



Installation Guide for Windows

IBM Rational Synergy
Installation Guide for Windows
Release 7.1

Before using this information, be sure to read the general information under , “Appendix: Notices” on page 69.

This edition applies to version 7.1, IBM Rational Synergy (product number 5724V66) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Table of contents

Chapter 1: Introduction	1
Readme	1
Upgrading from a previous release	1
Release summary	1
Installation-related features	1
Interfaces installed by Rational Synergy 7.1	2
Release compatibility	2
User prerequisites	3
Contacting IBM Rational Software Support	3
Prerequisites	3
Submitting problems	4
Other information	6
Conventions used in this guide	6
Rational Synergy documentation	6
Chapter 2: Terms and concepts	7
Chapter 3: Rational Synergy installation checklist	9
Pre-installation	9
Installation	10
Licensing	10
Rational Synergy	10
After installation	11
Troubleshooting	12
Chapter 4: Pre-Installation	13
What to install	13
What to install per customer site	13
What to install per user	14
Server installation planning	15

Main and additional Windows server computer requirements	15
Main and additional Windows server space requirements	18
Planning client installations	20
Client computer requirements	20
Client space requirements	21
Preparing your server	22
Disk space considerations	22
Services file	23
Rational Synergy administrator	23
Rational License Server TL installation	24
Rational Directory Server installation	24

Chapter 5: Server installation **25**

Before you install the server software	25
Rational Synergy Windows server installation	26
Installing the main Windows server	27
Where to go from here	44
Guidelines for the automated update process	44
Installing an additional Windows server	45
Where to go from here	56
Guidelines for the automated update process	56
Performing a custom installation	57
Custom installation example: engine	59
Where to go from here	60
After you install the server software	61
Updating client installations automatically	61

Chapter 6: Client installation **63**

Rational Synergy client installation	63
Guidelines for the automated update process	63
Installing the compact client	64

Appendix: Notices**69**

Trademarks..... 72

1

Introduction

This chapter explains what you must know before installing IBM[®] Rational[®] Synergy on Windows[®] operating systems.

Readme

The IBM Rational Synergy Readme file contains vital information about your Rational Synergy software, including information about new features in this release, and a list of the supported hardware and operating systems. Review this information before installing your software. The Rational Synergy Readme file and product documentation are available on the IBM Rational Software Information Center site at <http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>.

Note The Readme file is revised and reissued, as needed, to provide the most current information. To ensure you have the latest version, download an electronic copy from the IBM Rational Software Information Center.

Upgrading from a previous release

Existing Rational Synergy servers and databases can be upgraded to the current release of Rational Synergy. The upgrade process is described in the *IBM Rational Synergy Upgrade Instructions for Windows*. These instructions are available on the IBM Rational Software Information Center site at <http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>, and in the documentation that is shipped with Rational Synergy.

Release summary

Installation-related features

Rational Synergy has the following features relating to installation in the 7.1 release:

- **Windows Start menu path**

Rational Synergy is now accessed from the Windows taskbar in the following location: **All Programs > IBM Rational > IBM Rational Synergy 7.1**.

For more information about this option, see step 15 of "Server installation" on page 36.

- **Shortcut to open a window for running Rational Synergy commands**

To open a window for running Rational Synergy commands: On the Windows taskbar, click **Start > All Programs > IBM Rational > IBM Rational Tools > IBM Rational Synergy 7.1 > CM Command Prompt**. This path assumes that you used the default program folder during your installation.

- **Typical Client installation option removed**

The Typical Client installation option was removed, since the Compact Client is the most commonly used client. Instead, use the Custom option to install engine services if needed on a client system.

Interfaces installed by Rational Synergy 7.1

Rational Synergy offers the following graphical user interfaces.

- **Rational Synergy**

This interface was formerly called Rational Synergy for Developers. It is for users in the *developer* or *build_manager* role. It contains functionality for development and build management activities.

- **Synergy Classic**

This interface was formerly called the "original client" and contains functionality for CM administrators and DCM administrators.

Release compatibility

The following are important characteristics of this release:

- In order for Rational Synergy to run, the client, engine, and database must all be from the same release and service pack; you cannot mix components from different Rational Synergy releases or service packs.
- In order for Rational Synergy to run, you must install the IBM[®] Rational[®] License Server TL.
- In order for Rational Synergy to run, you must install the IBM[®] Rational[®] Directory Server.
- Windows clients may be used with both UNIX and Windows servers.
- UNIX clients may only be used with UNIX servers.

- Rational Synergy Release 7.1 must be available on a Windows client before that client can access a 7.1 database.

Rational Synergy 7.1 is compatible with Rational Change 5.2 or later. If you are already using Telelogic Change, you must upgrade to Rational Change 5.2 or later at the same time as you upgrade to Rational Synergy 7.1.

User prerequisites

To install the main server, you need the following:

- A Windows system administration background including local and domain Administrative privileges.
- Knowledge of your company's hardware infrastructure and network topology
- A working knowledge of how your company will use Rational Synergy.

To install a compact client, you may need the privileges or permissions described in "Installing the compact client" on page 64.

Contacting IBM Rational Software Support

If the self-help resources have not provided a resolution to your problem, you can contact IBM® Rational® Software Support for assistance in resolving product issues.

Note If you are a heritage Telelogic customer, a single reference site for all support resources is located at <http://www.ibm.com/software/rational/support/telelogic/>

Prerequisites

To submit your problem to IBM Rational Software Support, you must have an active Passport Advantage® software maintenance agreement. Passport Advantage is the IBM comprehensive software licensing and software maintenance (product upgrades and technical support) offering. You can enroll online in Passport Advantage from <http://www.ibm.com/software/lotus/passportadvantage/howtoenroll.html>

- To learn more about Passport Advantage, visit the Passport Advantage FAQs at http://www.ibm.com/software/lotus/passportadvantage/brochures_faqs_quickguides.html.
- For further assistance, contact your IBM representative.

To submit your problem online (from the IBM Web site) to IBM Rational Software Support, you must additionally:

- Be a registered user on the IBM Rational Software Support Web site. For details about registering, go to <http://www.ibm.com/software/support/>.
- Be listed as an authorized caller in the service request tool.

Submitting problems

To submit your problem to IBM Rational Software Support:

1. Determine the business impact of your problem. When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem that you are reporting.

Use the following table to determine the severity level.

Severity	Description
1	The problem has a <i>critical</i> business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
2	This problem has a <i>significant</i> business impact: The program is usable, but it is severely limited.
3	The problem has <i>some</i> business impact: The program is usable, but less significant features (not critical to operations) are unavailable.
4	The problem has <i>minimal</i> business impact: The problem causes little impact on operations or a reasonable circumvention to the problem was implemented.

2. Describe your problem and gather background information, When describing a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Rational Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:
 - What software versions were you running when the problem occurred?
To determine the exact product name and version, use the option applicable to you:

- Start the IBM Installation Manager and select **File > View Installed Packages**. Expand a package group and select a package to see the package name and version number.
 - Start your product, and click **Help > About** to see the offering name and version number.
 - What is your operating system and version number (including any service packs or patches)?
 - Do you have logs, traces, and messages that are related to the problem symptoms?
 - Can you recreate the problem? If so, what steps do you perform to recreate the problem?
 - Did you make any changes to the system? For example, did you make changes to the hardware, operating system, networking software, or other system components?
 - Are you currently using a workaround for the problem? If so, be prepared to describe the workaround when you report the problem.
3. Submit your problem to IBM Rational Software Support. You can submit your problem to IBM Rational Software Support in the following ways:
- **Online:** Go to the IBM Rational Software Support Web site at <http://www.ibm.com/software/rational/support/> and in the Rational support task navigator, click **Open Service Request**. Select the electronic problem reporting tool, and open a Problem Management Record (PMR), describing the problem accurately in your own words.

For more information about opening a service request, go to <http://www.ibm.com/software/support/help.html>

You can also open an online service request using the IBM Support Assistant. For more information, go to <http://www.ibm.com/software/support/isa/faq.html>.
 - **By phone:** For the phone number to call in your country or region, go to the IBM directory of worldwide contacts at <http://www.ibm.com/planetwide/> and click the name of your country or geographic region.
 - **Through your IBM Representative:** If you cannot access IBM Rational Software Support online or by phone, contact your IBM Representative. If necessary, your IBM Representative can open a service request for you. You can find complete contact information for each country at <http://www.ibm.com/planetwide/>.

Other information

For Rational software product news, events, and other information, visit the [IBM Rational Software Web site](http://www.ibm.com/software/rational/) at <http://www.ibm.com/software/rational/>.

Conventions used in this guide

The table below describes the typeface and symbol conventions used in this guide.

Typeface	Description
<i>Italic</i>	Used for book titles and terminology. Also designates names of roles (<i>developer</i>), states (<i>working</i>), groups (<i>ccm_root</i>), and users (<i>john</i>).
Bold	Used for items that you can select and menu paths, also used for emphasis.
Courier	Used for commands, filenames, and directory paths. Represents command syntax to be entered verbatim. Signifies computer output that appears on-screen. Also used for the names of attributes (<code>modify_time</code>), commands (<code>ccm start</code>), functions (<code>remote_type</code>), and types (<code>csrc</code>).
<i>Courier Italic</i>	Represents values in a command string that you supply. For example, (<code>drive:\username\commands</code>).

This document also uses the following conventions:

Note Contains information that should not be overlooked.

Caution Contains critical information that must be observed or damage to the database or system could result.

