



Installation Guide Supplement: Data Collection Infrastructure Installation and Instrumentation



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Note

Before using this information and the product it supports, read the information in "Notices" on page 17.

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This edition applies to version 7.0 of IBM Rational Performance Tester (part number 5724-J96) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Overview

This guide provides information about the requirements and procedures for installing and instrumenting the data collection infrastructure that complements and works with performance testing. It is intended to be a supplement to the *IBM® Rational® Performance Tester V7.0 Installation Guide*.

Data collection infrastructure

The data collection infrastructure, by default, is installed on the local computer workstations where you have installed IBM Rational Performance Tester, Version 7.0 workbench. In order to collect data from other computer systems that are used in distributed applications, the data collection infrastructure must be present on those remote hosts. You must install the Rational Performance Tester Agent, Version 7.0 on all remote hosts that will be used in your distributed applications.

The data collection infrastructure has been tested on the following platforms:

- Microsoft® Windows® XP Professional (service pack 2) on Intel® IA32
- Microsoft Windows 2000 Professional (service pack 4) on Intel IA32
- Microsoft Windows 2000 Advanced Server (service pack 4) on Intel IA32
- Microsoft Windows 2000 Server (service pack 4) on Intel IA32
- Microsoft Windows Server 2003 Standard Edition (service pack 1) on Intel IA32.
Note: Directory paths containing spaces are not supported on Windows 2003.
- Microsoft Windows Server 2003 Enterprise Edition (service pack 1) on Intel IA32.
Note: Directory paths containing spaces are not supported on Windows 2003.
- Red Hat Enterprise Linux® Workstation Version 4.0 (update 1)
- Red Hat Desktop Version 4.0 (running in 32-bit mode)
- SuSE Linux Enterprise Server (SLES) v9 (service pack 2)

Note: For Linux systems, the Test and Performance Tools Platform (TPTP) Data Collection Engine feature of the data collection infrastructure is compiled using the libstdc++-libc6.2-2.so.3 shared library. Ensure that this shared library exists under the `/usr/lib` directory. If it does not exist, you must install the RPM package `compat-libstdc++` that comes with the operating system installation media.

The data collection infrastructure works with Java™ virtual machine (JVM), Version 1.5 or later. The following are JVM versions that data collection has been tested on:

- Linux IA32: J2RE 1.5 IBM build cxia321411-20040301; J2RE 1.5 IBM. RPT to provide final build details
- Windows IA32 J2RE: 1.5 IBM Windows 32 build cn1411-20040301a; J2RE 1.5 IBM Windows 32; Sun Java(TM) 2 Standard Edition (build 1.4.2_04-b05) RPT to provide final build details

Server requirements for supported data collection scenarios

The data collection infrastructure collects performance profiling data for distributed applications, and sends the data to the Rational Performance Tester workbench, where you view and analyze the collected data. You can query IBM Tivoli® Monitoring for Transaction Performance (TMTP), IBM Tivoli Composite

Application Manager for Response Time Tracking (ITCAM for RTT), or IBM Tivoli Composite Application Manager for WebSphere® (ITCAM for WebSphere) management server databases to collect past performance data for an application that is deployed in a production environment. With the Response Time Breakdown feature of Rational Performance Tester, you can also monitor a live application in a development or testing environment and collect its data in real time.

In a production environment, you can collect data by querying the management server database for the following system management software:

- IBM Tivoli Monitoring for Transaction Performance, Version 5.3 fix pack 1 (5.3.0.1), on all supported platforms. See the TMTTP installation guide for information about supported platforms and configurations.
- IBM Tivoli Composite Application Manager for Response Time Tracking (ITCAM for RTT), Versions 6.0 and 6.1 on all supported platforms. See the ITCAM for RTT installation guide for information about supported platforms and configurations.
- IBM Tivoli Composite Application Manager for WebSphere (ITCAM for WebSphere), Versions 6.0 and 6.1 on all supported platforms. See the ITCAM for WebSphere installation guide for information about supported platforms and configurations.

