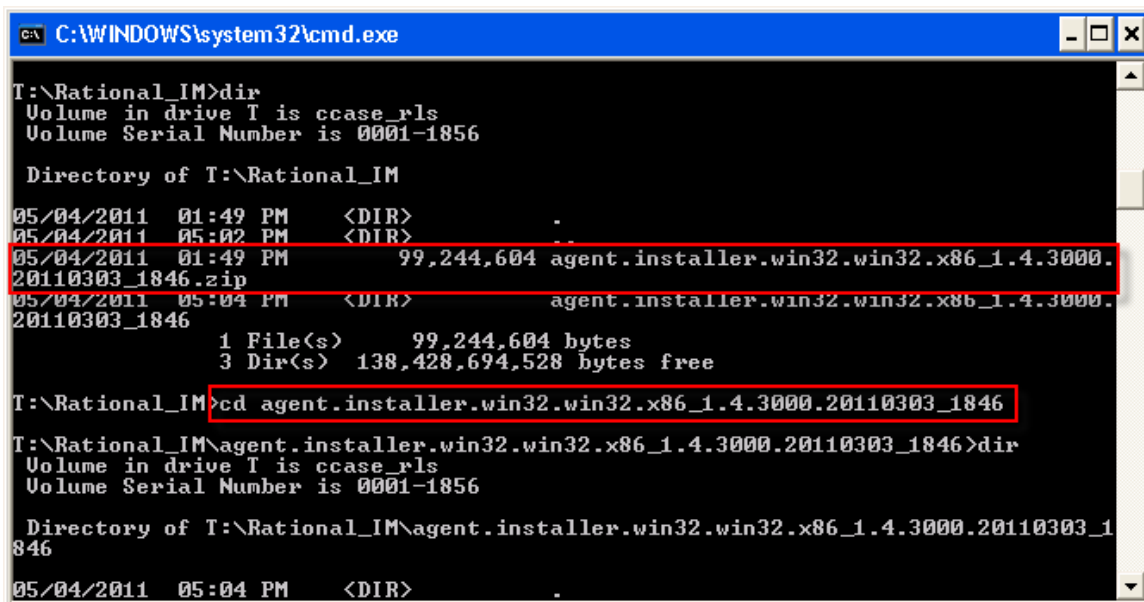# Installing Rational Tools Using Response Files

By

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In a previous technical discussion, we had a look at creating installation repositories using IBM Packaging Utility. After creating a repository, we then used IBM Installation Manager to install from the newly created repository. This is all well and good, but during the course of installation, it was necessary to answer a great many queries, which took much time. If we multiply this by even a small number of installs, this method of installation would be tedious and error prone. Isn't there some way to automate the Rational tools installation process?

The answer is yes! IBM provides something called response files for Installation Manager which can record any given installation scenario and preserve all steps and query responses which can then be used to drive any number of subsequent installs. The first step of this kind of installation methodology will be to install Installation Manager on the target machine.

The first thing to do is to download the current version of Installation Manager. In the first red rectangle below, we can see the zip file for the version we have found and downloaded; it is version 1.4.3. We have unzipped the archive and changed into the directory created – see the second red rectangle in the screenshot below.

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The next screenshot is a continuation of the previous one. In it, we can see all the files contained in the Installation Manager zip archive. The executable *installc.exe* is the one to be used on Windows to install Installation Manager. Launching the command also makes use of the *silent-install.ini* initialization file. This *silent-install.ini* file contains default command-line arguments for *installc.exe*. We run the command: *"install –launcher.ini silent-install.ini"* as shown below.

```
C:\WINDOWS\system32\cmd.exe                                              _ □ ×
                       1 File(s)      99,244,604 bytes
                       3 Dir(s)  138,428,694,528 bytes free

T:\Rational_IM>cd agent.installer.win32.win32.x86_1.4.3000.20110303_1846

T:\Rational_IM\agent.installer.win32.win32.x86_1.4.3000.20110303_1846>dir
 Volume in drive T is ccase_rls
 Volume Serial Number is 0001-1856

 Directory of T:\Rational_IM\agent.installer.win32.win32.x86_1.4.3000.20110303_1
846

05/04/2011  05:04 PM    <DIR>          .
05/04/2011  01:49 PM    <DIR>          ..
05/04/2011  01:49 PM    <DIR>          Offerings
05/04/2011  05:04 PM    <DIR>          configuration
05/04/2011  01:49 PM    <DIR>          documentation
05/04/2011  01:49 PM    <DIR>          features
05/04/2011  01:49 PM    <DIR>          jre_5.0.4.sr11_20091106a
05/04/2011  01:50 PM    <DIR>          native
05/04/2011  01:51 PM    <DIR>          plugins
05/04/2011  01:51 PM    <DIR>          tools
05/04/2011  01:49 PM             2,433 consoleinst.bat
05/04/2011  01:49 PM         1,645,320 gdiplus.dll
05/04/2011  01:49 PM            58,608 install.exe
05/04/2011  01:49 PM               174 install.ini
05/04/2011  01:49 PM               274 install.xml
05/04/2011  01:49 PM            24,576 installc.exe
05/04/2011  01:49 PM               218 installc.ini
05/04/2011  01:51 PM             7,777 readme_1.4.3.html
05/04/2011  01:51 PM               174 repository.config
05/04/2011  01:51 PM             4,652 repository.xml
05/04/2011  01:51 PM               224 silent-install.ini
05/04/2011  01:51 PM               231 user-silent-install.ini
05/04/2011  01:51 PM            58,608 userinst.exe
05/04/2011  01:51 PM               178 userinst.ini
05/04/2011  01:51 PM            24,576 userinstc.exe
05/04/2011  01:51 PM               222 userinstc.ini
05/04/2011  03:57 PM    <DIR>          p2
              16 File(s)      1,828,245 bytes
              11 Dir(s)  138,428,694,528 bytes free

T:\Rational_IM\agent.installer.win32.win32.x86_1.4.3000.20110303_1846>installc -
-launcher.ini silent-install.ini

T:\Rational_IM\agent.installer.win32.win32.x86_1.4.3000.20110303_1846>
```
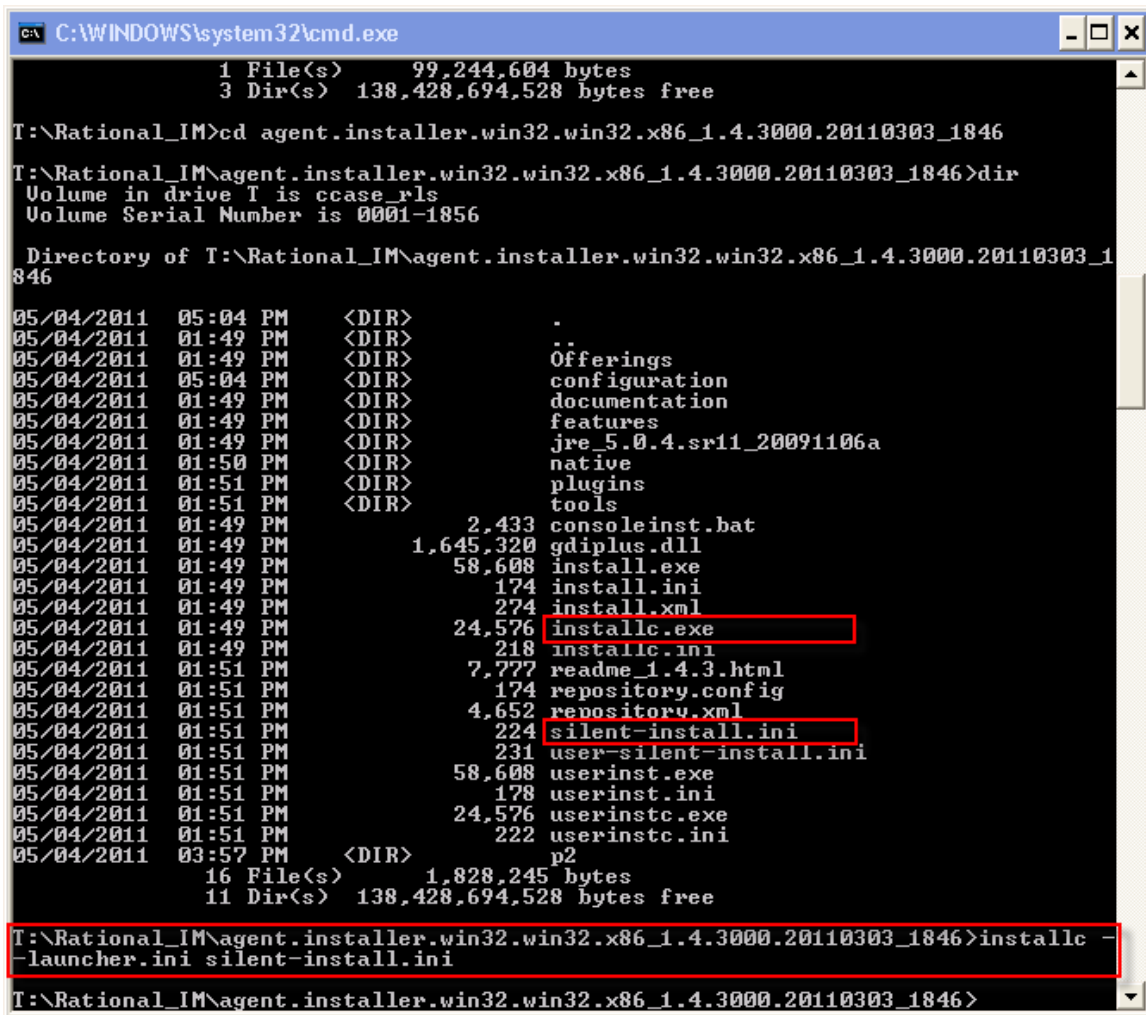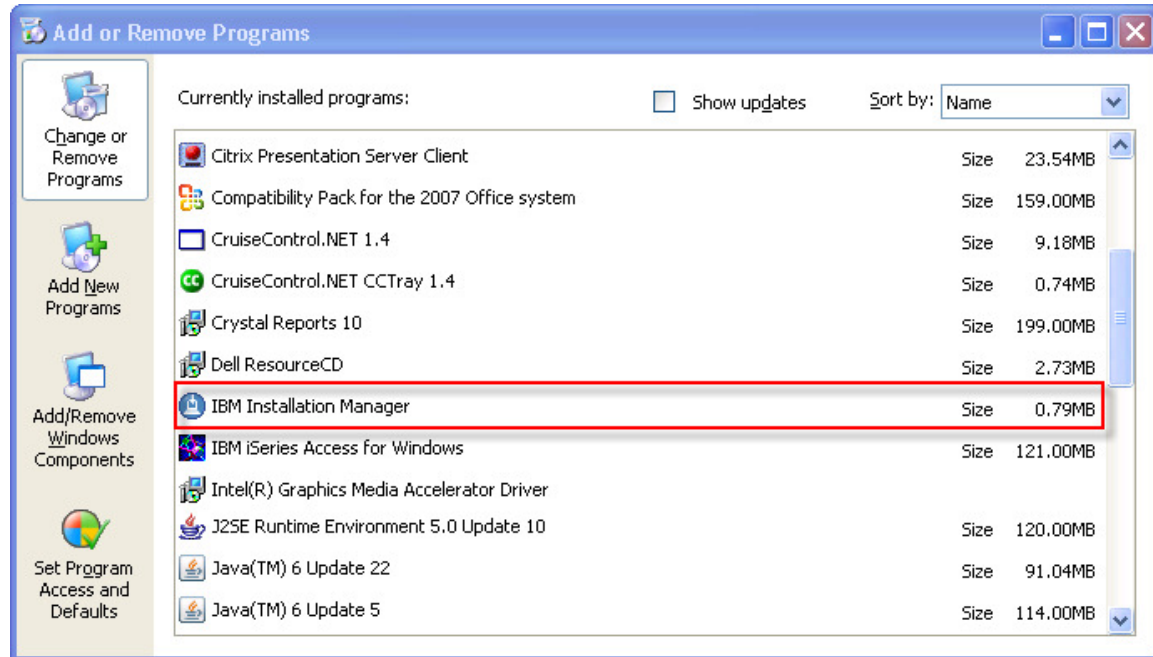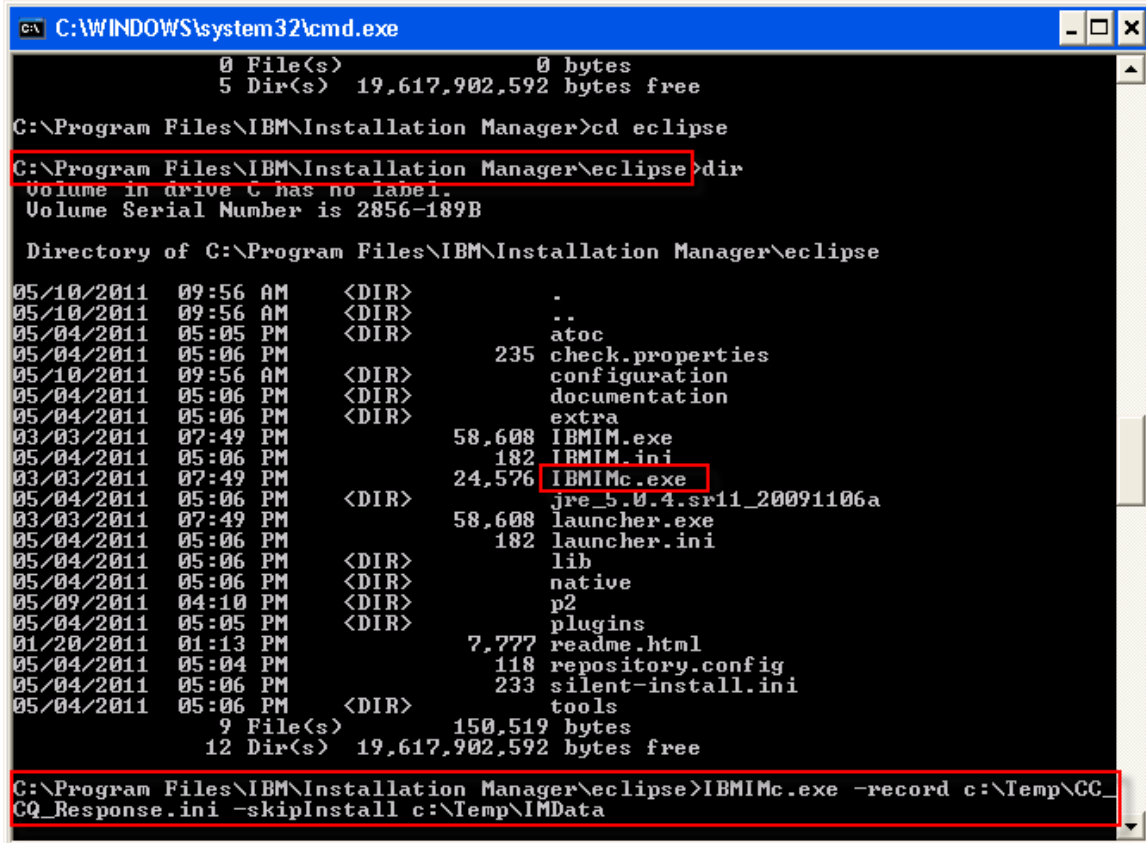
When the command has completed execution, Installation Manager will be fully installed on the machine. We can now see it listed in the Control Panel displayed in the screen-shot below.