Rational Synergy documentation

Unless otherwise noted, Rational Synergy documents are available on the IBM Rational Software Information Center site at <http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>, and in the DVD shipped with Rational Synergy.

2

Terms and concepts

To perform the operations described in this guide, it is helpful to understand the following terms and concepts.

Rational Synergy client A *Rational Synergy client* is a user interface process.

Rational Synergy database

A *Rational Synergy database* is an object-oriented repository that stores controlled files, change requests, and their properties. File properties include the source and creation date, and many other properties such as its relationship to other files.

Rational Synergy database server

The *database server* hosts the Rational Synergy databases.

Rational Synergy server

The *Rational Synergy server* hosts all Rational Synergy components: the database server, engine, client, license manager, object registrar, router, administrative tools, and web server. The engine server is a physical server that hosts the engine processes.

Rational Synergy CCM server

The *Rational Synergy CCM server* hosts the web-based Rational Synergy help, the Windows client installation image, and the automated update process available for Windows client installations. It also serves Rational Synergy Web mode clients. For details on the Rational Synergy CCM Server, see “CCM Server Administration” in the *IBM Rational Synergy Administration Guide for Windows*.

engine server

An *engine server* hosts the engine processes that communicate between the Rational Synergy client and the Rational Synergy database. The engine server is a physical server that hosts the engine processes.

object registrar

The *object registrar* tracks and communicates all changes made to Rational Synergy database objects so that each

	user's view of the database remains up to date. You must run one object registrar per database host.
router	The <i>router</i> manages the communications among CM processes. You must run one router per network installation.
Rational Directory Server	Rational Directory Server is a single enterprise directory solution designed for user authentication and administration for IBM Rational Solutions for Enterprise Lifecycle Management tools. The Rational Directory Server allows the users to log on using the same credentials across tools for which they have authorized access.
Rational License Server TL	The <i>license server</i> validates users' access to Rational Synergy databases, FLEXnet is used to manage licenses. You must run one license manager per network installation, and only on the computer for which the license was issued.
work area	A <i>work area</i> is a location in your file system to which Rational Synergy copies files when you check them out. Your work area can be located anywhere in the network file system. As you update files, Rational Synergy synchronizes changes in the work area with the database.

3

Rational Synergy installation checklist

Use the following checklist, in the sequence shown, to install and run the Rational Synergy software.

Pre-installation

Prepare to install the Rational Synergy software.

- Read the “Introduction” on page 1.
- Review the Rational Synergy Readme file.
- Read “Pre-Installation” on page 13. Pay special attention to “Server installation planning” on page 15 and “Planning client installations” on page 20.

- Fill out the appropriate space planning worksheets.

To plan space for a server installation, see “Main and additional Windows server space requirements” on page 18.

To plan space for a client installation, see “Client space requirements” on page 21.

- If you are upgrading from a previous release, read the *IBM Rational Synergy Upgrade Instructions for Windows*.

Installation

If you are installing Rational Synergy on both UNIX and Windows platforms, install it first on the platform where you will be running the Rational Synergy router. To install Rational Synergy on UNIX, refer to the *IBM Rational Synergy Installation Guide for UNIX* or the *Rational Synergy Installation Guide for UNIX (Oracle)*.

Licensing

Install the Rational Synergy licensing software before you install Rational Synergy.

To install the licensing software, see the *IBM Rational License Server TL Licensing Guide*. This document can be downloaded from the IBM Rational Software Information Center site at (<http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>).

To run Rational Synergy, you need to install the Rational Directory Server. To install the Rational Directory Server, see the *IBM Rational Server Installation Guide*. This document can be downloaded from the IBM Rational Software Information Center site at (<http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>).

Rational Synergy

Install the Rational Synergy software. If you are unsure what to install, see “What to install” on page 13.

- To install the main Windows server, see “Installing the main Windows server” on page 27.
- To install an additional Windows server, see “Installing an additional Windows server” on page 45.
- To perform a custom installation, see “Performing a custom installation” on page 57.
- To install a compact client, see “Installing the compact client” on page 64.

After installation

After installing the Rational Synergy software, do the following, as directed. You will need to reference the *IBM Rational Synergy Administration Guide for Windows*. This document is available on the IBM Rational Information Center site (<http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>) and on the Documentation section of the DVD.

- Unpack a database.

You must perform this procedure before you can start a Rational Synergy session. It is described in the “Create through unpack” section of the *IBM Rational Synergy Administration Guide for Windows*.
- Add users to the database.

This procedure is described in the “Add Users to a Rational Synergy Database” section of the *IBM Rational Synergy Administration Guide for Windows*.
- Configure the build computers, if necessary.

You can do this for an installation area or for a database. This procedure is described in the “Set Up Build Machines” section of the *IBM Rational Synergy Administration Guide for Windows*.
- Install and configure Rational Change, if necessary.

You need to do this only if your team will use the Rational Change tool. This tool is described in the *IBM Rational Change Installation Guide for Windows*, *IBM Rational Change Installation Guide for UNIX*, and Rational Change online help.
- Coordinate the customization of local types with the type developer of your site. Creating and modifying types is described in Rational Synergy CLI or Synergy Classic Help.
- Implement a database backup plan.

Guidelines for doing this are given in the “Rational Synergy Database Backup and Recovery” sections of the *IBM Rational Synergy Administration Guide for Windows*.
- Publish the URL to the Windows client installation.

Send this URL to Windows users who need to install the Rational Synergy 7.1 client on their computers.

Troubleshooting

For information about problems you might encounter while using Rational Synergy and information about how to solve the problems, review the Rational Synergy Readme file. Refer to “Readme” on page 1 for information about where to find the Readme file.

To read technical support technical bulletins, see the Rational Synergy Support site (<http://www.ibm.com/software/awdtools/synergy/support/>).

4

Pre-Installation

This chapter describes how to prepare your system for Rational Synergy software installation. It also contains information that will help you make decisions during your installation.

What to install

The following installation options are available for the Rational Synergy product.

- **Main Windows Server**
Includes the client, engine, database server, administrative tools, object registrar, and router for Windows servers.
- **Additional Windows Server**
Includes the client, engine, database server, administrative tools, and object registrar for Windows servers.
- **Custom Installation**
Enables you to choose which Rational Synergy components you want to install.
- **Compact Client**
Includes the client only, and is the most common choice if all you need is the client. This installation includes all user interfaces: Rational Synergy and Synergy Classic.

In addition to installing Rational Synergy, you must also install the Rational License Server. This is a separate installation procedure from the product installation process. For more information, see “Licensing” on page 10.

In addition to installing Rational Synergy, you must also install the Rational Directory Server. This is a separate installation procedure from the product installation process. For more information, see “Rational Directory Server installation” on page 24

What to install per customer site

All customer sites that will use the Rational Synergy Windows server must install a main Windows server on their network. Typically, the main server is installed on a Windows server computer. This installation (see “Installing the main Windows

server” on page 27) gives you everything you need to run Rational Synergy sessions, including the following:

- Rational Synergy Services

These services include the router, license manager, object registrar, and engine startup service.

- Database Server
- Client

If your team needs more than one database server, you can install additional database servers on separate Windows server computers.

An alternative to installing a Rational Synergy Windows server is to install a Rational Synergy UNIX server, as explained in the *IBM Rational Synergy Installation Guide for UNIX*.

Install the UNIX server before installing clients that will access the server.

Note Rational Synergy requires that the Windows browser service be enabled on each Rational Synergy Windows Server; otherwise, any `ccmsrv` option that requires the user to be a member of the Informix-Admin group will not work.

What to install per user

To start a Rational Synergy session, a compact client must be installed on the user’s computer, or a client installation must be accessible on a shared network drive. The user can also install the client using the Custom installation option.

The following sections explain what you need to install for users running Windows 2003 or Windows XP Professional.

Windows users

Users running Windows have the following options.

- **Install the Compact Client**

Most Windows users will install the compact client on the local computer. With this installation, only the client process runs on the user’s computer; the engine process runs on the Rational Synergy server or on another system configured to run engines.

- **Access a Client Installation on a Shared Network Drive**

An alternative to installing the Compact Client on each user’s computer is for users to access a single shared installation on a network drive.

After installing one main Windows server, you can create a network-share installation by installing a compact client on a network drive. Then, each Windows user can start Rational Synergy programs from the directory where the network installation resides. (Users will probably want to create desktop shortcuts to the programs they will use in the network installation.)

- **Custom Client Installation**

Some customer sites may want users to run the engine on their local computers. In this case, users can use the Custom installation option to install the client, engine, and Engine Start Service (ESS) on the user's computer.

Server installation planning

The following sections explain how to plan for the installation of a main Windows server and additional Windows servers. Custom installation requirements are also discussed. Read the section appropriate to the type of installation you need to perform.

Main and additional Windows server computer requirements

The table below shows the minimum system requirements, and the table on the following page shows the minimum configuration for server computers that will run the different types of Rational Synergy installations. Your installation may require more than the amounts shown in these tables. You will use the

information in these tables while reviewing the worksheet shown in the section “Main and additional Windows server space requirements” on page 18.