For a live Web application, the data collection infrastructure collects performance profiling data from the following Web servers:

- IBM WebSphere Application Server, Version 6.0 and Version 5.0 and later
- Embedded IBM WebSphere Application Server, Version 6.0
- BEA WebLogic Application Server, Version 8.1
- If you intend to profile the performance of a Web service, you must use one of the following versions of WebSphere Application Server, Base edition:
 - Version 6.0
 - Version 5.1.1.1 and later service levels (no patch is required starting at WAS 5.1.1.1)
 - Version 5.1.1.0 with patch PQ91494_Fix.jar
 - Version 5.1.0.5 with patch PQ89492_5105_Fix.jar; service levels 5.1.0.0 and later with patch PQ89492_510x_Fix.jar
 - Version 5.0.2.7 with patch PQ89492_5027_Fix.jar; service levels 5.0.2.0 and later with patch PQ89492_502x_Fix.jar

See the installation guides for complete instructions on installing these products. The installation instructions that follow include information on how to configure these products for use with the data collection infrastructure.

Configuring, starting, and stopping the data collection infrastructure

The data collection infrastructure must be installed on any computer or server involved in running the application being monitored, from which you want to collect performance data. You must then instrument the application servers on those computers to enable application profiling. Also, installations of the Rational Performance Tester workbench include an installation of the data collection infrastructure enabling the collection of data via performance tests or load test schedules.

Instrumenting application servers to work with the data collection infrastructure

For an application server to correctly send performance data to the data collection infrastructure, it must be instrumented correctly and restarted before you start to use data collection. You can use either a command line or graphical user interface to instrument application servers to work with the data collection infrastructure.

Note: Instrumentation of an embedded WebSphere Application Server, Version 5 is not supported.

Instrumenting an application server installed on a local host from the command line

Note: Ensure that the application server to be instrumented is running.

1. Open a command line and go to the `rpa_prod` directory under the data collection infrastructure installation directory.
2. The instrumentation utility is called `instrumentServer.sh` on Linux systems and `instrumentServer.bat` on Windows system. Enter the command name with no arguments to see the syntax details for the command.
3. Enter the command name with the arguments that you want to instrument a server. See the examples that follow.
4. Restart the application server.

Changes will take effect when you restart the server.

Repeat the instrumentation steps for every application server on the computer system involved in any data collection for the applications you will be profiling. Typically, there will be only one application server, but it is possible for you to have more than one on a system.

Syntax and examples of command-line instrumentation commands

To see the syntax for the `instrumentServer` command, enter the command without any arguments from the directory in which the instrumentation utility is installed.

- Linux: `./instrumentServer.sh`
- Windows: `instrumentServer`

Examples

To instrument a Linux system that is equipped with an IBM WebSphere Application Server, Version 5.0 or later, server named `server1`, installed in the directory `/opt/WebSphere/AppServer`, and no security:

```
./instrumentServer.sh -install -type IBM -serverName server1 -serverHome  
/opt/WebSphere/AppServer -serverVersion 5
```

To instrument a Linux system that is equipped with an IBM WebSphere Application Server, Version 6.0, server named `server2`, installed in the directory `/opt/WebSphere/AppServer`, with profile name `default`, and security enabled:

```
./instrumentServer.sh -install -type IBM -serverName server2 -serverHome  
/opt/WebSphere/AppServer -serverVersion 6  
-profileName default -user my_WAS_userId -password my_WAS_password
```

To instrument a Linux system that is equipped with a BEA WebLogic application server (with specifics as indicated):

```
./instrumentServer.sh -install -type BEA -serverName server1 -serverHome  
/opt/bea/weblogic81 -javaHome /opt/bea/jdk141_02 -adminServerHost hostname.xyz.com  
-adminServerPort 7001 -user my_BEA_userId -password my_BEA_password  
-startScript /opt/bea/weblogic81/mydomain/startManagedWeblogic.sh
```

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM shipped in WebLogic in order for an instrumented server to start correctly.