Here the Add or Remove Programs control panel shows IBM Installation Manager as now installed on the machine. It can now be started from the Start -> All Programs menu if needed. However, for our purposes, we will want to do something different.

Our purpose is to use Installation Manager to create a response file which can then be replayed later to install a given product repository. To do this, we again use the Installation Manager line command. Let's take a look at the screen-shot below to see how this is done.

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```
                     0 File(s)              0 bytes
                     5 Dir(s)  19,617,902,592 bytes free

C:\Program Files\IBM\Installation Manager>cd eclipse

C:\Program Files\IBM\Installation Manager\eclipse>dir
 Volume in drive C has no label.
 Volume Serial Number is 2856-189B

 Directory of C:\Program Files\IBM\Installation Manager\eclipse

05/10/2011  09:56 AM    <DIR>          .
05/10/2011  09:56 AM    <DIR>          ..
05/04/2011  05:05 PM    <DIR>          atoc
05/04/2011  05:06 PM               235 check.properties
05/10/2011  09:56 AM    <DIR>          configuration
05/04/2011  05:06 PM    <DIR>          documentation
05/04/2011  05:06 PM    <DIR>          extra
03/03/2011  07:49 PM            58,608 IBMIM.exe
05/04/2011  05:06 PM               182 IBMIM.ini
03/03/2011  07:49 PM            24,576 IBMIMc.exe
05/04/2011  05:06 PM    <DIR>          jre_5.0.4.sr11_20091106a
03/03/2011  07:49 PM            58,608 launcher.exe
05/04/2011  05:06 PM               182 launcher.ini
05/04/2011  05:06 PM    <DIR>          lib
05/04/2011  05:06 PM    <DIR>          native
05/09/2011  04:10 PM    <DIR>          p2
05/04/2011  05:05 PM    <DIR>          plugins
01/20/2011  01:13 PM             7,777 readme.html
05/04/2011  05:04 PM               118 repository.config
05/04/2011  05:06 PM               233 silent-install.ini
05/04/2011  05:06 PM    <DIR>          tools
               9 File(s)        150,519 bytes
              12 Dir(s)  19,617,902,592 bytes free

C:\Program Files\IBM\Installation Manager\eclipse>IBMIMc.exe -record c:\Temp\CC_
CQ_Response.ini -skipInstall c:\Temp\IMData
```

In the above screen-shot, we have first changed into the install directory for Installation Manager, shown by the first red outline. The binary that we want to work with is *IBMIMc.exe*, which again is the version that is appropriate for Windows. The command syntax that we will use, "*IBMIMc.exe –record c:\Temp\CC_CQ_Response.ini –skipInstall c:\TempIMData*", will be explained.

The "*–record*" parameter instructs the command to create a response file (specified after the parameter), which will record the choices made during the course of the installation so they can be replayed in a subsequent installation.

The "*–skipInstall*" parameter causes the install to be run in a record-only mode. No actual install will be done when using *–skipInstall*, the only purpose being to create the response file which will be used for later actual installs. The directory supplied along with the parameter is a temporary installation registry which tracks the components installed. If multiple components are to be "installed" and have response files created, the same installation registry should be used for all of them.
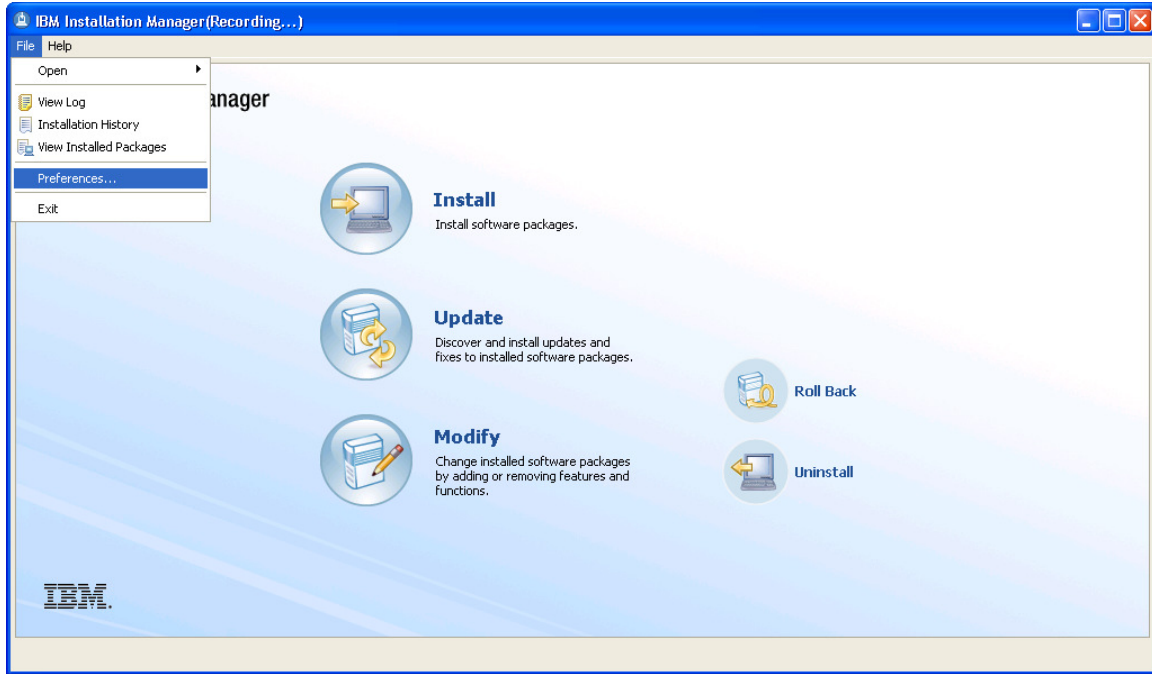
After launching Installation Manager by means of the line command, IM comes up and presents the following window to begin a product install. To begin, and thus record the results in a response file, we begin by setting the repository location that we want to install. Use the Preferences menu option as shown above.
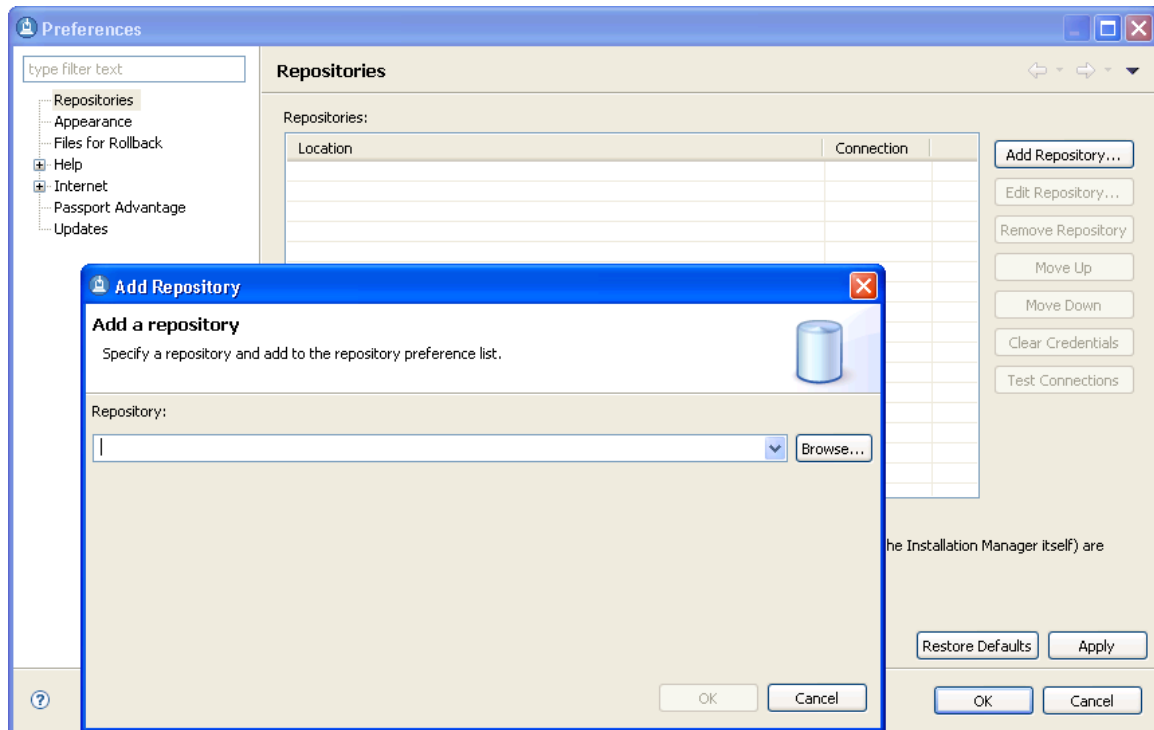
When the Preferences panel comes up, click on Add Repository to get the subsequent pop-up. The Browse button can be used to navigate to the location of an install repository, and select the *diskTag.inf* or *repository.config* file which describes that repository. The results of this can be seen in the next screenshot.