Type of Requirement	Type of Installation	Requirements
Operating System	Main/Additional server	See the Readme file for a list of supported systems.
Disk Space	All installations — Rational Synergy file system requirements	<ol style="list-style-type: none"> 1. Rational Synergy database file system requirements: <ul style="list-style-type: none"> — Allocate disk space according to the size of the data to be migrated to Rational Synergy. Plan extra space for the growth of this area. The database must reside on an NTFS file system partition. 2. <code>informix_chunkfiles</code> requirements: <ul style="list-style-type: none"> — Allocate disk space according to the number of users. The files must reside on a local NTFS file system partition. 3. Disk space for users’ work areas: <ul style="list-style-type: none"> — Each Rational Synergy user must have enough disk space to store a full copy of any data on which the user will work.
Disk Space	Main server Additional server Custom	To install a Rational Synergy Main Windows server: <ul style="list-style-type: none"> — Windows computers require a minimum of 630 MB of disk space. To install a Rational Synergy Additional Windows server: <ul style="list-style-type: none"> — Windows computers require a minimum of 325 MB of disk space. To perform a custom installation (as shown in “Performing a custom installation” on page 57), add the disk and memory requirements for the configuration you want to install.
License File	Main server/Custom	A valid Rational Synergy license file is required. For more information on installing the Rational Synergy License Server, see “Licensing” on page 10.

The minimum configurations are shown below.

Type of Requirement	Type of Installation	Minimum Configuration
CPU	Main/Additional server	Xeon [®] 2 GHz dual processor or better
Memory (per Computer)	Main/Additional server	3 GB
Virtual Memory	Main/Additional server	3 times physical RAM
Repository DB Space	Main/Additional server	2 GB partition

Main and additional Windows server space requirements

The following worksheet describes how to allocate space for your main and additional Windows server installations.

INSTALLATION AREA MINIMUM CONFIGURATION									
<p>Separate programs and data for your installation as follows: 1) install Rational Synergy software into one directory, 2) install the Rational Synergy databases into another directory when you unpack a database, then 3) install the database server chunk files into a different directory.</p> <p>The following is an example of three drives and directories for a main installation:</p> <ol style="list-style-type: none"> 1. C:\Program Files\IBM\Rational\Synergy\7.1 2. E:\ccmdb (Rational Synergy database directory on an NTFS file system partition) 3. F:\ifmxdata (includes database server chunk files (rootdbs, tempdbs, log, and ccm) on a local NTFS file system partition. For more information, see “Disk space considerations” on page 22). <p style="text-align: center;">Note Directories 2 and 3 have the greatest growth potential. Plan for this growth by completing this worksheet before you install a main or additional server.</p>									
SPACE REQUIREMENTS EXAMPLE									
<p>System with Rational Synergy installed:</p> <table> <tbody> <tr> <td>Rational Synergy main server installation area: (executables)</td> <td>630 MB</td> </tr> <tr> <td>informix_chunkfiles:</td> <td>220 MB (40 users)</td> </tr> <tr> <td>ccmdb area:</td> <td>(might be much larger, depending on the size of projects in database) 100 MB</td> </tr> <tr> <td colspan="2" style="text-align: right;">minimum total of 950 MB</td> </tr> </tbody> </table>		Rational Synergy main server installation area: (executables)	630 MB	informix_chunkfiles:	220 MB (40 users)	ccmdb area:	(might be much larger, depending on the size of projects in database) 100 MB	minimum total of 950 MB	
Rational Synergy main server installation area: (executables)	630 MB								
informix_chunkfiles:	220 MB (40 users)								
ccmdb area:	(might be much larger, depending on the size of projects in database) 100 MB								
minimum total of 950 MB									

MINIMUM SPACE CONFIGURATION		
1. Rational Synergy installation (executable files):		630 MB
2. <code>informix_chunkfiles</code> (data files):		
Installation default (based on an average of 5 MB per user)		
40 users (default):	220 MB	_____ MB
3. <code>ccmdb</code> :		
Rational Synergy databases expand as users migrate or create new data in them.		
Therefore, plan for disk space growth in the <code>ccmdb</code> file system location.		
The <code>ccmdb</code> file system must be on a shared NTFS file system.		
Per database:	minimum	220 MB
	TOTAL:	_____ MB

Planning client installations

The following sections describe how to plan for the installation of a compact client.

Client computer requirements

The table below presents the minimum requirements, and the following table shows the minimum configuration for client computers. Your installation may require more than the amounts shown in these tables.

Type of Requirement	Type of Installation	Requirements
Operating system	Compact client	See the Readme file for a list of supported systems.
Disk space (per Windows computer)	Compact client	153 MB

The minimum configurations are shown below.

Type of Requirement	Type of Installation	Minimum Configuration
Hardware	Compact client	Core 2 Duo
Memory	Compact client	2 GB
Virtual memory	Compact client	3 times physical memory

Client space requirements

The following worksheet describes how to allocate space for the Rational Synergy Windows client software.

INSTALLATION AREA MINIMUM CONFIGURATION					
<p>The following is the default installation area for the Rational Synergy Windows client. You can keep this default or change it during installation.</p> <p>C:\Program Files\IBM\Rational\Synergy\7.1 (includes Rational Synergy executables for the Windows client)</p>					
SPACE REQUIREMENTS EXAMPLE					
<p>System with Rational Synergy client installation:</p> <table> <tr> <td>Rational Synergy installation area:</td> <td>153 MB</td> </tr> <tr> <td>User's work areas (per user on each user computer). This total depends on the size of your data.</td> <td>100 MB</td> </tr> </table> <p>Work areas can also reside on a shared network drive.</p> <p style="text-align: right;">TOTAL: 253 MB</p>		Rational Synergy installation area:	153 MB	User's work areas (per user on each user computer). This total depends on the size of your data.	100 MB
Rational Synergy installation area:	153 MB				
User's work areas (per user on each user computer). This total depends on the size of your data.	100 MB				
MINIMUM SPACE REQUIREMENTS					
<p>1. Rational Synergy 7.1 installation area (compact client): 153 MB</p> <p>2. User work area space requirements:</p> <ul style="list-style-type: none"> — Each user's work area must be a directory that is writable by the user. You can define where to place your work area in the Home Directory field of the Rational Synergy Startup Info dialog box. This dialog box opens when you start a Rational Synergy session. — The area must be visible to all build/compile servers. <p>For each work area, per user: _____ X 200 MB</p> <p style="text-align: right;">TOTAL: _____ MB</p>					

Preparing your server

Before you create the database server and start the database server processes, read the following sections to ensure that your system is properly set up for the database server.

Disk space considerations

When installing a database server, the `setup` program prompts you for the location of the Informix[®] chunk files (see step 20 on page 37). When you choose the location, keep the following in mind:

- Place the chunk files where no one will remove them. The chunk files must reside on a local disk on the database server computer.

Caution After you create a chunk file in a database server, **do not** move it. If you do, the database server will no longer work, and you might lose data.

- You must use a local NTFS file system.
- In the future, you might want to expand the capacity of an existing database server. If so, you will need to create additional chunk files. For instructions on how to do this, see “`ccmsrv expand`” in the *IBM Rational Synergy Administration Guide for Windows*.

By default, Rational Synergy uses the following criteria to create the initial chunk of database space (dbspace):

- 1 MB multiplied by the number of users is used for root, log, and temp dbspace (root dbspace must be at least 60 MB).
- 2 MB multiplied by the number of users is used for the initial `ccm` dbspace.

Note The above criteria are just a rough estimate of the initial database chunk. As a rule, generously allocate space for the `ccm` dbspace because this is where all users’ metadata is stored and where the database typically grows.

Services file

The database server requires a Services file, which is typically located in `%windir%\System32\drivers\etc\services`. If it is missing, check with your system administrator before starting the database server installation process.

The Services file contains a single entry for each known service on the network, and each line contains a service name, a port number, and a protocol. A name alias is optional. The Services file contains information regarding the known services on your network. The syntax of the file is `service_name port_number/protocol [alias] [#comment]`.

The Rational Synergy installation program automatically updates the Services file when you install the main Windows server, an additional server, or an engine. You are prompted for the port number. In most cases, you do not need to change the displayed default value.

The following is an example of an entry in the Services file:

```
turbo 1526/tcp      #Informix-OnLine Dynamic Server
```

where:

`turbo` is the name of the Informix network service.

`1526` is the port number and `tcp` is the protocol. The TCP/IP port numbers must be identical on all hosts running Rational Synergy products.

`#comment` is any information that you want to add.

As long as the Services file exists and has been properly configured for your network, no user modification is necessary to run Rational Synergy. Contact your system administrator if you have questions.

Note This service refers to a Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) port service. These services are separate from the Windows services that are discussed in the “Monitor the Services” section of the *IBM Rational Synergy Administration Guide for Windows*, and from those administered by the Windows Service Manager.

Rational Synergy administrator

Before starting the Rational Synergy product installation, you must create a user to be the CM administrator, such as `ccm_root`. This user is reserved for CM administration. This user will have special privileges that are not intended for users in the *developer* or *build manager* role.

Rational License Server TL installation

Rational Synergy uses the Rational License Server TL. The Rational License Server TL is a FLEXnet-based license server used to manage licenses for Rational Synergy, IBM® Rational® DOORS®, and IBM® Rational® TAU® products. You must install the Rational License Server TL separately from the product installation process documented here in order to run Rational Synergy, even if you are not running other products. Install the Rational License Server TL before you perform the Rational Synergy product installation.

For complete information about installing the license, see “Licensing” on page 10.

Rational Directory Server installation

You must install Rational Directory Server (RDS) to run Rational Synergy. RDS is a powerful solution for the centralized database that can be used by the enterprise to store and retrieve the large volume of data. RDS is a separate installation. For complete information on installing RDS, see the Rational Software Information Center at <http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp>.