To instrument a Windows system that is equipped with an IBM WebSphere Application Server, Version 5.0 or later, server named `my_Server`, installed in `C:\Program Files\was5.x`, with security enabled:

```
instrumentServer -install -type IBM -serverName my_Server  
-serverHome "C:\Program Files\was5.x" -user my_WAS_userId  
-password my_WAS_password -serverVersion 5
```

To instrument a Windows system that is equipped with an IBM WebSphere Application Server, Version 6.0, server named `my_Server2`, installed in `C:\Program Files\was6.0`, with profile name `default` and security enabled:

```
instrumentServer -install -type IBM -serverName my_Server2  
-serverHome "C:\Program Files\was6.0" -user my_WAS_userId  
-password my_WAS_password -serverVersion 6 -profileName default
```

To instrument a Windows system that is equipped with a BEA WebLogic application server (with specifics as indicated):

```
instrumentServer -install -type BEA -serverName server1  
-serverHome C:\bea\weblogic81 -javaHome C:\bea\jdk141_02  
-adminServerHost localhost -adminServerPort 7001  
-user my_BEA_userID -password my_BEA_password  
-startScript C:\bea\weblogic81\mydomain\startManagedWeblogic.cmd
```

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM shipped in WebLogic in order for an instrumented server to start correctly.

Instrumenting an application server installed on a local host using the graphical user interface

1. If instrumenting a BEA WebLogic server, start the server. This is not required when instrumenting a WebSphere application server as the GUI-based instrumenter will automatically start the server for you.
2. Click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection InfrastructureApplication Server Instrumenter**.
3. Instrument the server with the desired arguments. See the examples that follow.
4. If instrumenting a BEA WebLogic server, stop and restart the server. (This step is not needed when instrumenting a WebSphere application server as the GUI-based instrumenter will automatically restart and stop the server for you.)

Repeat the instrumentation steps for every server on the system involved in any data collection for the applications you will be profiling. Typically, there will be only one application server, but it is possible for you to have more than one on a system.

Syntax and examples of GUI-based instrumentation

To invoke the graphical user interface based instrumenter, click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Application Server Instrumentation**.

Examples

To instrument a Linux system equipped with an IBM WebSphere Application Server, Version 5.0 or later, server named `server1`, installed in the directory `/opt/WebSphere/AppServer`, and no security:

1. Click **Add Local**.
2. Select **IBM WebSphere Application Server v5.x** from the **Type** menu.
3. Type `server1` in the **Server name** field.
4. Type `/opt/WebSphere/AppServer` in the **Server home** field.
5. Click **OK**.

To instrument a Linux system equipped with a WebSphere Application Server, Version 6.0, server named `server2`, installed in the directory `/opt/WebSphere/AppServer`, with profile name `default`, and security enabled:

1. Click **Add Local**.
2. Select **IBM WebSphere Application Server v6.x** from the **Type** menu.
3. Type `default` in the **Profile name** field.
4. Type `server2` in the **Server name** field.
5. Type `/opt/WebSphere/AppServer` in the **Server home** field.
6. Select the **Requires global security** check box.
7. Type `my_WAS_userId` in the **User** field.
8. Type `my_WAS_password` in the **Password** field.
9. Click **OK**.

To instrument a Linux system equipped with a BEA WebLogic application server named `server1`, installed in the directory `/opt/bean/weblogic81`, with Java home `/opt/bean/jdk15`, admin server host `hostname.xyz.com`, admin server port `7001`, and start script file `/opt/bean/weblogic81/mydomain/startManagedWeblogic.sh`:

1. Start the WebLogic server.

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM that came with WebLogic in order for an instrumented server to start correctly.

