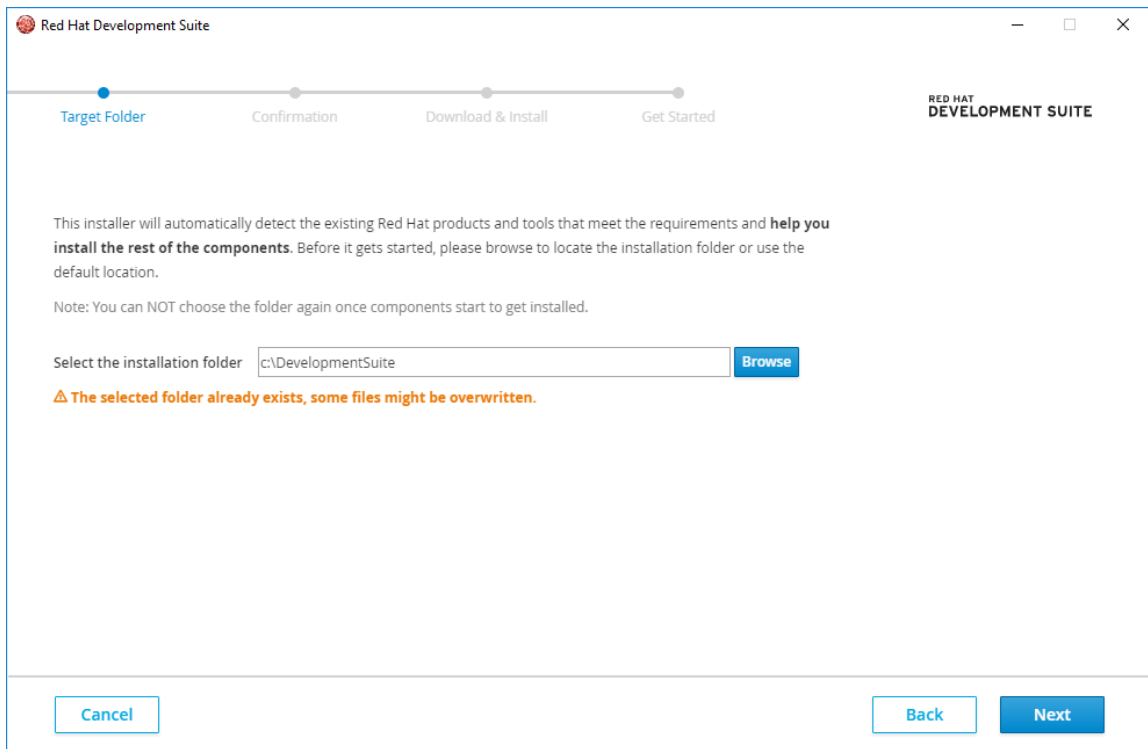
1. Log in and download Red Hat Development Suite from the Red Hat Developers Portal product download page at [Red Hat Developers Download](#). Please note that macOS installers need to be unzipped before the next step. If using the Safari browser to download, the macOS installer is automatically unzipped.
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



4. 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 **/Applications/DevelopmentSuite**.