5

Server installation

This chapter describes how to install the Rational Synergy main server software. Each site must complete this installation before unpacking a database. This chapter also describes how to perform an additional server installation as well as a custom installation.

Note You can install the Rational Synergy software on any supported Windows server. See the Readme file or the Rational Synergy Support Web site for a list of the supported hardware and operating systems. Throughout this document, when a Windows server is discussed, the generic term "Windows server" is used.

Before you install the server software

The CM administrator or system administrator must install the main Windows server and additional servers.

If you are installing the Rational Synergy software for the first time, do the following:

- Read “Pre-Installation” on page 13.
- Be prepared to provide license information. See the section “Locating your server license file” in the *IBM Rational License Server TL Licensing Guide*.
- Be prepared to provide the port for Rational Directory Server. Read “Rational Directory Server installation” on page 24.
- Be sure that your Windows main server computer meets the system requirements listed in “Main and additional Windows server computer requirements” on page 15.
- Read “Main and additional Windows server space requirements” on page 18.

If you are installing an additional server, do the following:

- Read “Installing an additional Windows server” on page 45.

Rational Synergy Windows server installation

You can install the main Windows server, additional servers, or a custom installation. Each installation is unique. Instructions for each start on the following pages:

- “Installing the main Windows server” on page 27
- “Installing an additional Windows server” on page 45
- “Performing a custom installation” on page 57

Before proceeding with the installation, consider the following:

- If you have not installed any of the Rational Synergy software and are unsure which type of installation to perform, read “Pre-Installation” on page 13.
- If you have already installed the main server, but are unsure what to do next, refer to “Rational Synergy installation checklist” on page 9.
- If you have already installed the main Windows server or additional servers and want to install a client, see “Installing the compact client” on page 64.

Installing the main Windows server

The following instructions describe how to install the main Windows server, which includes the compact client, engine, database server, administrative tools, object registrar, license manager, and router.

Note In order to install a Windows Server, you must be licensed to use Rational Synergy on Informix.

You must install the main Windows server before installing additional servers or clients. If you have already installed the main server, but need to install more servers, see “Installing an additional Windows server” on page 45.

There can be only one main Windows server per Rational Synergy license file. For more information, see “Setting up your server license” on page 28.

You must satisfy the following requirements before installing the main Windows server.

User Requirements: Member of local Administrators group

Permission to write to a local NTFS file system partition

Active Directory user

OS Requirements: See the Readme file or Rational Synergy Support Web site

Prerequisites: The `%windir%\System32\drivers\etc\services` file must be writable and you must be logged on to a domain. `%windir%` is the Windows installation directory.

Note You must install the main server and any additional servers in a domain environment. To install additional servers, see “Installing an additional Windows server” on page 45.

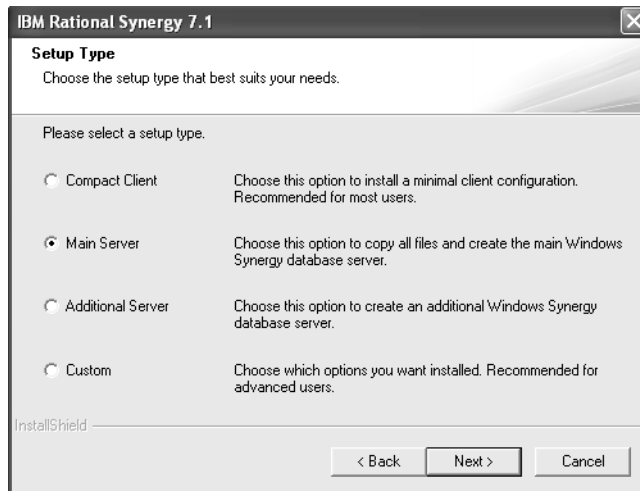
To install the main Windows server:

1. Log on to the Windows domain.
2. Start the Rational Synergy installer.
 - If you are installing from a DVD, insert the DVD that contains the Rational Synergy Windows Server in the DVD drive. On the Windows taskbar, right-click the **Start** button to display a shortcut menu. Click **Explore** to open Windows Explorer. Navigate to `DVD_drive:\win_servers\synergy_server`, and double-click `setup.exe` to display the **Welcome** dialog box.
 - If you are installing from a download, double-click `synergy71.exe` to display the **Welcome** dialog box.

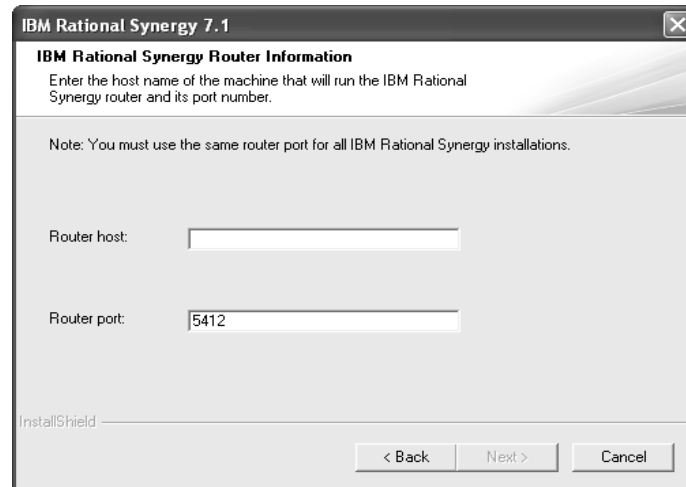
3. Click **Next** to display the **Software License Agreement** dialog box. Review and accept the terms of the license agreement.
4. Click **Next** to display the **Choose Destination Location** dialog box. You can accept the default installation location, or click **Browse** to specify a different location.
5. Click **Next** to display the **Setup Type** dialog box.

If you **are** a domain user and a member of the local Administrators group, the **Setup Type** dialog box opens. Select **Main Server** and click **Next**, then proceed to step 6.

Install only one main server on your network.



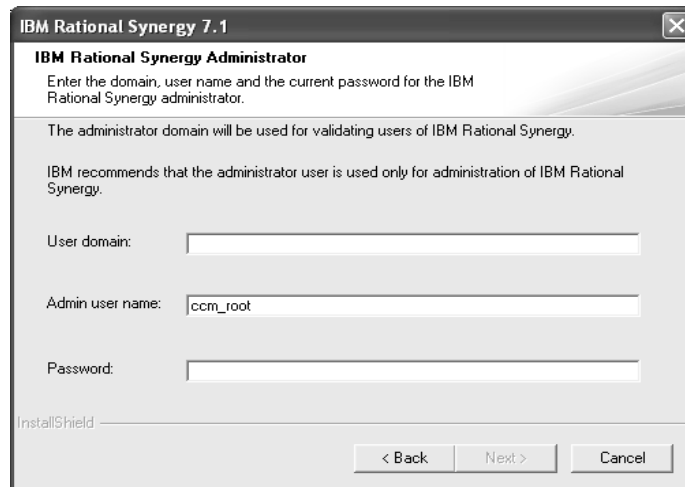
If you **are not** a domain user and a member of the local Administrators group, the installation program displays the **IBM Rational Synergy Router Information** dialog box to install a compact client.



To resolve this, do the following:

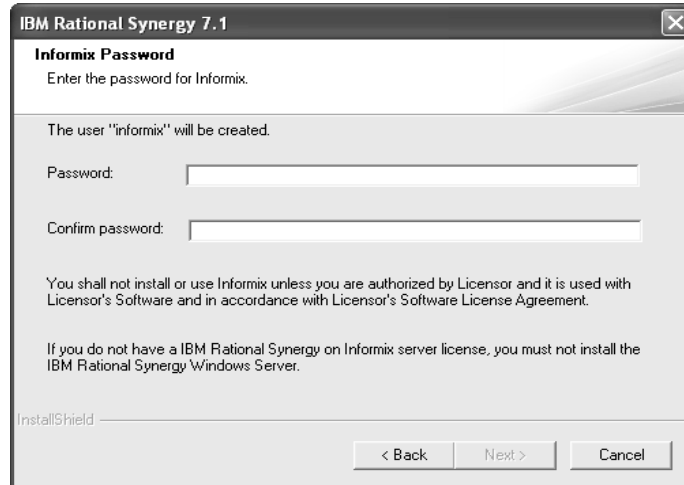
- a. Click **Cancel** to exit the setup program.
 - b. Log on as a domain user who is a member of the local Administrators group.
 - c. Start the main Windows server installation (see “Installing the main Windows server” on page 27).
6. In the **IBM Rational Synergy Administrator** dialog box, type your domain name in the **User domain** field, if necessary.
- Type the **Admin user name** and **Password** in the appropriate fields.

Note that the domain and Admin user must already exist before running the installation.

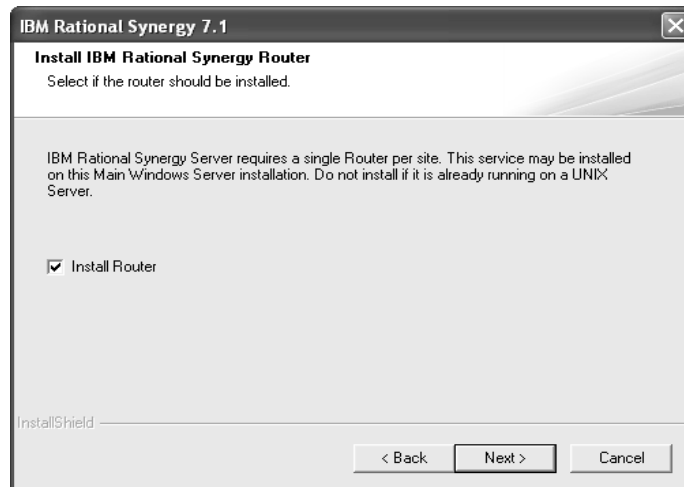


7. Click **Next** to display the **Informix Password** dialog box.
 - If you already have a user *informix*, you will be prompted for the *informix* user password, and the password you enter is verified by the installation program. Skip to step 8.
 - If you do not have a user *informix*, the install program creates the *informix* user for you. The *informix* user is a member of the Informix-Admin group, and has the privilege to run the database server commands. In this case, you are prompted for the password, and asked to confirm the password, as shown in the following dialog box.