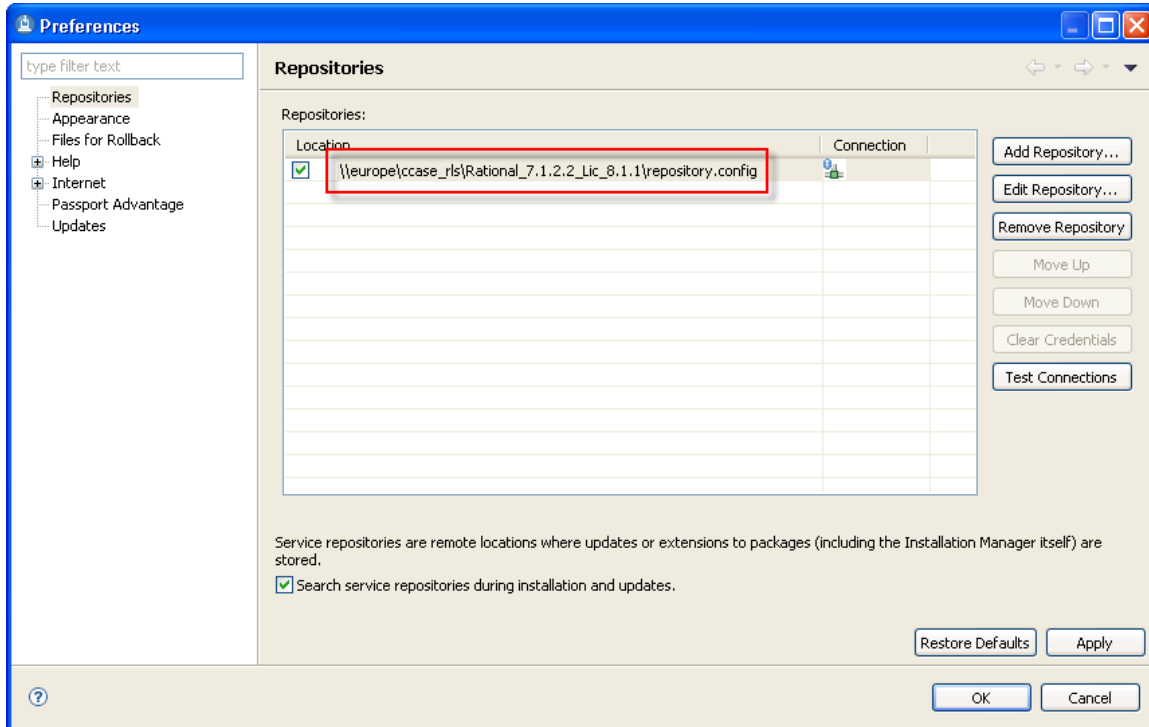
In the case shown above, we will be installing a repository that contains three components. These are ClearCase and ClearQuest 7.1.2.2, and Rational License Administrator 8.1.1. This creation of this multiple product repository was described in a prior blog post, which described the use of IBM Packaging Utility for this purpose. We are now continuing by using this pre-created repository and creating a response file to automatically install it.

Click OK to accept and retain the new repository. You are then returned to the main initial Installation Manager console. Click Install on the main IM console to be presented with the installation options for this particular repository package. As previously mentioned, this one contains three different software applications: Rational ClearCase, Rational ClearQuest, and the Rational License Key Administrator.
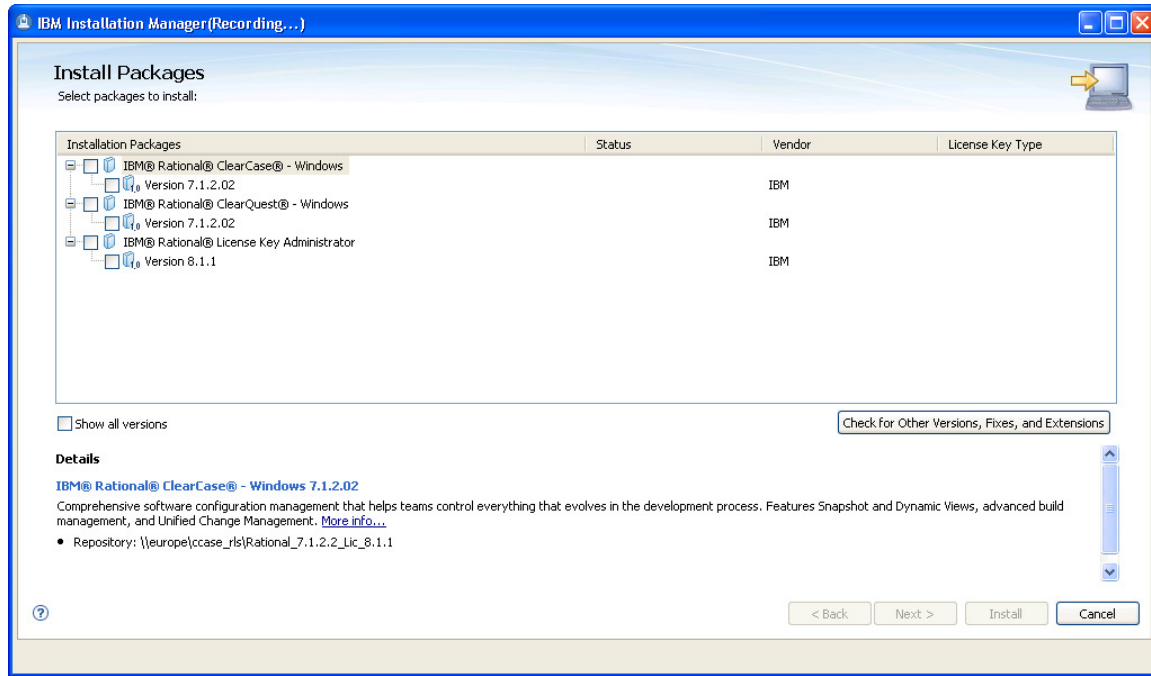
Above, we see the product packages included in the repository which will be installed.
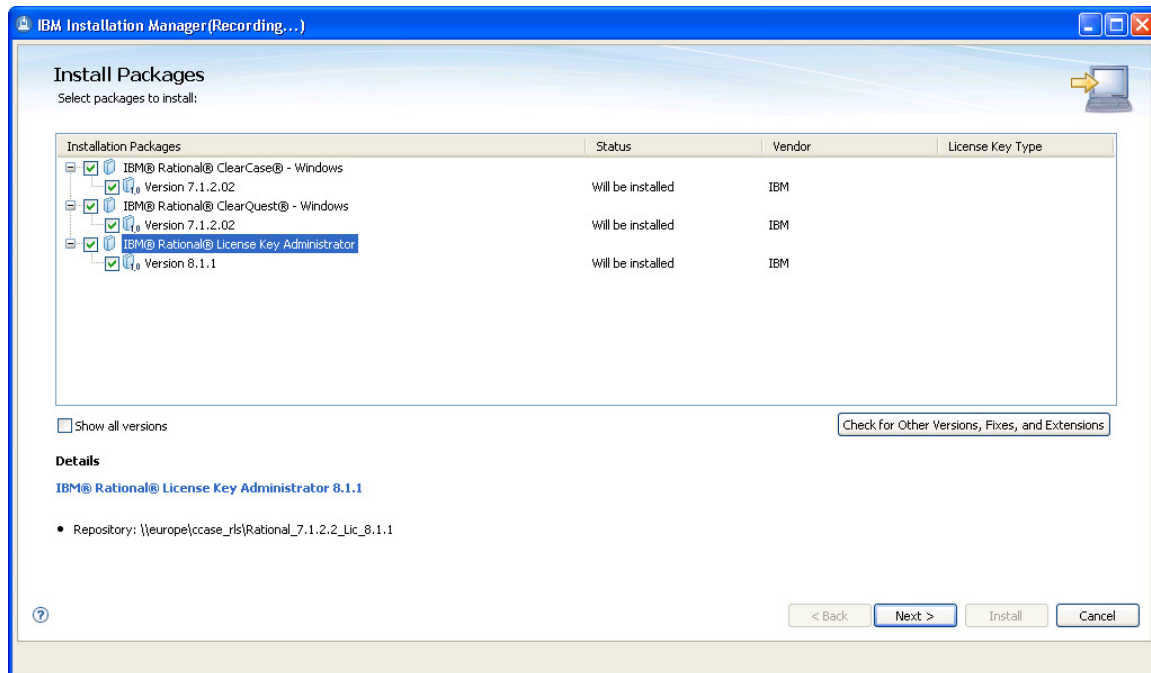
Check the products to be installed (in our case, all of them), and click Next.

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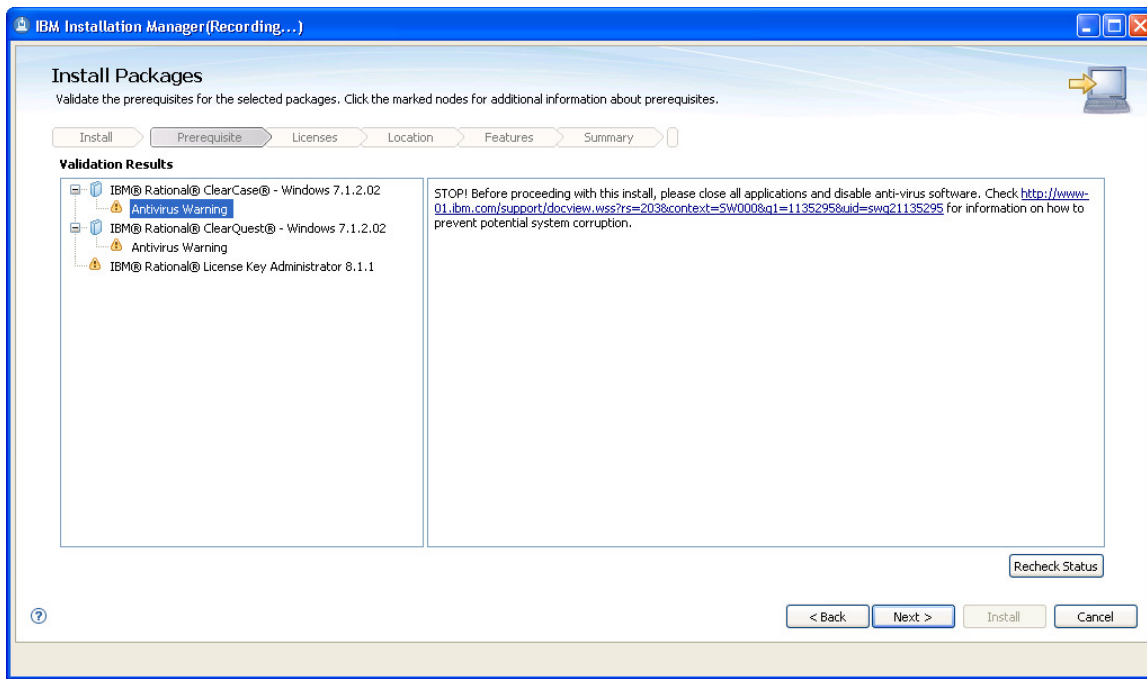
Deal with any conflicts, such as anti-virus software, and click Next to continue.
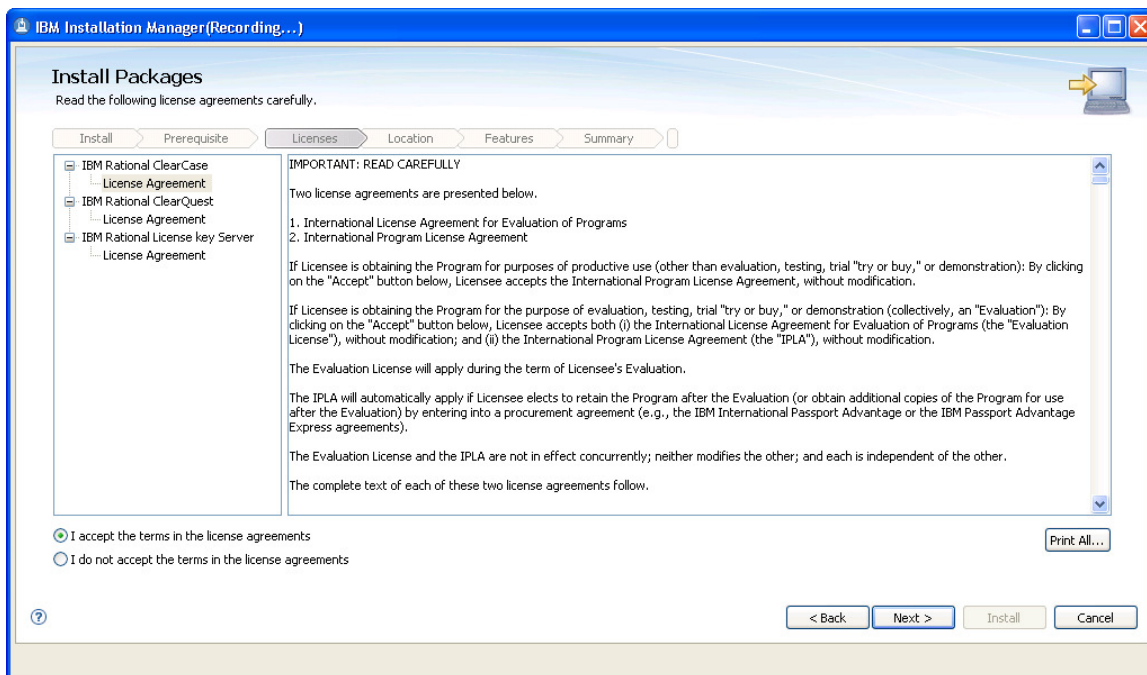
Accept the licensing agreements, and click Next to continue.