Figure 4.2. Set the Target Directory



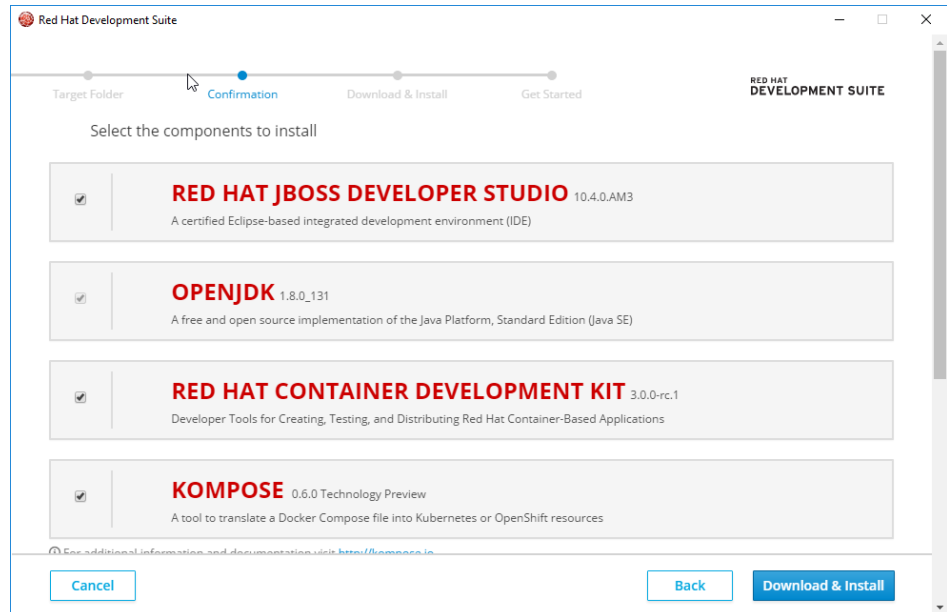
If your Windows user has a space in the username, for example, **Example User**, the installer displays an error. See [Section 6.1, “Terms and Conditions Error”](#) for troubleshooting information for this error.

5. 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, the user can uninstall the older version of the component without exiting the installer. Red Hat Development Suite detects when the older version of the component is uninstalled.

- a. **To Install Red Hat Development Suite:**

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

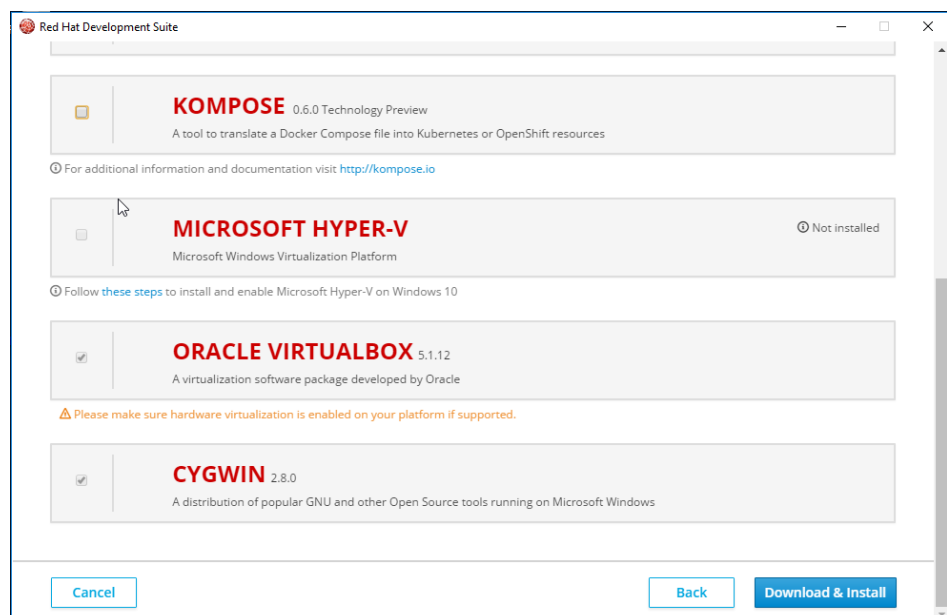
Figure 4.3. Download and install all components



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. Deselect Kompose.
- iii. For Windows only: Enable Hyper-V or proceed with selected component VirtualBox. If user chooses to enable Hyper-V, a reboot is required and then restart Red Hat Development Suite. Once Red Hat Development Suite detects that Hyper-V is enabled, VirtualBox is removed from the component list.
- iv. Click **Download & Install** to continue.

Figure 4.4. Enable Hyper-V



c. To only install JBoss Developer Studio:

- i. Deselect the Red Hat Container Development Kit, Cygwin, and VirtualBox options. You must deselect the Container Development Kit option before its dependencies are available to select.
 - ii. Deselect Kompose.
 - iii. Click **Download & Install** to continue.
 - d. **To only install any of the tools (VirtualBox, Cygwin, Kompose, 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.
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 [Red Hat Container Development Kit](#) to learn about using Red Hat Container Development Kit.
 - c. For Windows only: if Hyper-V is enabled, the user must log off and log in again in order to run CDK without administrative privileges.
 - d. Start a local OpenShift cluster with minishift:

```
minishift start --cpus 3 --disk-size 20g
```

Visit [Minishift](#) to learn about using minishift.
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.