Type the password for the *informix* user in the **Password** and **Confirm password** fields.



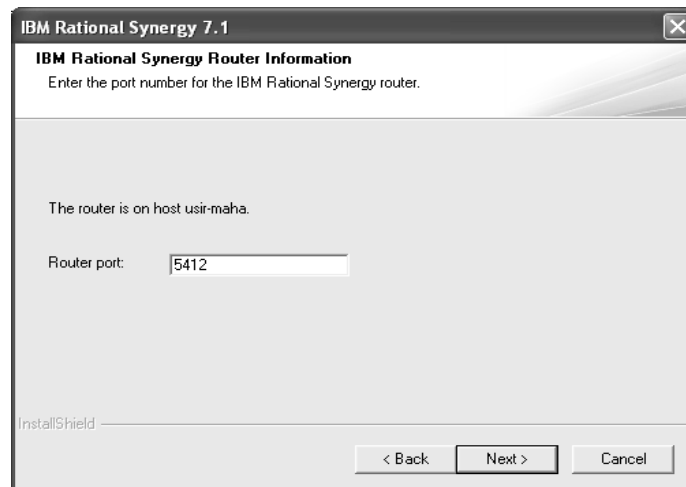
8. Click **Next** to display the **Install IBM Rational Synergy Router** dialog box.



9. If you do not have a router installed, select **Install Router**. The Rational Synergy server requires one router per site.

If you already have a router running on UNIX, do not install one on your Rational Synergy Windows server. You can share these services running on UNIX.

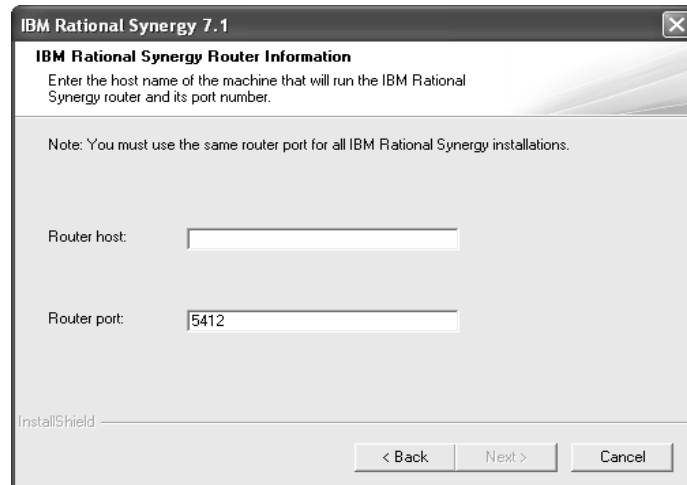
10. Click **Next** to display the **IBM Rational Synergy Router Information** dialog box. If you selected **Install Router** in step 9, perform step a. Otherwise, perform step b.
 - a. If you are installing the router and license manager, the **IBM Rational Synergy Router Information** dialog box prompts you only for port information.



By default, the port number that the Rational Synergy router uses is 5412. If this port number is already in use, change the port number in the **Router port** field. If you are not certain that port number 5412 is available, look in your Services file, which is located in the %windir%\System32\drivers\etc\services directory. For more information, see “Services file” on page 23.

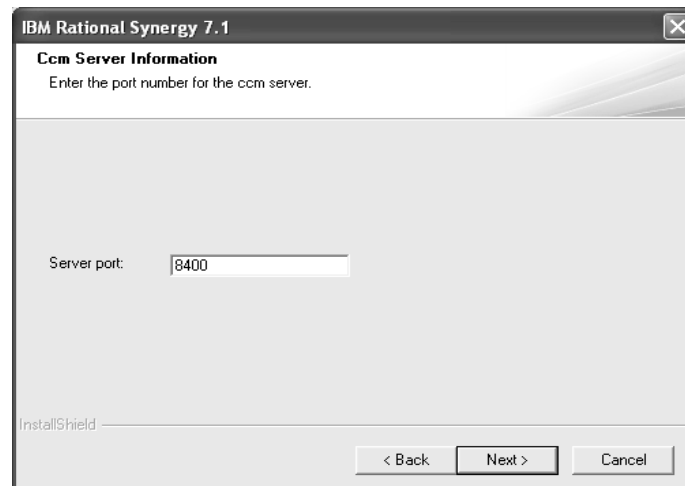
- b. If you are **not** installing the router and license manager, the **IBM Rational Synergy Router Information** dialog box prompts for router host **and** port information. By default, the port number that the Rational

Synergy router uses is 5412. The port number must be the same as the one specified on the router computer.

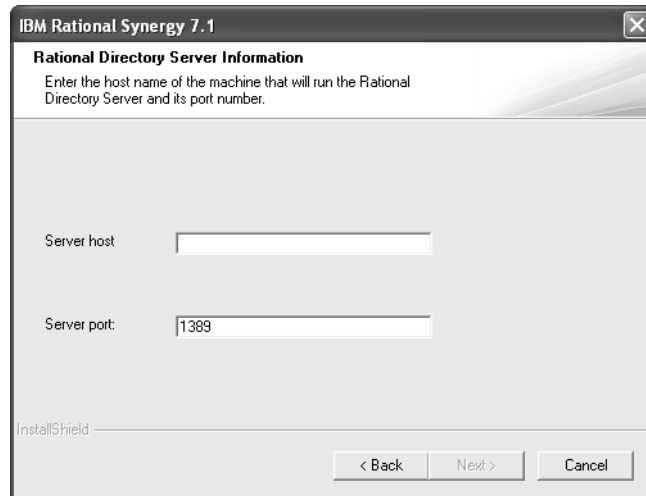


If you need to change the defaults, type the name of the router host and router port in the appropriate fields.

11. Click **Next** to display the **Ccm Server Information** dialog box. The CCM server is a Web server that serves online help pages for all Rational Synergy GUI sessions, both Web mode and traditional mode. Rational Synergy requires one primary server, which runs on the router host system.

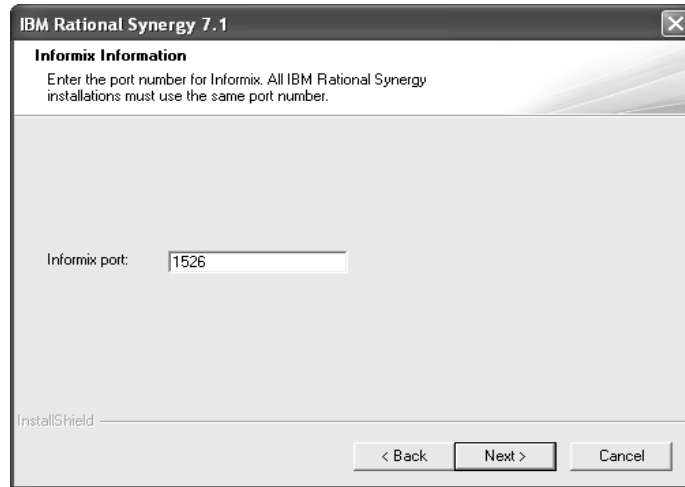


12. If the default primary server port number (8400) is already in use, change the port number in the **Port Number** field. If you are not certain that port number 8400 is available, look in your Services file, which is located in the %windir%\System32\drivers\etc\services directory. For more information, see “Services file” on page 23.
13. Click **Next** to display the **Rational Directory Server Information** dialog box.



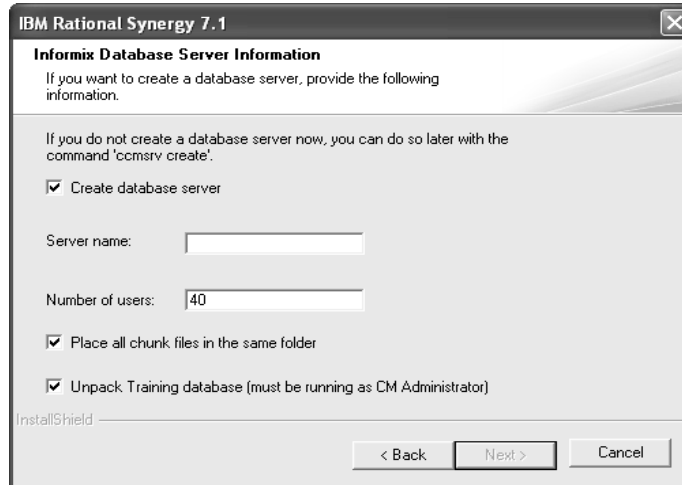
14. In the **Server Host** and **Server Port** fields, type the host and port where Rational Directory Server is installed. The default primary server port number is 1389. To find the port number where Rational Directory Server is installed, look in your Services file, which is located in the %windir%\System32\drivers\etc\services directory. For more information, see “Services file” on page 23

15. Click **Next** to display the **Informix Information** dialog box.



16. If the default Informix port number (1526) is already in use, change the port number in the **Informix port** field. If you are not certain that port number 1526 is available, look in your Services file, which is located in the %windir%\System32\drivers\etc\services directory. For more information, see “Services file” on page 23.
17. Click **Next** to display the **Informix Database Server Information** dialog box.