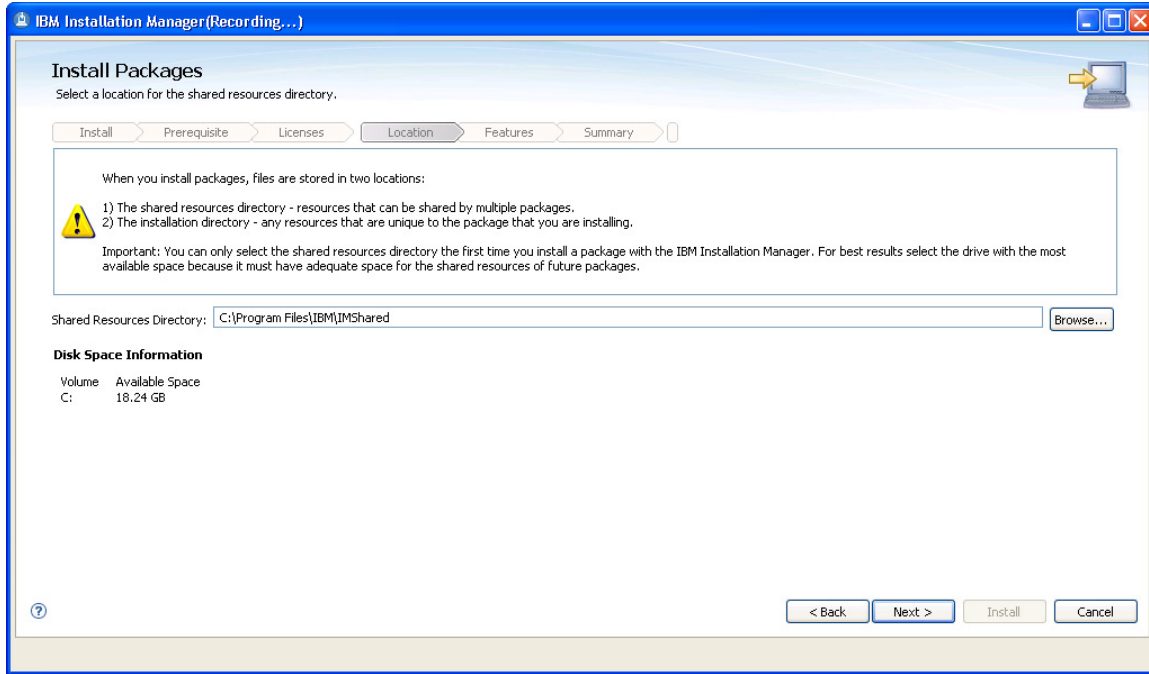
You probably should accept the default shared resources location. Click Next.
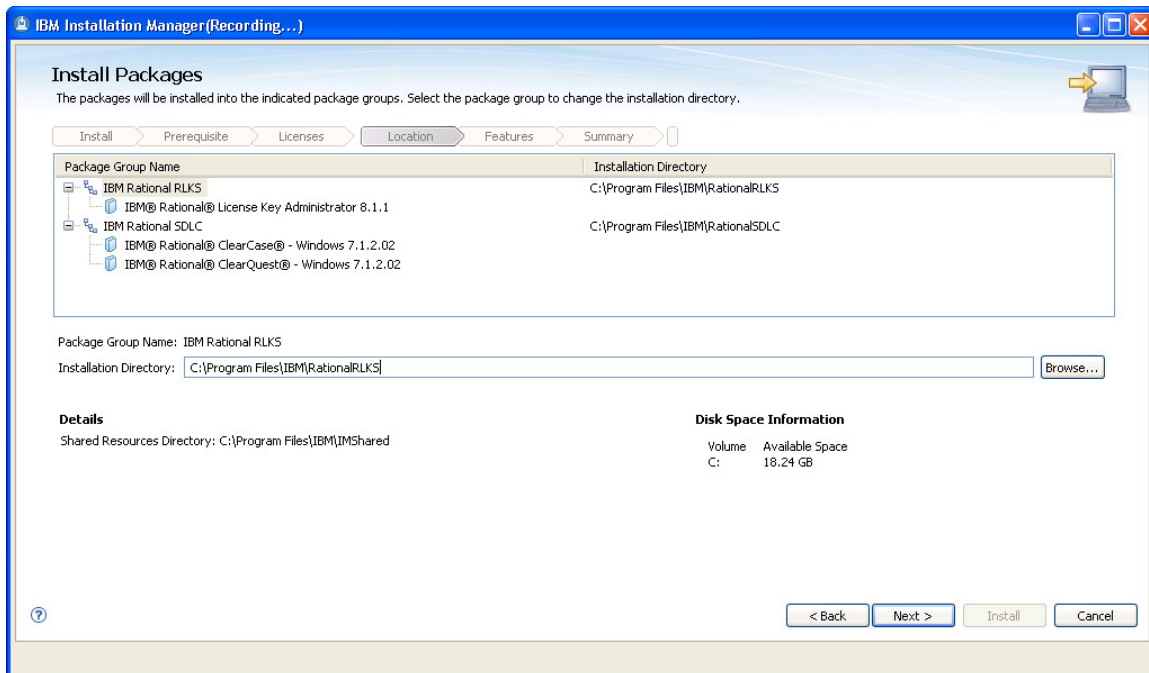
Click Next unless there is reason to do otherwise with the install locations.
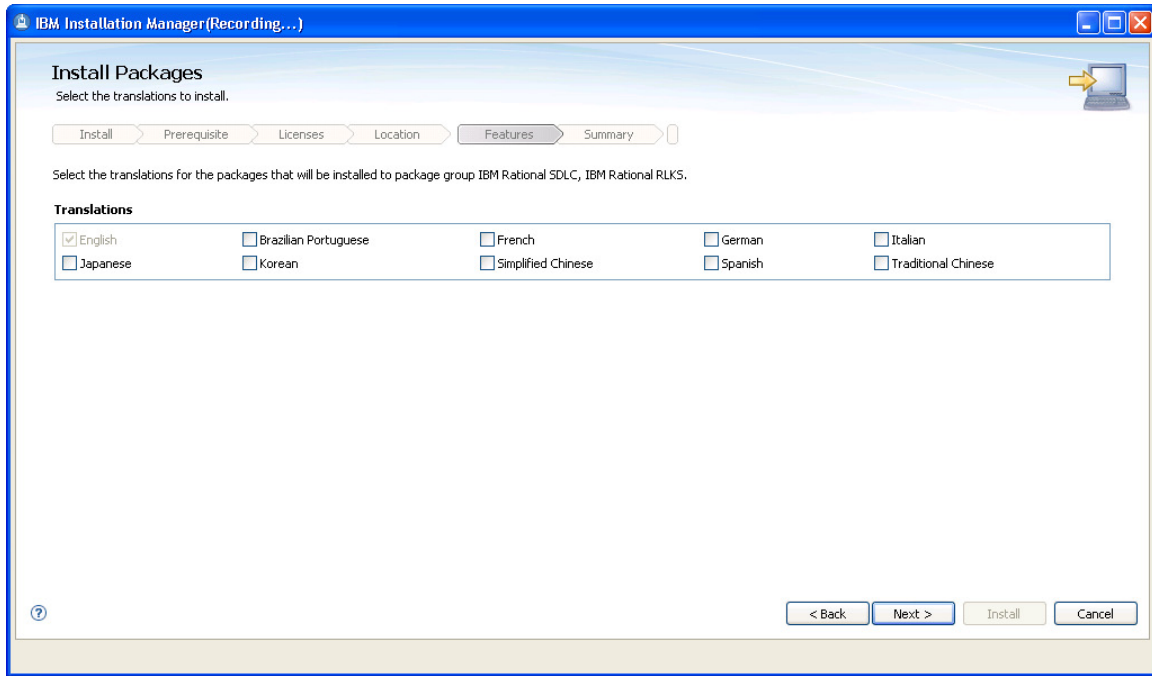
Click Next to accept English as the installation language.
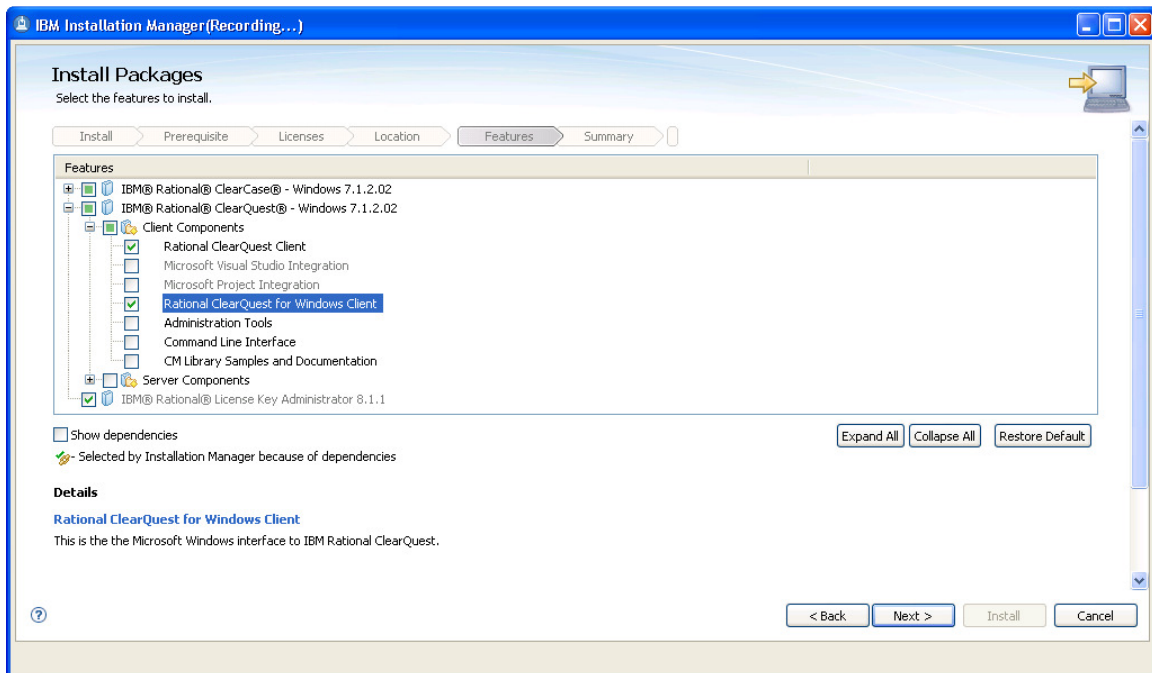
Make any needed adjustments to installation options and click Next.
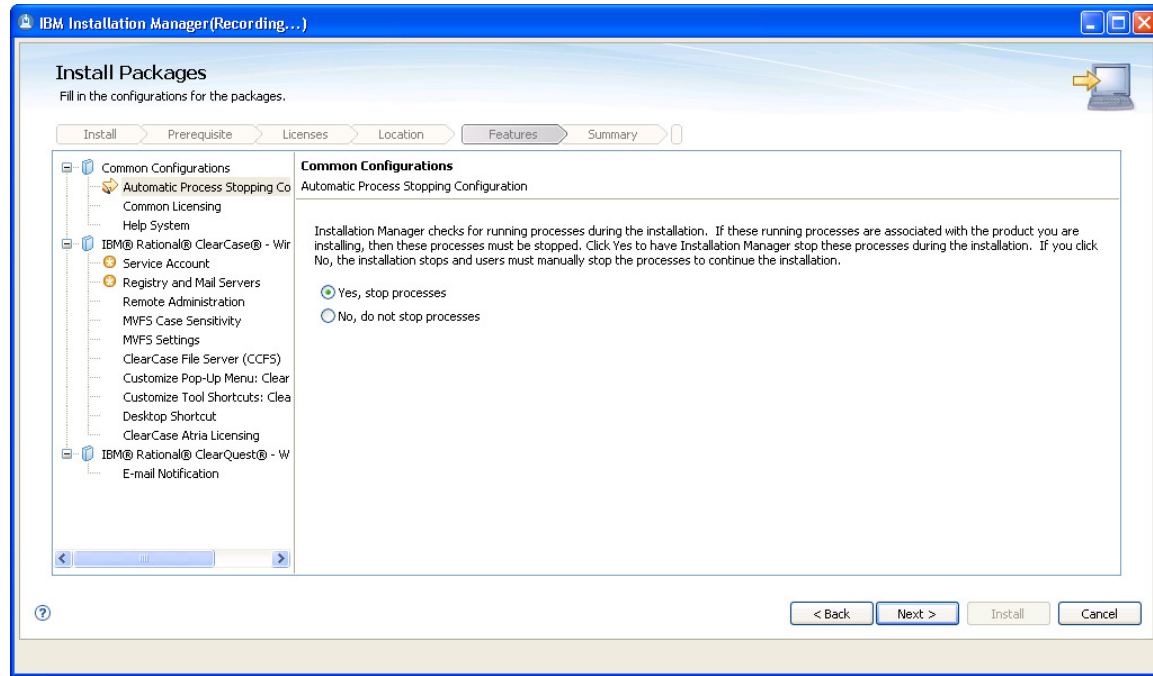
OK, here we go with the install. If we look at the left hand panel of the window, we see all the steps that need to be completed when installing the different Rational applications. We will quickly go through all of these, with perhaps minimal commentary on each, since we have seen all of these before in prior technical blog posts.