2. Click **Add Local**.
3. Select **BEA WebLogic Application Server v8.x** from the **Type** filed menu.
4. Type server1 in the **Server name** field.
5. Type /opt/bea/weblogic81 in the **Server home** field.
6. Type /opt/bea/jdk15 in the **Java home** field.
7. Type hostname.xyz.com in the **Admin server host** field.
8. Type 7001 in the **Admin server port** field
9. Type my_BEA_userId in the **User** field.
10. Type my_BEA_password in the **Password** field.
11. Select the **A script starts this server** check box.
12. Type /opt/bea/weblogic81/mydomain/startManagedWeblogic.sh in the **Script file** field.
13. Click **OK**.
14. Stop and restart the server.

To instrument a Windows system equipped with a WebSphere Application Server, Version 5.0 or later, server named my_Server, installed in C:\Program Files\was5.x, with security enabled:

1. Click **Add Local**.
2. Select **IBM WebSphere Application Server v5.x** from the **Type** menu.
3. Type my_Server in the **Server name** field.
4. Type C:\Program Files\was5.x in the **Server home** field.
5. Select the **Requires global security** check box.
6. Type my_WAS_userId in the **User** field.
7. Type my_WAS_password in the **Password** field.
8. Click **OK**.

To instrument a Windows systems equipped with a WebSphere Application Server, Version 6.0, server named my_Server2, installed in C:\Program Files\was6.0, with profile name default, and security enabled:

1. Click **Add Local**.
2. Select **IBM WebSphere Application Server v6.x** from the **Type** menu.
3. Type default in the **Profile name** field.
4. Type my_Server2 the **Server name** field.
5. Type C:\Program Files\was6.0 in the **Server home** field.
6. Select the **Requires global security** check box.
7. Type my_WAS_userId in the **User** field.
8. Type my_WAS_password in the **Password** field.
9. Click **OK**.

To instrument a Windows system equipped with a BEA WebLogic application server named `server1`, installed in the directory `C:\bea\weblogic81`, Java home `C:\bea\jdk15`, admin server host `localhost`, admin server port `7001`, and start script file `C:\bea\weblogic81\mydomain\startManagedWeblogic.cmd`:

1. Start the WebLogic server.

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM that came with WebLogic in order for an instrumented server to start correctly.

2. Click the **Add Local**.
3. Select **BEA WebLogic Application Server v8.x** from the **Type** menu
4. Type `server1` in the **Server name** field.
5. Type `C:\bea\weblogic81` in the **Server home** field.
6. Type `C:\bea\jdk15` in the **Java home** field.
7. Type `localhost` in the **Admin server host** field.
8. Type `7001` in the **Admin server port** field.
9. Type `my_BEA_userId` in the **User** field.
10. Type `my_BEA_password` in the **Password** field.
11. Select the **A script starts this server** check box.
12. Type `C:\bea\weblogic81\mydomain\startManagedWeblogic.cmd` in the **Script** field.
13. Click **OK**.
14. Stop and restart the server

Instrumenting an application server installed on a remote host using the graphical user interface

The graphical user interface-based instrumenter enables you to instrument application servers on multiple remote hosts from your workstation. You must first ensure that the Rational Performance Tester Agent, Version 7.0, is installed on each remote host. Refer to the *IBM Rational Performance Tester V7.0 Installation Guide* for more information. You must also have an secure shell server installed on each host (Linux ssh server or cygwin for Windows systems).

To instrument a remote host:

1. Click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Application Server Instrumenter**.
2. Instrument the server with the desired arguments. See the examples that follow.

Repeat the instrumentation steps for every server on the remote host that is involved in any data collection for the applications that you will be profiling and for every remote host with an application server that requires instrumentation. Typically, there will be only one application server, but it is possible to have more than one on a host server.

Syntax and examples of GUI-based instrumentation of remote application servers

To invoke the graphical user interface based instrumenter, click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Application Server Instrumenter**.