18. Create the Informix database server.



The default settings in all Informix database server dialog boxes are only suggestions. Configure these dialog boxes based on your planning estimates in “Main and additional Windows server space requirements” on page 18. If you have not completed that section, do so before filling in these dialogs.

- If you are upgrading from a previous Rational Synergy release on the same computer, **do not** select **Create database server**. In all other cases, select this check box.

If you do not select **Create database server**, you will install the new Informix software, but you will not create a new database server.

Caution If you are upgrading from a previous Rational Synergy release on the same computer and you select **Create database server**, your old chunk files may be overwritten. This may result in loss of data. For more information, see the upgrade instructions relevant to your current installation.

- If you are creating a database server, type its name in the **Server name** field. Alternatively, use the default, which is the computer name.
- Based on your planning estimates, type the appropriate number in the **Number of users** field.

- By default, **Place all chunk files in the same folder** is selected. Keep this setting if you want all chunk files to be stored in the same directory. Otherwise, clear this check box. For more information, see “Installation Area Minimum Configuration” in the worksheet in “Main and additional Windows server space requirements” on page 18.

To learn more about chunk files, see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

- If you are running the installation program as the CM Administrator, and you have selected the **Create database server** check box, you can choose to have the installation program automatically create a training database for you. Select **Unpack Training database** if you want a training database.

The training database will be created in the path *computername*\ccmdb\training, where *computername* is the name of the computer on which you are installing. The installation program will create and share the ccmdb directory if it does not already exist.

19. Click **Next** to display the **Create Database Server Information** dialog box.

If you are creating a database server (specified in step 18), a message appears telling you that server creation will overwrite the existing onconfig file, SQLHOSTS registry entry, or Informix database chunk files. Click **Yes** to display the **Create Database Server Information** dialog box.

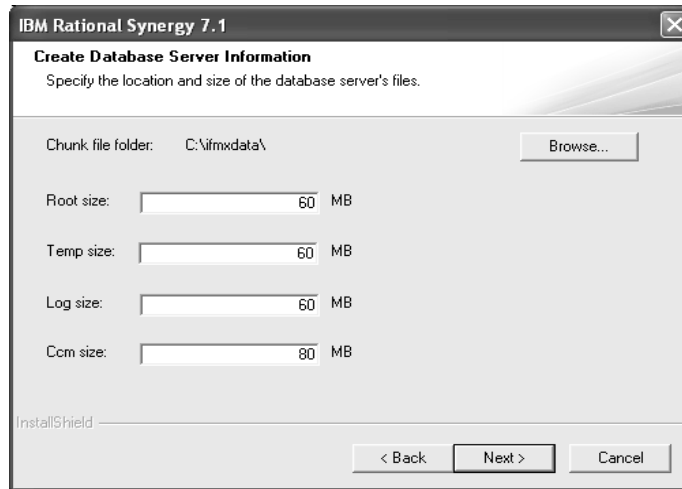
20. If you selected **Place all chunk files in the same folder** in step 18, follow the instructions in “To store chunk files in the same folder” on page 38. Otherwise, follow the instructions in “To store chunk files in separate folders” on page 39.

If you are unsure how to allocate space for the chunk files, refer to “Disk space considerations” on page 22.

Caution After you create a chunk file in a database server, do not move it. If you do, the database server will no longer work, and you may lose data.

To store chunk files in the same folder

- a. In the **Create Database Server Information** dialog box, accept the default location of `drive:\ifmxddata\` or click **Browse** to specify a different location.



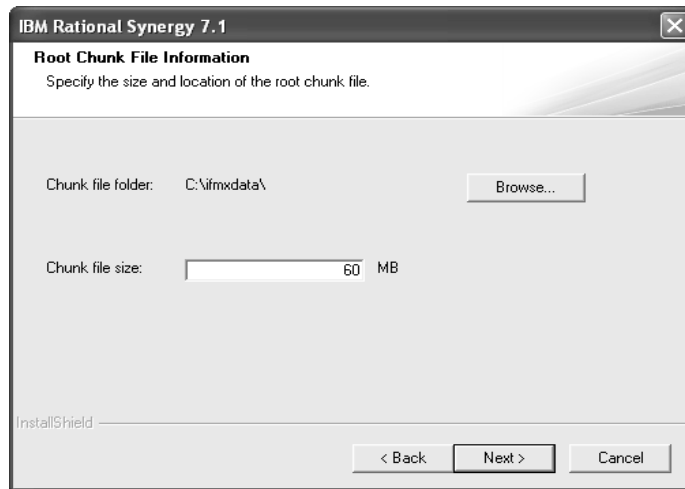
- b. Type the sizes of the dbspaces in the following fields: **Root size**, **Temp size**, **Log size**, and **Ccm size**.

To learn how to calculate the sizes for each dbspace, see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

- c. Click **Next** to display the **Connect to UNIX IBM Rational Synergy Server** dialog box. Proceed to step 21 on page 42.

To store chunk files in separate folders

- a. In the **Root Chunk File Information** dialog box, accept the default location of `drive:\ifmxdata\`, or click **Browse** to specify a different location.

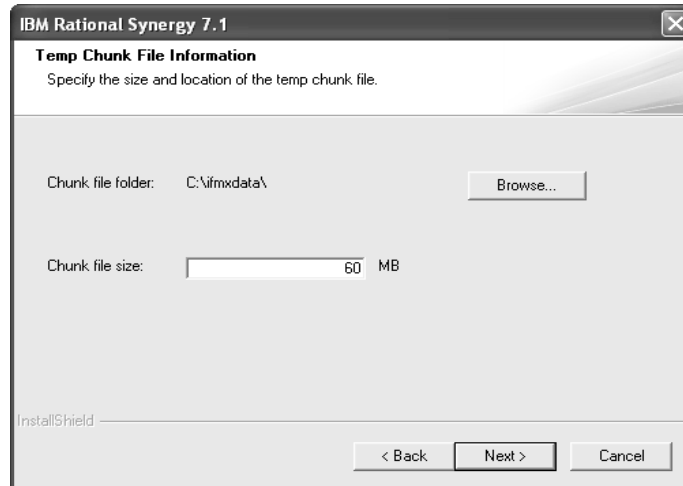


- b. If you need to change the default, type a chunk file size in the **Chunk file size** field.

To calculate any of the four (4) dbspace sizes (`rootdbs`, `tempdbs`, `log`, and `ccm`), see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

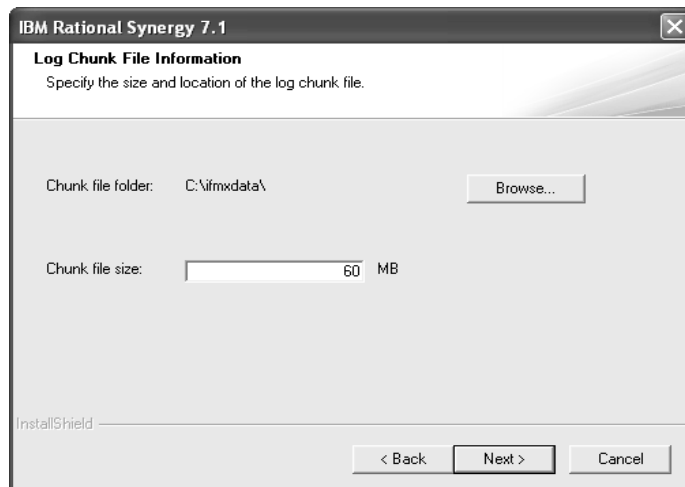
- c. Click **Next** to display the **Temp Chunk File Information** dialog box.

Note If a specified directory already contains chunk files already, a Warning dialog box opens telling you that these files will be overwritten.

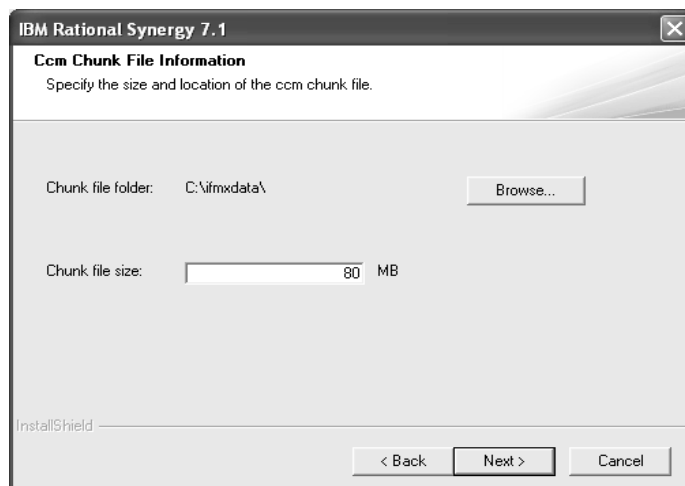


- d. In the **Temp Chunk File Information** field, accept the default location of *drive:\ifmxdata*, or click **Browse** to specify a different location.
- e. If you need to change the default, type a chunk file size in the **Chunk file size** field.