Note that as we move through the installation screens, the items in the left hand panel will be marked as completed by Installation Manager. In the present window, select the Yes radio button, and click Next.
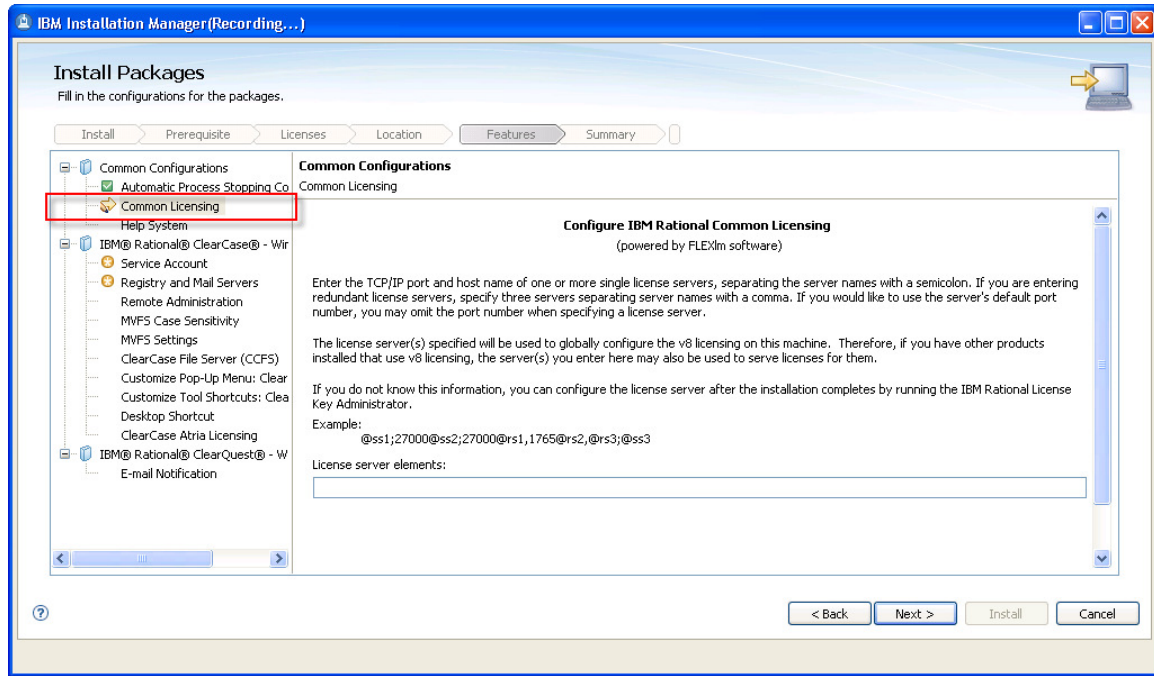
Here we are on the second step of the install, indicated by the red rectangle. First note that the prior step is marked by IM in green as complete. Enter the license information and click Next.
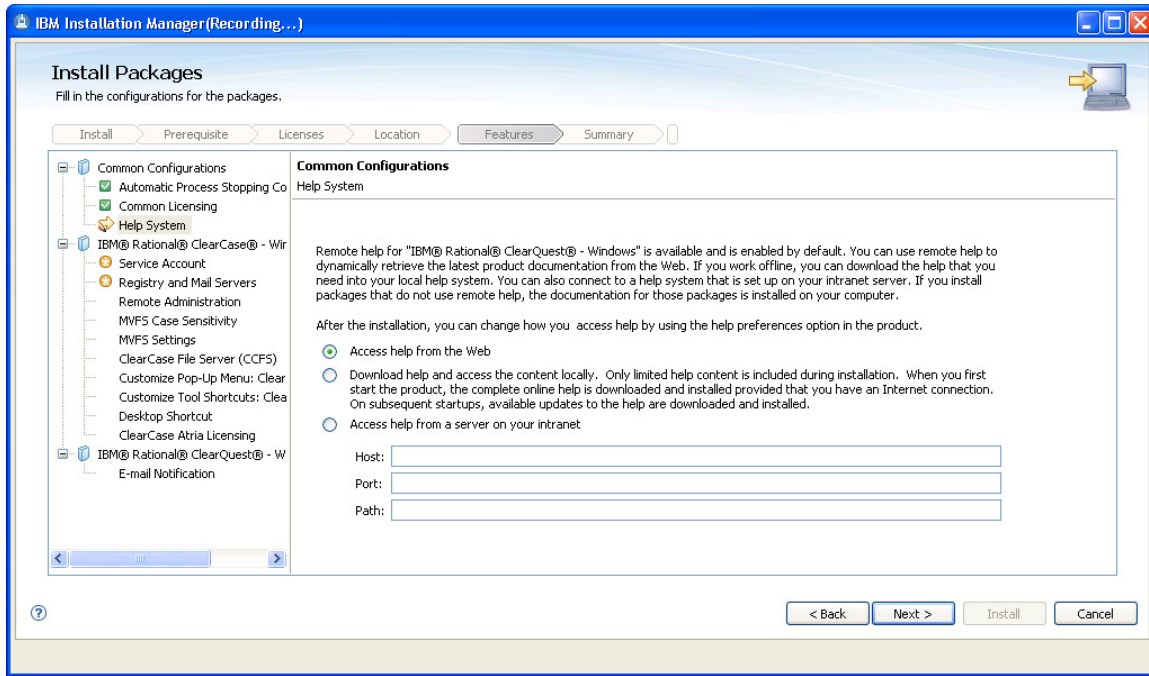
Probably it's best to take Help documentation from the web. Click Next.
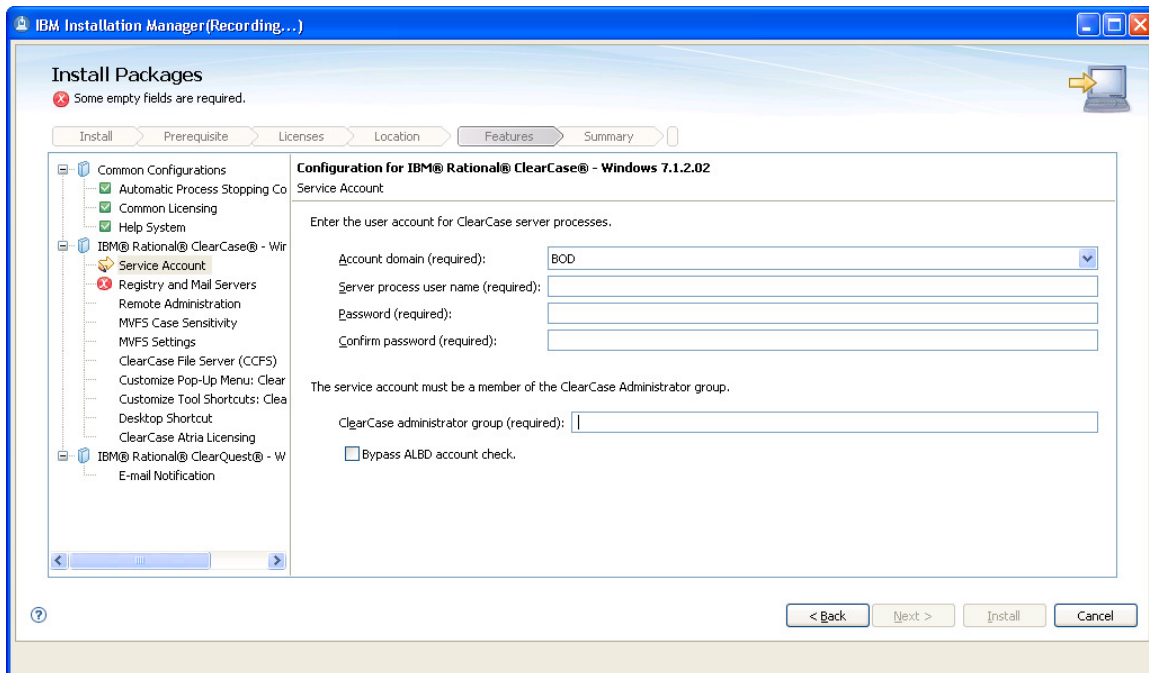
Enter ClearCase configuration information and click Next.
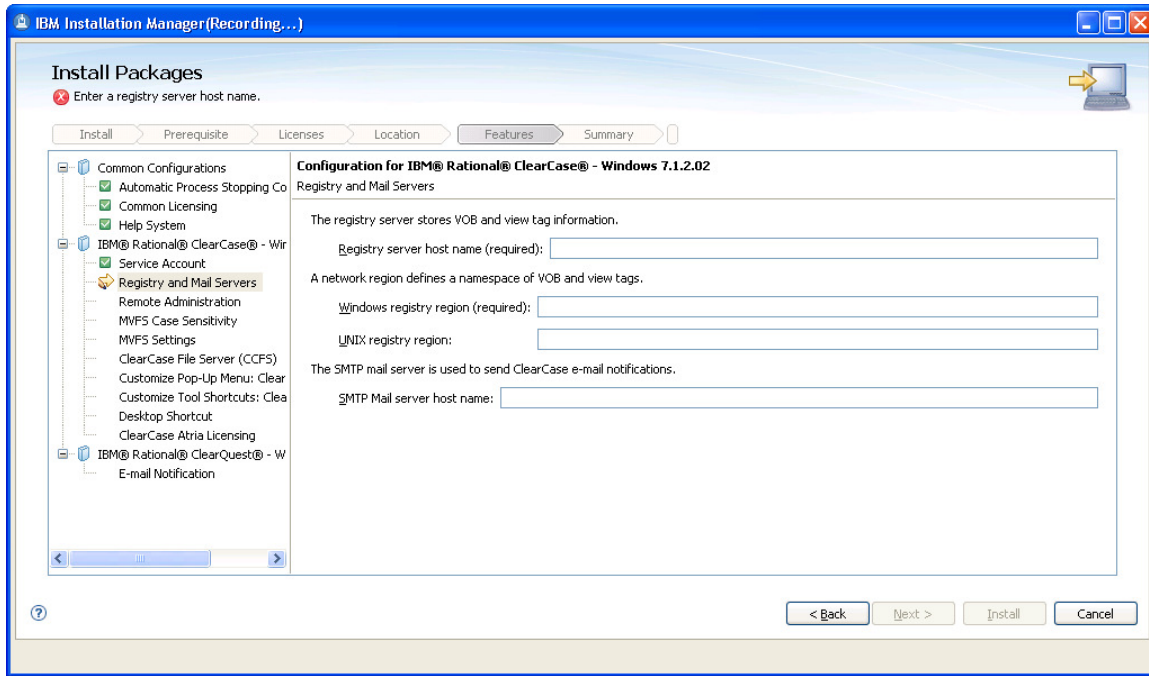
More ClearCase configuration settings. Enter what is appropriate and click Next.