4.3.2. Installing Red Hat Development Suite on Red Hat Enterprise Linux

Red Hat Development Suite includes the following packages:

- ✦ **rh-devsuite** - all tools integrated together
- ✦ **rh-eclipse46-devstudio** - Red Hat JBoss Developer Studio 10.4
- ✦ **cdk-minishift** - Red Hat Container Development Kit 3.0
- ✦ **docker-machine-kvm** - Red Hat Container Development Kit minishift kvm driver

To install Red Hat Development Suite using the RPM package:

1. As **root**, create the `etc/yum/repos.d/rh-devsuite.repo` file and add the following content:

```
[rh-devsuite]
name=Red Hat Developemnt Suite RPMs
baseurl=file://opt/rh-devsuite-repo/
gpgkey=https://www.redhat.com/security/data/a5787476.txt
enabled=1
gpgcheck=1
```

2. To install Red Hat Development Suite with all components, run the following command:

```
# yum -y install rh-devsuite
```

3. To only install Red Hat JBoss Developer Studio, run the following command:

```
# yum install rh-eclipse46-devstudio
```

4. To only install Red Hat Container Development Kit, run the following command:

```
# yum install cdk-minishift
```

To setup Red Hat Container Development Kit, enter the following commands:

1. Create a symbolic link for minishift:

```
sudo ln -s /var/lib/cdk-minishift-3.0.0/minishift
/usr/bin/minishift
```

2. Install required CDK components:

```
minishift setup-cdk --force --default-vm-driver="kvm"
```

3. Create a symbolic link:

```
sudo ln -s /home/$(whoami)/.minishift/cache/oc/v3.5.5.8/oc
/usr/bin/oc
```

Visit [Minishift](#) to learn about using minishift.

To run Red Hat JBoss Developer Studio:

1. Use **Applications** → **Programming** → **Red Hat Eclipse 4.6** launcher.

CHAPTER 5. UPGRADING RED HAT DEVELOPMENT SUITE

There is no current path to upgrade from Red Hat Development Suite 1.3 to 1.4. To use version 1.4, uninstall Red Hat Development Suite 1.3 and then install Red Hat Development Suite 1.4.

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

- ✦ Only VirtualBox version 5.1.22 is supported. If a VirtualBox version older than 5.1.22 is installed, manually uninstall this component before upgrading to new version.
- ✦ 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 6. 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 VirtualBox and OpenJDK.

6.1. 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 [Red Hat Developers Program](#) and download Red Hat Container Development Kit. This triggers all the required Terms and Conditions approvals (if any are needed).

A user who wants to download and use Red Hat Container Development Kit must become a member of the Red Hat Developer Program. Sign up for the program here: [Red Hat Developers Program](#).

6.2. 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.

6.3. REPORTING AN ISSUE

If you encounter issues other than the ones listed in this section, log an issue at [JBoss Developer](#) under the **platform-installer** component in the **Red Hat JBoss Developer Studio (devstudio)** project.

CHAPTER 7. UNINSTALLING RED HAT DEVELOPMENT SUITE

7.1. UNINSTALLING RED HAT DEVELOPMENT SUITE ON MICROSOFT WINDOWS

On Microsoft 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 Microsoft 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 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:

1. Use the command prompt (**cmd**) to run the file.
 - a. 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.

2. Use the Run with Powershell menu item:
 - a. Navigate to:

```
    ${target - folder}\uninstaller\uninstall.ps1
```
 - b. Highlight `uninstall.ps1` and Right-Click
 - c. Select 'Run with Powershell'

7.2. 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.

7.3. UNINSTALLING RED HAT DEVELOPMENT SUITE ON RED HAT ENTERPRISE LINUX

For Red Hat Enterprise Linux users, uninstall Red Hat Development Suite as follows:

1. For Red Hat Development Suite:

```
sudo yum autoremove rh-devsuite
```