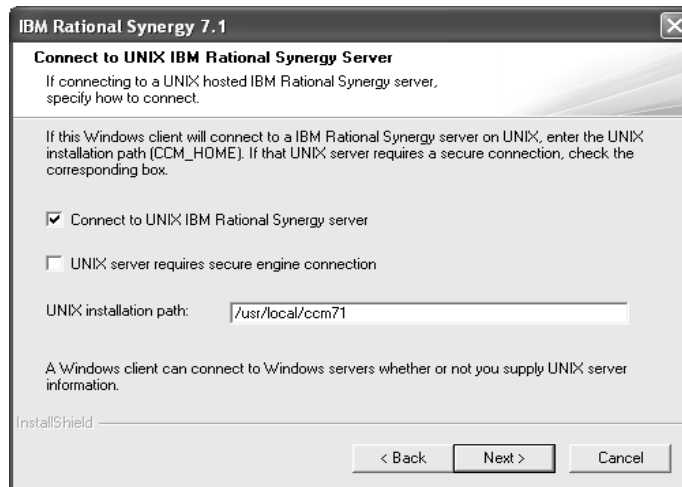
- f. Click **Next** to display the **Log Chunk File Information** dialog box.



- g. In the **Log Chunk File Location** dialog box, accept the default location of `drive:\ifmxdata\`, or click **Browse** to specify a different location.
- h. If you need to change the default, type a chunk file size in the **Chunk file size** field.
- i. Click **Next** to display the **Ccm Chunk File Information** dialog box.

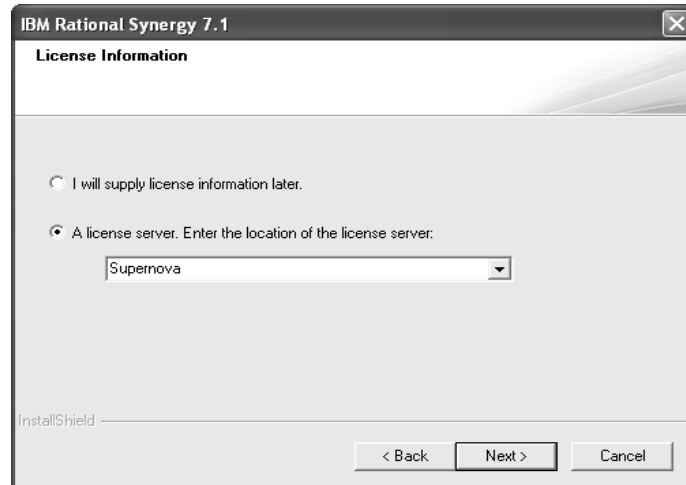


- j. In the **Ccm Chunk File Location** dialog box, accept the default location of `drive:\ifmxdata\`, or click **Browse** to specify a different location.
 - k. If you need to change the default, type a chunk file size in the **Chunk file size** field.
 - l. You are now finished configuring the chunk files to be stored in separate directories.
21. Click **Next** to open the **Connect to UNIX IBM Rational Synergy Server** dialog box.



- a. If you will connect the client to a UNIX server, select **Connect to UNIX IBM Rational Synergy Server**. Otherwise, clear this check box.
- b. If you selected **Connect to UNIX IBM Rational Synergy server**, specify whether a secure connection is to be used.
- c. If you selected **Connect to UNIX IBM Rational Synergy server**, type the UNIX installation path in the **CCM_HOME** field.

- If the **License Information** dialog box opens, select the appropriate license option:



For more information on obtaining license information, see “Obtaining a license” on page 22.

22. Click **Next** to display the **Start Copying Files** dialog box.
 - a. Scroll through the **Current Settings** list to view your setup. If you need to change any settings, click **Back** until you arrive at the dialog box where you need to make the change. After you make the change, click **Next** until you return to the **Start Copying Files** dialog box.
 - b. When all of your settings are correct, click **Next**.

A progress indicator window opens in the middle of the screen while the files are being loaded onto your system.

If you see a dialog box instructing you to restart after the installation program has finished running, follow the instructions in the dialog box to complete your installation. The installation program determines whether you need to restart.

23. Click **Finish**. The Rational Synergy main Windows server installation is complete.

Note that all setup information is written to a log file. For example, C:\Documents and Settings\user\Application Data\IBM Rational\Synergy 7.1 install.log.

You can unpack a database, then start a Rational Synergy session as the CM administrator. However, until you add users, including yourself, to the Rational Synergy database, you cannot use the database.

If you selected the option to create a training database, you can use the desktop shortcut **Training for IBM Rational Synergy 7.1** to start a session on that database. You (the CM Administrator) are a user of the training database, but if you would like another user to use it, you must add that user to the database.

Instructions for unpacking a database, adding users to a database, and starting a Rational Synergy session are in the *IBM Rational Synergy Administration Guide for Windows*.

Where to go from here

To install an additional server, see “Installing an additional Windows server” on page 45.

To perform a custom installation, see “Performing a custom installation” on page 57.

To install a compact client, see “Installing the compact client” on page 64.

To install clients for multiple Rational Lifecycle Solutions, see the installation media.

Guidelines for the automated update process

After the main Windows server installation is complete, users can install the Rational Synergy client. The CM administrator sends email to all users informing them to install the client, and providing the URL to the Windows client installation image.

Installing an additional Windows server

The following instructions describe how to install an additional Windows server, which includes the compact client, engine, database server, administrative tools, and object registrar.

Note To install a Windows Server, you must be licensed to use Rational Synergy on Informix.

The main reason for installing an additional server is resource allocation. An additional database server allows databases to grow separately. For example, if your company is large, but only one group within it is using Rational Synergy, you can create one database in which all source code, documentation, and testing objects reside. Later, when your company decides that Rational Synergy is the right tool for all your projects, you can create one database for source code, one for documentation, and another for testing. Moreover, you could use a separate server for each database.

You must satisfy the following requirements before installing an additional Windows server.

User requirements: Member of local Administrators group

Permission to write to a local NTFS file system partition
Active Directory user

OS requirements: See the Readme file or Rational Synergy Support site

Prerequisites: You must have already installed a main Windows server.
The %windir%\System32\drivers\etc\services file must be writable and you must be logged on to domain. %windir% is the Windows installation directory.

Note You must install the main server and any additional servers in a domain environment.

To install an additional Windows server:

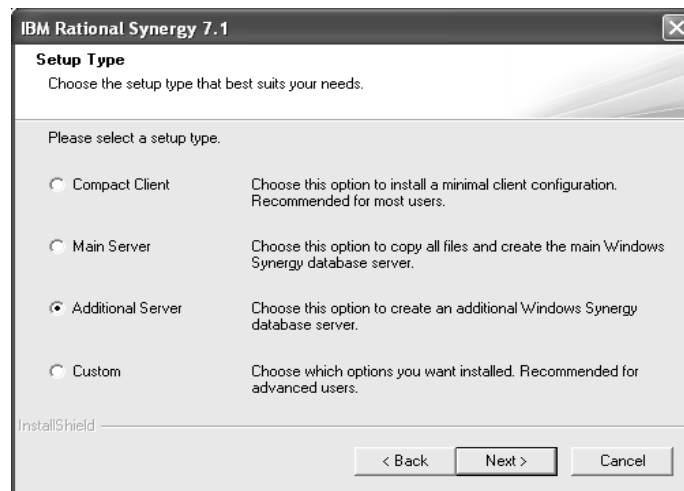
1. Log on to the Windows domain.
2. Start the Rational Synergy installer.
 - If you are installing from a DVD, insert the DVD that contains the Rational Synergy Windows Server in the DVD drive. On the Windows taskbar, right-click the **Start** button to display a shortcut menu. Click **Explore** to open Windows Explorer. Navigate to `DVD_drive:\win_servers\synergy_server`, and double-click `setup.exe` to display the **Welcome** dialog box.

- If you are installing from a download, double-click `synergy71.exe` to display the **Welcome** dialog box.

Note If you already have an installation of Rational Synergy or an installation of Informix, a warning dialog box opens. If you choose to continue, the new installation will overwrite the current installation.

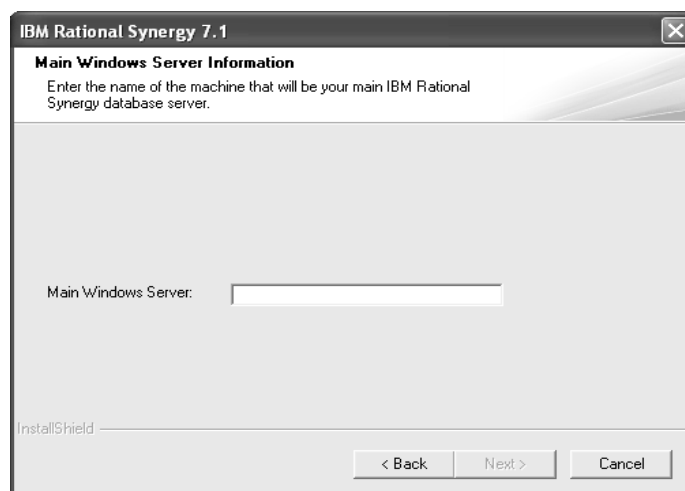
3. Click **Next** to display the **License Agreement** dialog box. Review and accept the terms of the license agreement.
4. Click **Next** to display the **Choose Destination Location** dialog box. You can accept the default installation location, or click **Browse** to specify a different location.
5. Click **Next** to display the **Setup Type** dialog box.

If you **are** a domain user and a member of the local Administrators group, the **Setup Type** dialog box opens.