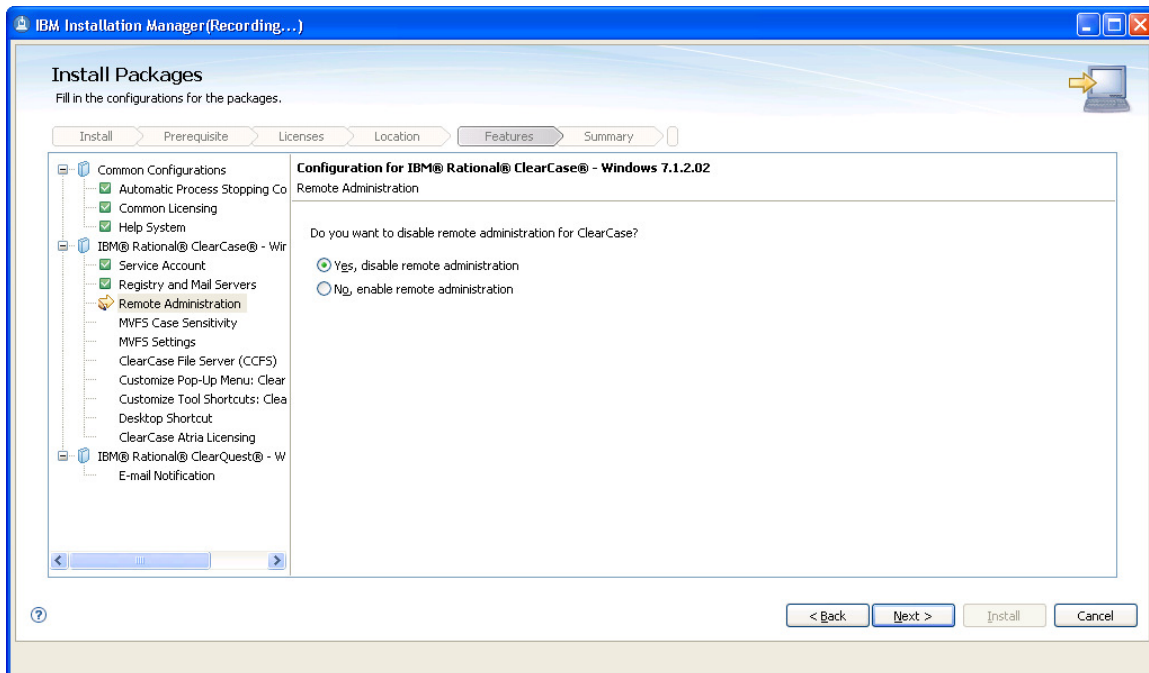
Choose the desired setting for remote administration and click Next.
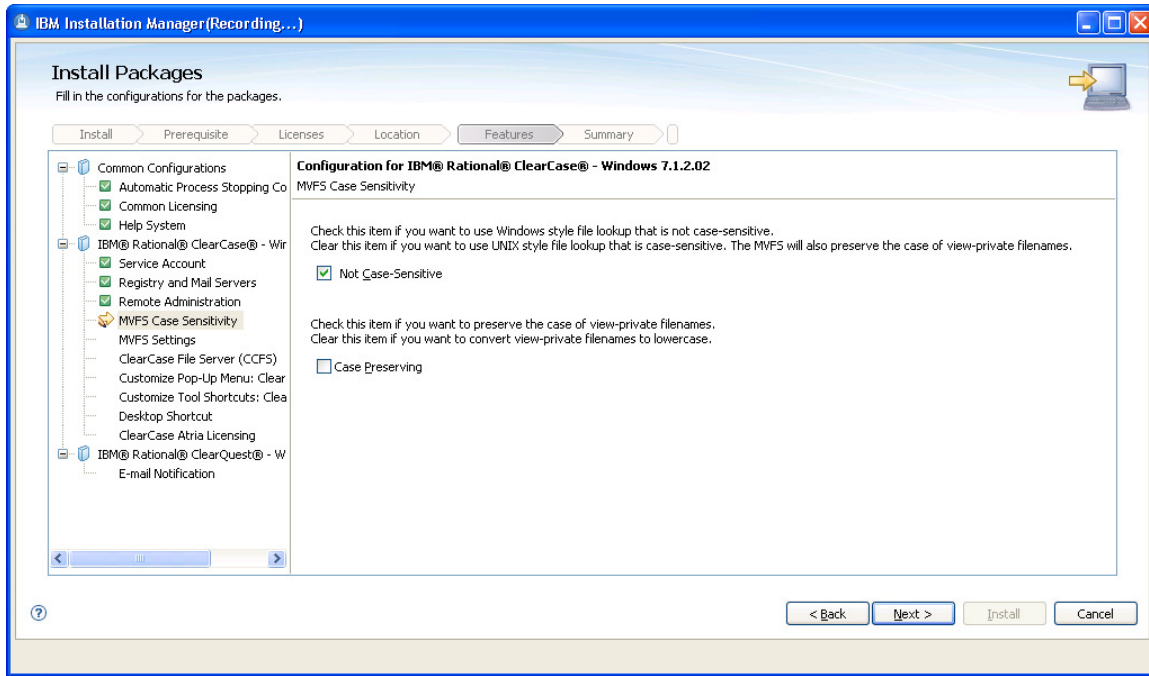
Click Next after setting case sensitivity to what is required.
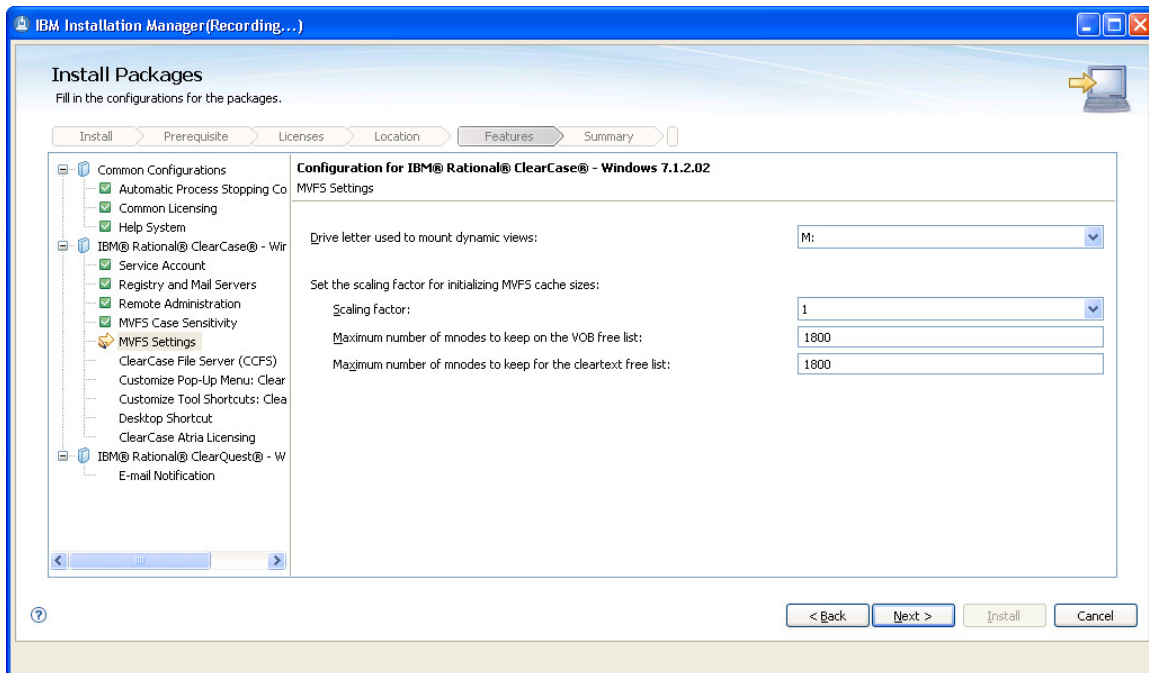
Accept defaults and click Next unless there is some need to change it.
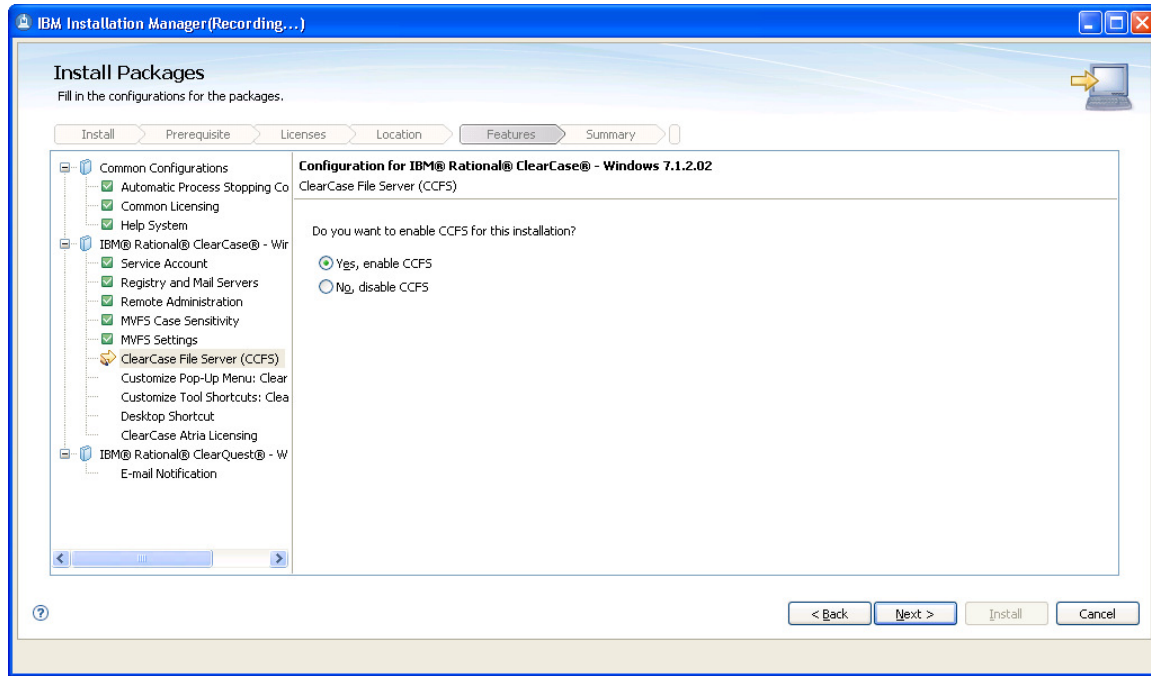
Enable or disable CCFS and click Next.
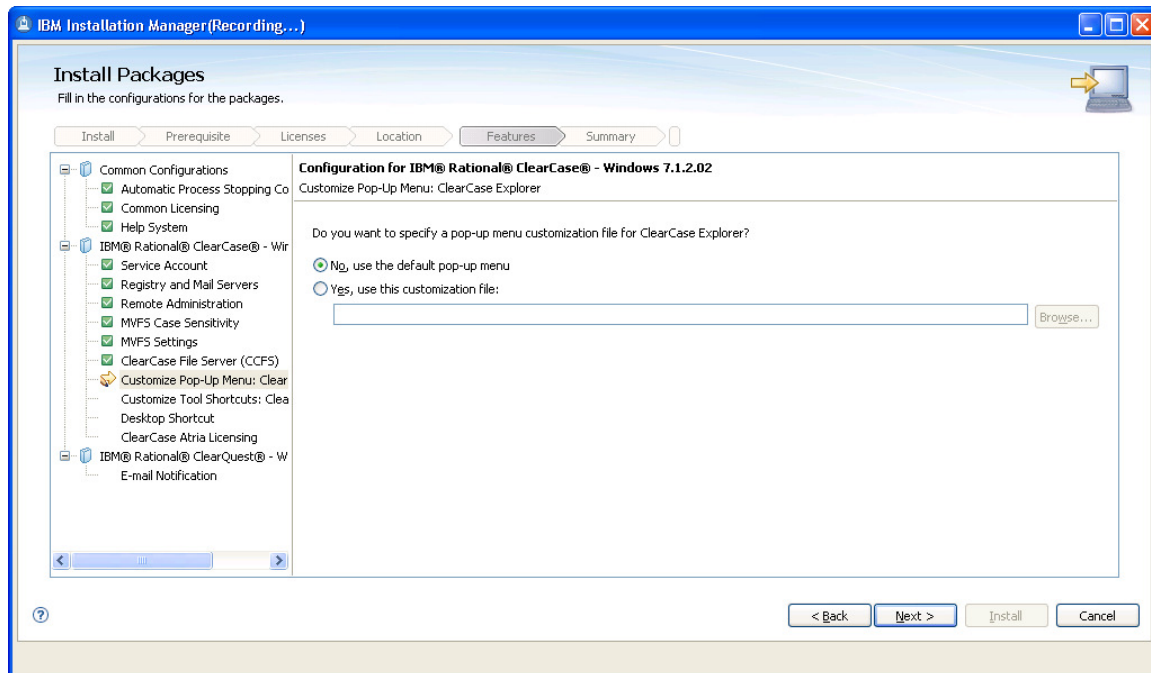
Specify ClearCase Explorer menu customization, or not, and click Next.