Examples

To instrument a remote Linux host named `linux1` that is equipped with an IBM WebSphere Application Server, Version 5.0 or later, server named `server1`, installed in the directory `/opt/WebSphere/AppServer`, and no security:

1. Click **Add Remote**.
2. Populate the **Application Server** tab:
 - Select **IBM WebSphere Application Server v5.x** from the **Type** menu.
 - Type `server1` in the **Server name** field.
 - Type `/opt/WebSphere/AppServer` as the **Server home** field.
3. Populate the **Connection** tab:
 - Type `linux1` in the **Host** field.
 - Type `SSH_linux1_userId` in the **User** field.
 - Type `SSH_linux1_password` in the **Password** field.
4. Click **OK**.

To instrument a remote Linux host named `linux2`, that is equipped with an IBM WebSphere Application Server, Version 6.0, server named `server2`, installed in the directory `/opt/WebSphere/AppServer`, profile name `default`, and security enabled:

1. Click **Add Remote**.
2. Populate the **Application Server** tab:
 - Select **IBM WebSphere Application Server v6.x** from the **Type** menu
 - Type `default` in the **Profile name** field.
 - Type `server2` in the **Server name** field.
 - Type `/opt/WebSphere/AppServer` in the **Server home** field.
 - Select the **Requires global security** check box.
 - Type `my_WAS_userID` in the **User** field.
 - Type `my_WAS_password` in the **Password** field.
 - Select or clear the **Save password** check box, depending on your preferences.
3. Populate the **Connection** tab:
 - Type `linux2` in the **Host** field.
 - Type `SSH_linux2_userId` in the **User** field.
 - Type `SSH_linux2_password` in the **Password** field.
4. Populate the **Advanced** tab:
 - Enter RSA/DSA authentication information.
 - Provide Options as necessary.
5. Click **OK**.

To instrument a remote Linux host named `linux3` that is equipped with a BEA WebLogic application server named `server1` installed in the directory `/opt/bea/weblogic81`, Java home `/opt/bea/jdk15`, admin server host

hostname.xyz.com, admin server port 7001, and start script file
/opt/bea/weblogic81/mydomain/startManagedWeblogic.sh:

1. Start the WebLogic server.

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM that came with WebLogic in order for an instrumented server to start correctly.

2. Click **Add Remote**.
3. Populate the **Application Server** tab:
 - Select **BEA WebLogic Application Server v8.x** from the **Type** menu
 - Type server1 in the **Server name** field.
 - Type /opt/bea/weblogic81 in the **Server home** field.
 - Type /opt/bea/jdk15 in the **Java home** field.
 - Type hostname.xyz.com in the **Admin server host** field.
 - Type 7001 in the **Admin server port** field.
 - Type my_BEA_userId in the **User** field.
 - Type my_BEA_password in the **Password** field.
 - Select the **A script starts this server** check box.
 - Type /opt/bea/weblogic81/mydomain/startManagedWeblogic.sh in the **Script** field.
4. Populate the **Connection** tab:
 - Type linux3 in the **Host** field.
 - Type SSH_linux3_userId in the **User** field.
 - Type SSH_linux3_password in the **Password** field.
5. Click **OK**.
6. Stop and restart the server.

To instrument a remote Windows host named windows1 that is equipped with an IBM WebSphere Application Server, Version 5.0 or later, server named my_Server installed in C:\Program Files\was5.x, and security enabled:

1. Click **Add Remote**.
2. Populate the **Application Server** tab:
 - Select **IBM WebSphere Application Server v5.x** from the **Type** menu.
 - Type my_Server in the **Server name** field.
 - Type C:\Program Files\was5.x in the **Server home** field.
 - Select the **Requires global security** check box.
 - Type my_WAS_userId in the **User** field.
 - Type my_WAS_password in the **Password** field.
3. Populate the **Connection** tab:
 - Type windows1 in the **Host** field.
 - Type SSH_windows1_userId in the **User** field.
 - Type SSH_windows1_password in the **Password** field.
4. Click **OK**.