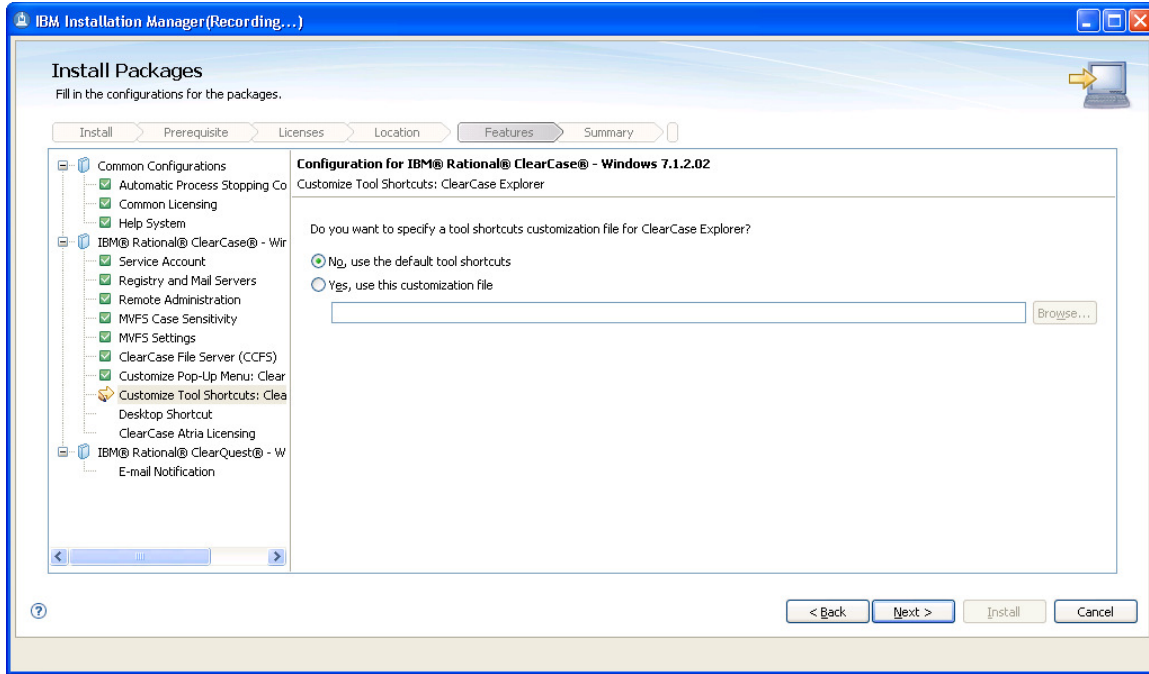
ClearCase Explorer tool shortcuts, or not. Click Next.
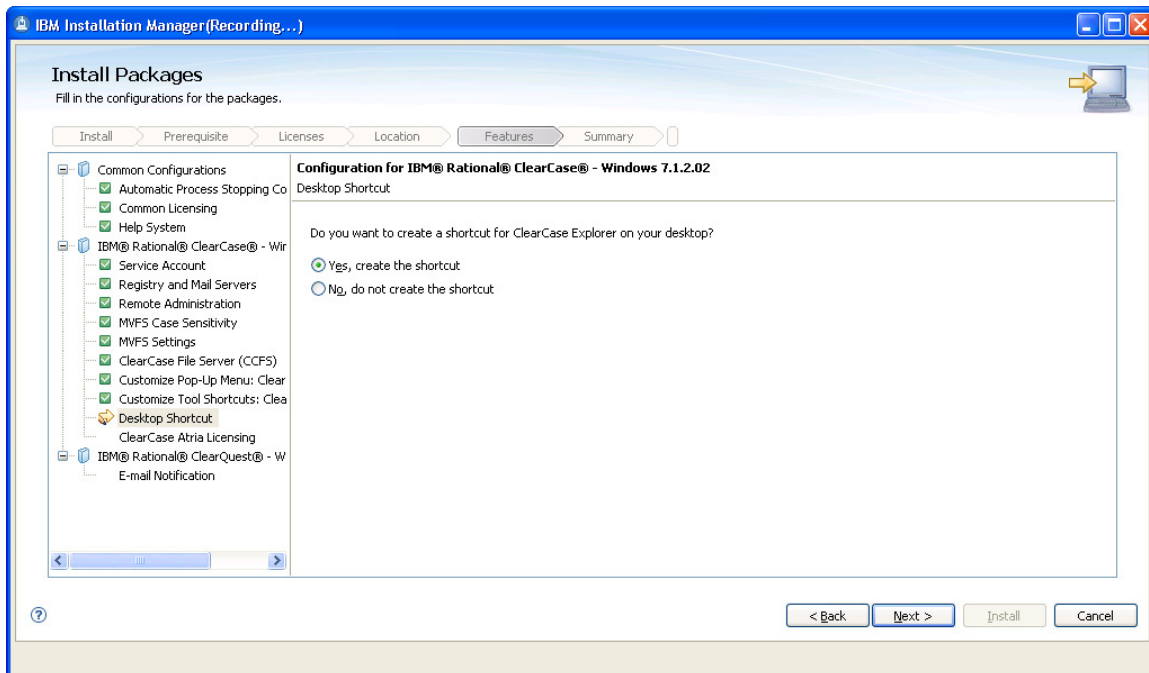
Specify if you want desktop shortcut, or not. Click Next.
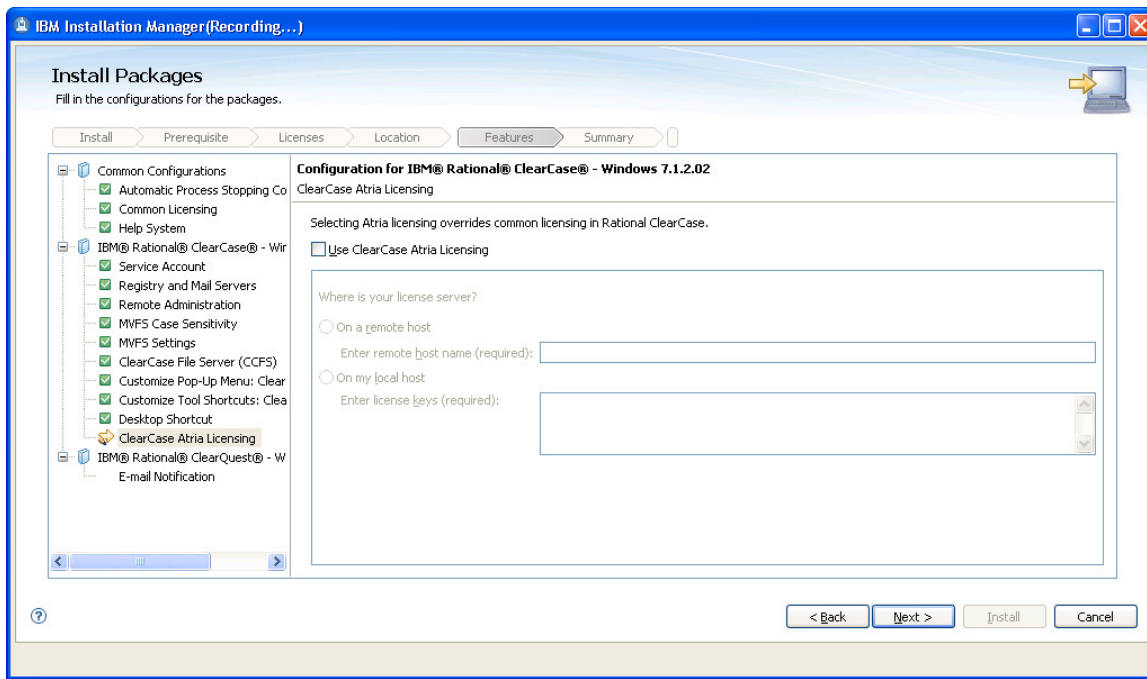
Make any needed changes to ClearCase licensing, and click Next.
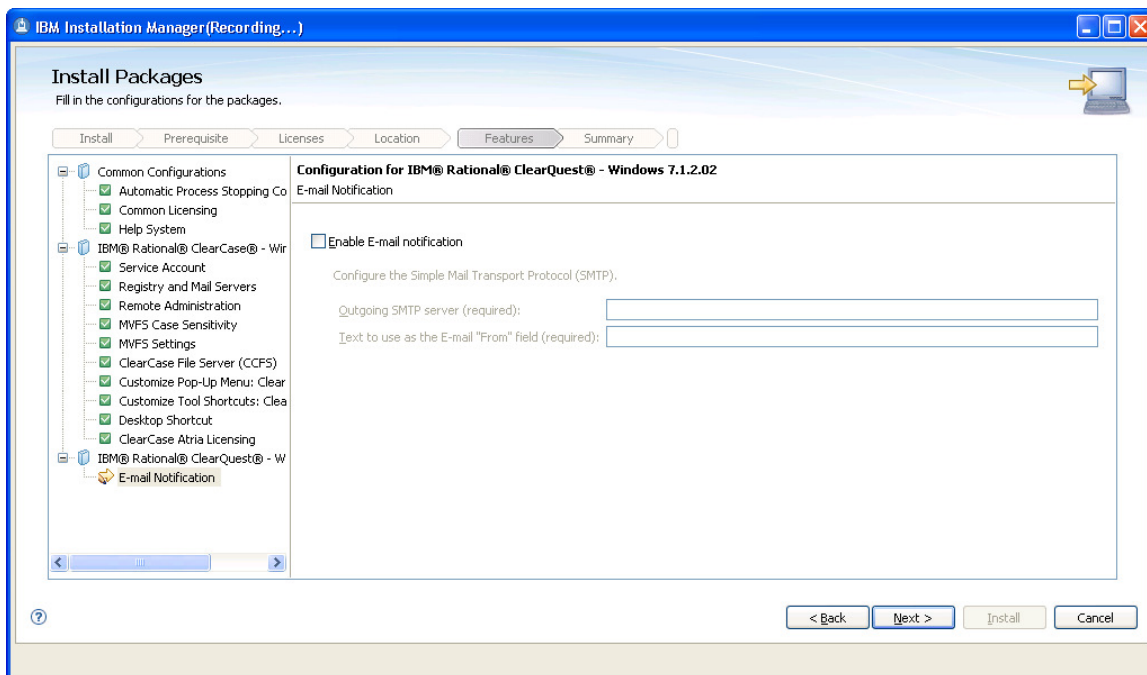
OK, done with ClearCase. Specify ClearQuest email configuration and click Next.

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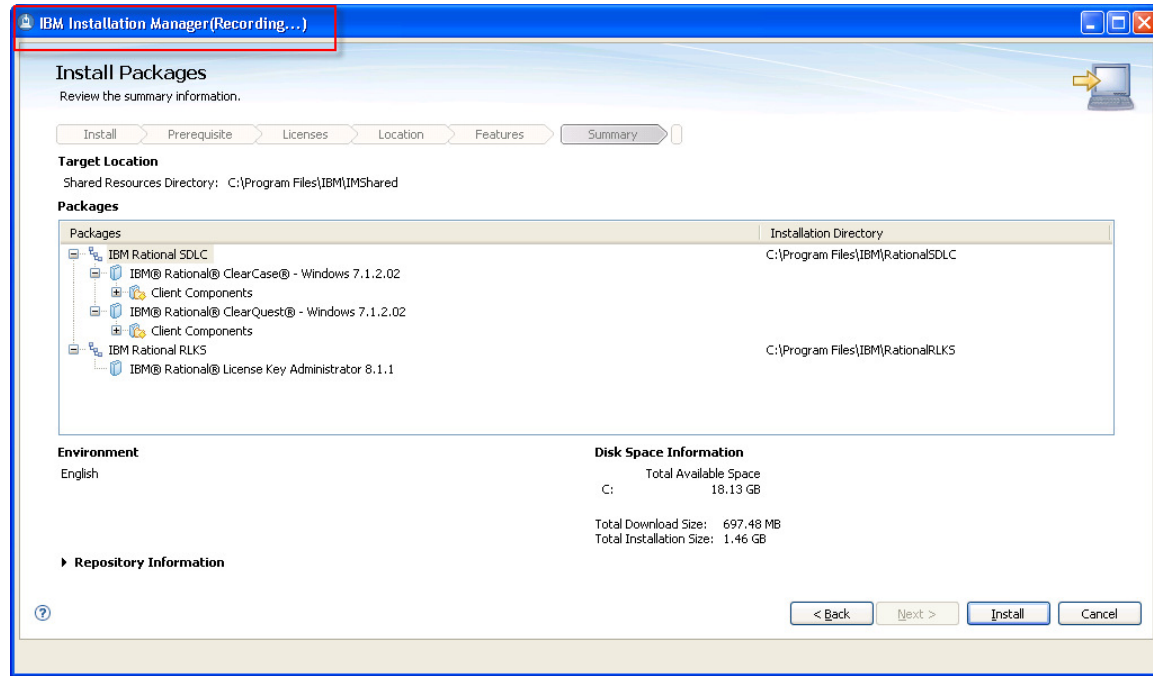
All right, we have now completed all the product specific configuration for an install. We are now ready to create the response file by simulating the install. Remember that we are running this install with the *–skipInstall* option, because the objective is to create the response file. Note the window title outlined in red which says that we are "Recording". Click the Install button to begin.
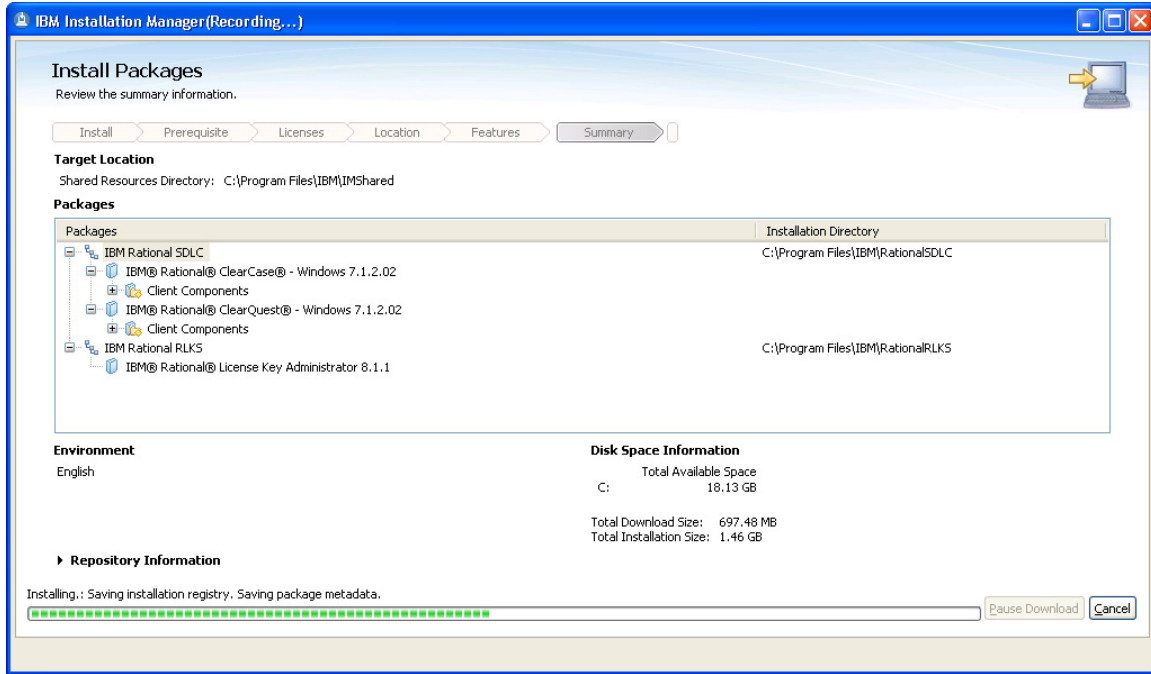
Here we see the installation recording continue. This completes relatively quickly, certainly compared to the time it would take if we were actually installing the applications while creating the response file. Once the response file is created, we will demonstrate how to use it in an actual install.
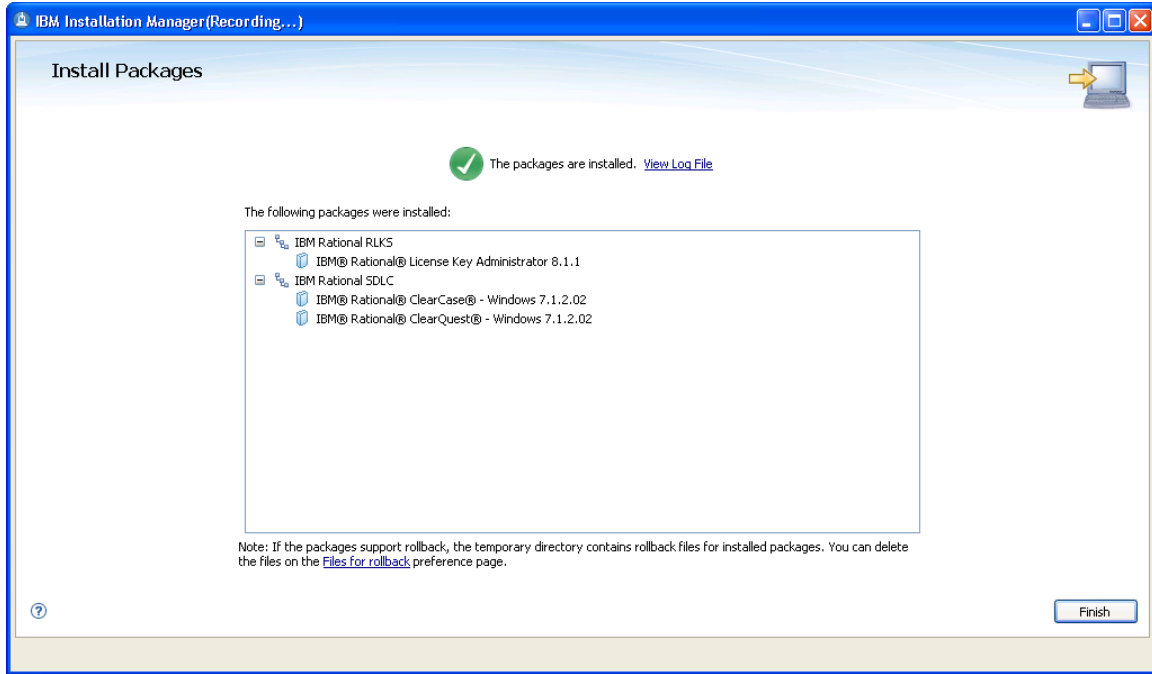
Again note the "Recording…" specified in the window title. Click Finish to complete the recording of this response file.

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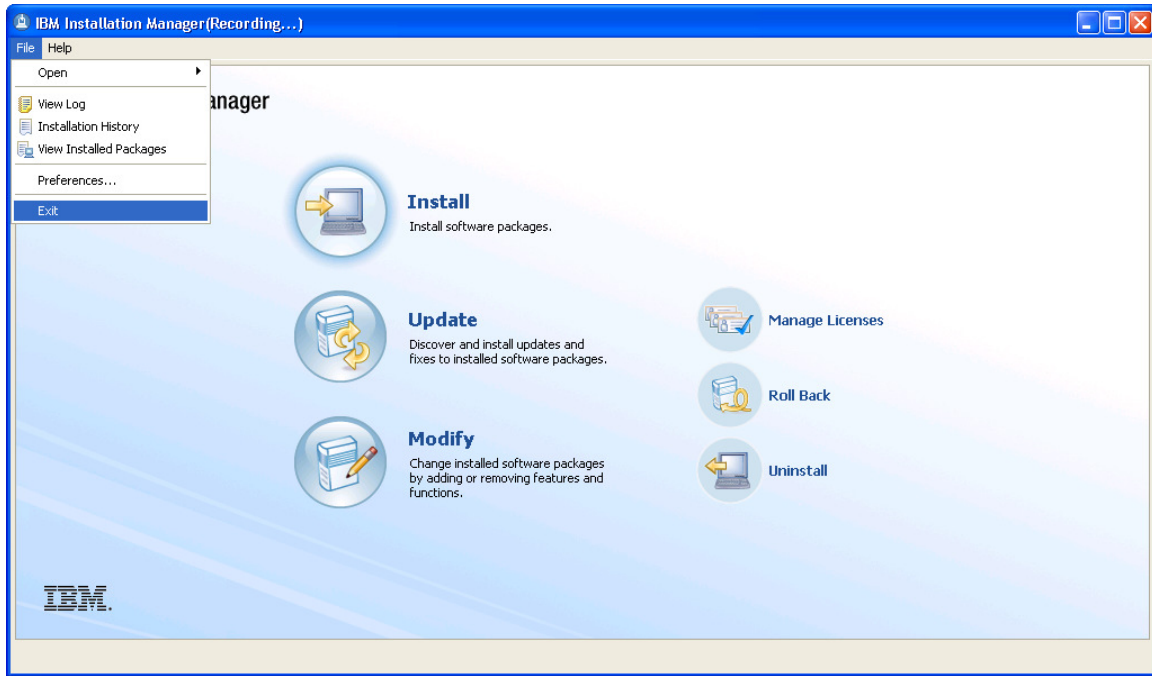
Here we are, back where we began when creating the response file. Note that the window still shows that we are in "Recording…" mode. If we wanted to, we could continue to record into the response file by specifying another repository and installing that additional application. Instead, we will call it a day, and exit the Installation Manager. This will terminate the line command which launched IM. The command line completion can be seen in the screenshot below.

The screenshot above shows the command completion. We have now created an install response file, along with a temporary IBM Rational Installation Manager registry. We next want to use the created response file to do an install of the Rational products. First, below, there is a snippet of the created response file, just to give a flavor of how these are constructed.
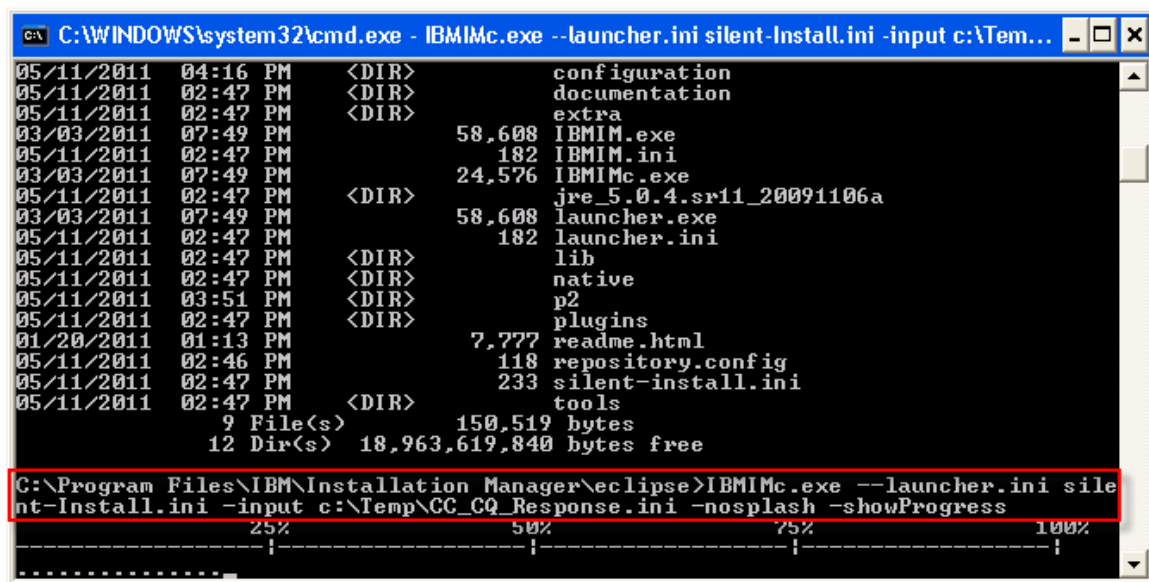
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In the screenshot above, we can see a section of the response file that we just created. Note the highlighted repository location. When we run an install using this response file, this is the repository from which the Rational applications will be installed.

In this next screenshot above, we are now using the response file to do the installation. The command is: "*IBMIMc.exe –launcher.ini silent-Install.ini – input c:\Temp\CC_CQ_Response.ini –nosplash –showProgress*". Some explanations are in order.

The first parameter, *--launcher silent-install.ini*, says to conduct the install without bringing up the Installation Manager menu window. The install will proceed strictly as a line command.

The next parameter *–input*, specifies the response file that we just created. This will be the main input to the IM command which will install the Rational applications.

The *–nosplash* parameter simply suppresses the IM splash screen from popping up when the *IBMIMc.exe* command is issued.

Finally, the *–showProgress* parameter provides the progress graph that appears below the line command.

The command will run to completion, and the result will be the installation of Rational ClearCase, ClearQuest, and License Key Administrator. Since ClearCase requires a reboot to complete, the machine will be rebooted as the line command terminates. After the reboot, logging in will show all the products installed and useable. You will likely need to supply ClearQuest with an initialization file to create the database connections that are used at your site, but everything should be correctly installed.