To instrument a remote Windows host named windows2 that is equipped with an IBM WebSphere Application Server, Version 6.0, server named my_Server2 installed in C:\Program Files\was6.0, with profile name default, and security enabled:

1. Click **Add Remote**.
2. Populate the **Application Server** tab:
 - Select **IBM WebSphere Application Server v6.x** from the **Type** menu.
 - Type default in the **Profile name** field.
 - Type my_Server2 in the **Server name** field.
 - Type C:\Program Files\was6.0 in the **Server home** field.
 - Select the **Requires global security** check box.
 - Type my_WAS_userId in the **User** field.
 - Type my_WAS_password in the **Password** field.
3. Populate the **Connection** tab:
 - Type windows2 in the **Host** field.
 - Type SSH_windows2_userId in the **User** field.
 - Type SSH_windows2_password in the **Password** field.
4. Click **OK**.

To instrument a remote Windows host named windows1 that is equipped with a BEA WebLogic application server named server1, installed in the directory C:\bea\weblogic81, Java home C:\bea\jdk15, admin server host localhost, admin server port 7001, and start script file C:\bea\weblogic81\mydomain\startManagedWeblogic.cmd:

1. Start the WebLogic server.

Note: The WebLogic server must be started with the JVM that is included with the product itself. Also, note that the JRockit VM is not a supported JVM. For managed WebLogic servers, the Java Home variable (under **Configuration** → **Remote Start**) must point to the Sun JVM that came with WebLogic in order for an instrumented server to start correctly.

2. Click **Add Remote**.
3. Populate the **Application Server** tab:
 - Select **BEA WebLogic Application Server v8.x** from the **Type** menu.
 - Type server1 in the **Server name** field.
 - Type C:\bea\weblogic81 in the **Server home** field.
 - Type C:\bea\jdk15 in the **Java home** field.
 - Type localhost in the **Admin server host** field.
 - Type 7001 in the **Admin server port** field.
 - Type my_BEA_userId in the **User** field.
 - Type my_BEA_password in the **Password** field .
 - Select the **A script starts this server** check box.
 - Type C:\bea\weblogic81\mydomain\startManagedWeblogic.cmd in **Script** field.
4. Populate the **Connection** tab:
 - Type windows1 in the **Host** field.
 - Type SSH_windows1_userId in the **User** field.
 - Type SSH_windows1_password in the **Password** field.
5. Click **OK**.
6. Stop and restart the server.

Starting and stopping the data collection infrastructure

The data collection infrastructure must be started in order to collect performance data from running applications and tests. Additionally, there are two types of agent controllers: Integrated Agent Controller (IAC) and Rational Agent Controller (RAC). The IAC will not function with the data collection infrastructure. Therefore, you must use the RAC with the data collection infrastructure.

To start the RAC with the data collection infrastructure

1. Exit any running instances of the Rational Performance Tester, Version 7.0 workbench.
2. Start the Agent Controller:
 - On a Windows system, start the Agent Controller as a service.
 - On non-Windows system, change your working directory to the /bin subdirectory in the AgentController installation directory and enter `./RASStart.sh` on a command line.
3. Start the data collection infrastructure:
 - On a Windows system, click **Start** → **Program** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Start monitoring**.
 - On a Linux system, from the start menu click **Applications** → **System Tools** → **Start monitoring**.
 - On other platforms, change your working directory to the `rpa_prod/rpa_comp` subdirectory in the DCI installation directory and enter `./startDCI.sh` on a command line.
4. Start the web application server.

Note: In order to collect Web services data on WebSphere Application Server you must start the data collection infrastructure before you start Websphere Application Server. Otherwise, Web service data might not be collected.

5. Start Rational Performance Tester, Version 7.0.

To stop the data collection infrastructure

1. On a Windows system, click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Stop monitoring**.
2. On a Linux system, from the start menu click **Applications** → **Systems Tools** → **Stop monitoring**.
3. On other platforms, change your working directory to the `rpa_prod/rpa_comp` subdirectory in the DCI installation directory. On a command line enter `./stopDCI.sh`.

Uninstalling data collection infrastructure from application servers

Before you uninstall the data collection infrastructure, you must uninstrument all application servers that were instrumented to work with it. An application server can be uninstrumented either from the command line or a graphical user interface.

Uninstrumenting an application server from the command line

1. Open a command line, and open the `rpa_prod` directory in the data collection infrastructure installation directory.

2. The instrumentation utility, which is also used to uninstrument servers, is called `instrumentServer.sh` (`instrumentServer.bat` on a Windows system). Type the command with no arguments to see the syntax details.
3. Type the command name with the `-uninstall` argument and all of the other arguments that you used to instrument the server originally. For example, on Windows, to uninstall an IBM WebSphere Application Server, Version 5.1, server instance named `my_Server`, installed in `C:\Program Files\was5.1`, with security enabled, type the following command and arguments:
`instrumentServer -uninstall -type IBM -serverName my_Server -serverHome "C:\Program Files\was5.1" -user my_WAS_userId -password my_WAS_password -serverVersion 5` See instrumentation examples for examples of other original instrumentation arguments. Note: All instrumented servers are listed in the file, `InstrumentationRegistry.xml`. Important: If you have uninstalled the server or removed the server instance without uninstrumenting it, the `instrumentServer` utility will be unaware of the absence and will be unable to contact it to uninstrument it. This will block the uninstallation process for the data collection infrastructure.
4. Restart the server.

Repeat the uninstrumentation steps for every server that you instrumented for data collection. After you are finished, the `InstrumentationRegistry.xml` file will be empty. You can proceed to uninstalling data collection infrastructure.

Uninstrumenting a local or remote application server using the graphical user interface

1. Click **Start** → **Programs** → **IBM Software Development Platform** → **IBM Rational Data Collection Infrastructure** → **Application Server Instrumenter**.
2. Highlight the server you want to uninstrument.
3. Click **Remove**.
4. Restart the server.

Uninstalling previous versions of the data collection infrastructure on Windows and Linux systems

To uninstall previous versions of the data collection infrastructure, use the install manager of the operating system. For example, on a Windows system, use **Add/Remove Programs** in the **Control Panel**. Find and remove the program **IBM Rational Data Collection Infrastructure, Version 6.0** or later.

If the operating system does not have an install manager, uninstall the data collection infrastructure this way:

1. Stop the data collection infrastructure.
2. Go to `thedci_prod/_uninst` subdirectory in the data collection infrastructure installation directory.
3. Run `./uninstall.bin`.
4. Follow the instructions in the wizard.

Note: If you uninstall the data collection infrastructure on a computer that also includes a Rational Software Development Platform product such as Rational Application Developer, Version 6.0 or later, or Rational Software Architect, Version 6.0 or later, it will remove the Agent Controller or data collection component that was installed by that product. If you want to use

Agent Controller or data collection with that product after you have uninstalled the previous version of the data collection infrastructure, you will need to upgrade that product to version 7.0 as well.

Troubleshooting

If you have trouble uninstalling previous versions of the data collection infrastructure, ensure the agents are stopped before attempting to uninstall.

See instrumentation examples for examples of other original instrumentation arguments.

Note: All instrumented servers are listed in the file, InstrumentationRegistry.xml.

Note: If you have uninstalled the server or removed the server instance without uninstrumenting it, the instrumentServer utility will be unaware of the absence, and will be unable to contact it to uninstrument it. This will block the uninstallation process for the data collection infrastructure.

If, after uninstalling the data collection infrastructure, WebSphere Application Server no longer starts, you might be able to fix it by doing the following steps:

1. Open the file, server.xml in `<was_install>/config/cells/<cell>/nodes/<node>/servers/<server>/` (`<server>` is likely server1, and `<cell>` and `<node>` is likely the system name).
2. Locate the following line: `genericJvmArgs="<some set of strings>"`.
3. Replace this with an empty string: `genericJvmArgs=""`.

Start the application server.

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