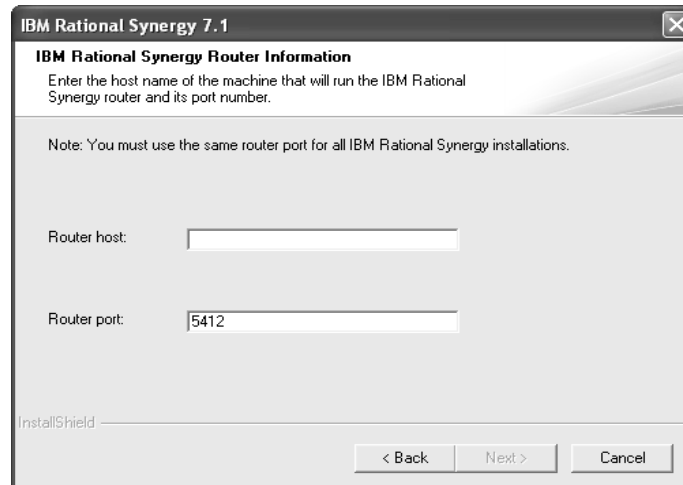
6. In the **Setup Type** dialog box, click the **Additional Server** button.
7. In the **Informix Password** dialog box, type the *informix* user password in the **Password** field, and type it again in the **Confirm password** field.
8. Click **Next** to display the **Main Windows Server Information** dialog box.

In the **Main Windows Server Information** dialog box, type the name of the computer that will be your main Rational Synergy database server.



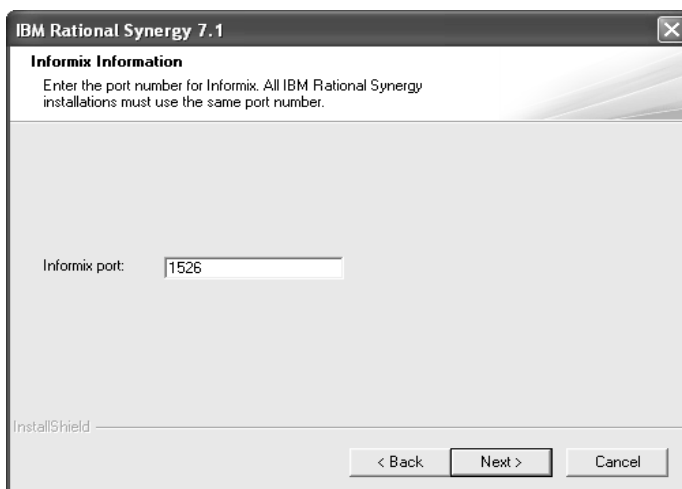
9. Click **Next**, and do one of the following, as directed:
 - If the **IBM Rational Synergy Router Information** dialog box opens, proceed to step 10.
 - If the **Informix Information** dialog box opens, the installation program has determined the router port number from the main server computer. Skip to step 11b.
 - If the **Informix Database Server Information** dialog box opens, the installation program has determined the router port number from the main server computer, and has also determined the *informix* port number. Skip to step 13.
10. If necessary, type the router host name and the router port number in the appropriate fields. By default, the port number that the Rational Synergy router uses is 5412. The port number must be the same as the port number

specified on the router computer. By default, the router computer is the main server.

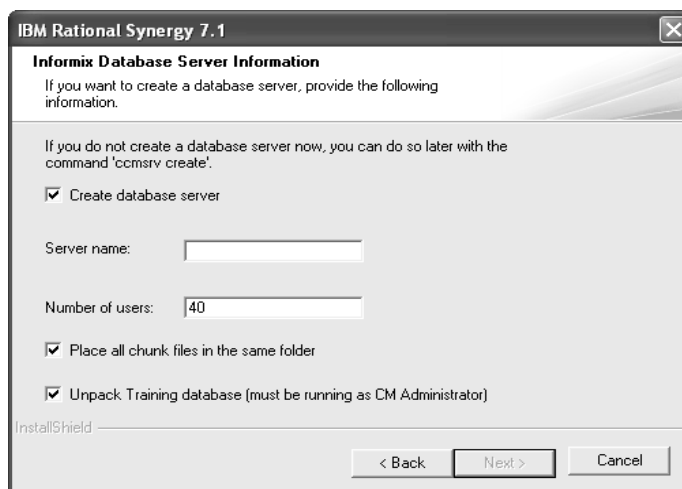


11. Click **Next**, and do one of the following, as directed.
 - If the **Informix Information** dialog box does not appear, the installation program has detected the *informix* port number. Skip to step 13.
 - In the **Informix Information** dialog box, if the default port number that Informix uses (1526) is already in use, type a different port number in the **Informix Port** field. If you are not certain that port number 1526 is available, look in your Services file, which is located in the

%windir%\System32\drivers\etc\services directory. For more information, see “Services file” on page 23.



12. Click **Next** to display the **Informix Database Server Information** dialog box.
13. Configure the **Informix Database Server Information** dialog box.



The default settings in the database server dialog boxes are only suggestions. Configure these dialog boxes based on your planning estimates in “Main and additional Windows server space requirements” on page 18. If you have not completed that section, do so before filling in these dialogs.

- If you are upgrading from a previous Rational Synergy release on the same computer, **do not** select **Create Database Server**. In all other cases, select this check box.

If you do not select **Create Database Server**, you will install the new Informix software, but you will not create a new database server.

Caution If you are upgrading from a previous Rational Synergy release on the same computer and you select **Create a Database Server**, your old chunk files might be overwritten. This might result in loss of data. For more information, see the upgrade instructions relevant to your current installation. These instructions are available as explained in “Upgrading from a previous release” on page 1.

- If you are creating a database server, type its name in the **Server Name** field. Alternatively, use the default, which is the computer name.
- Based on your planning estimates, type the appropriate number in the **Number of users** field.
- By default, **Place all chunk files in the same folder** is selected. Keep it if you want all chunk files to be stored in the same directory. Otherwise, clear this check box. For more information, see “Installation Area Minimum Configuration” in the worksheet in “Main and additional Windows server space requirements” on page 18.

To learn more about chunk files, see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

14. Click **Next** to display the **Create Database Server Information** dialog box.

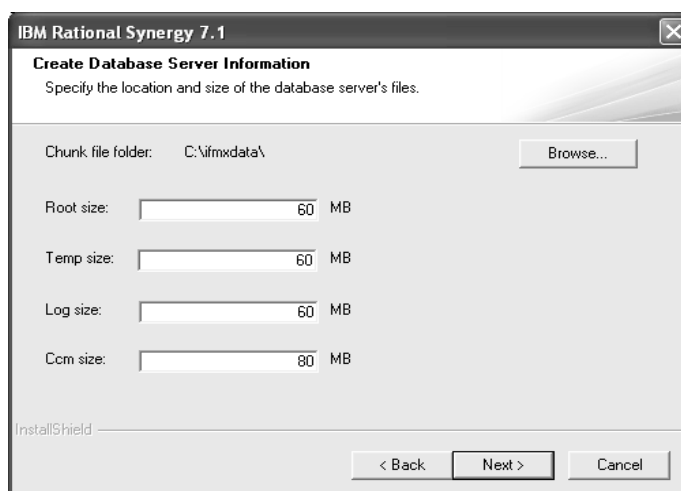
Note If you are creating a database server (as shown in step 13), a message appears telling you that server creation will overwrite the existing `onconfig` file, `SQLHOSTS` registry entry, or Informix database chunk files. Click **Yes** to display the **Informix Database Server Information (2)** dialog box.

15. If you selected to **Place all chunk files in the same folder** in step 13, and you are unsure how to allocate space for the chunk files, follow the instructions in “Disk space considerations” on page 22.

Caution After you create a chunk file in a database server, do not move it. If you do, the database server will no longer work, and you may lose data.

To Place Chunk Files in the Same Folder

- a. In the **Create Database Server Information** dialog box, accept the default location of `drive:\ifmxdata\` or use the **Browse** button to specify a different location.



- b. If you need to change the defaults, type the size of the dbspaces in the following fields: **Root size**, **Temp size**, **Log size**, and **Ccm size**.

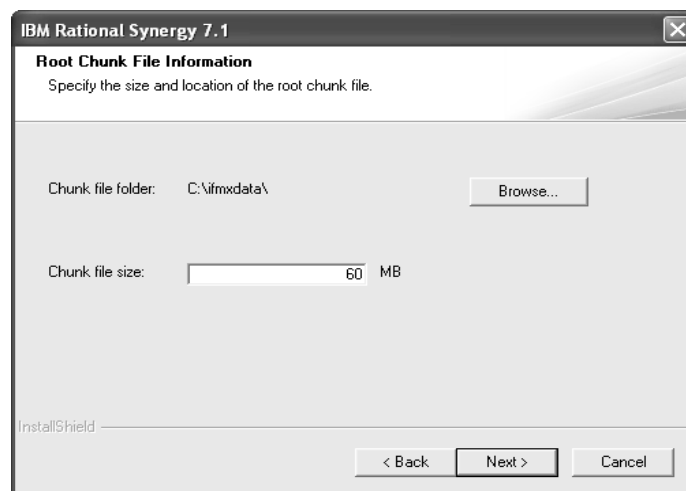
To learn how to calculate the sizes for each dbspace, see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

- c. Click **Next** to display the **Connect to UNIX IBM Rational Synergy Server** dialog box. Proceed to step 16 on page 55.

To Store Chunk Files in Separate Folders

- a. In the **Root Chunk File Information** dialog box, accept the default location of `drive:\ifmxdata\`, or use the **Browse** button to specify a different location.

Caution After you create a chunk file in a database server, do not move it. If you do, the database server will no longer work, and you might lose data.

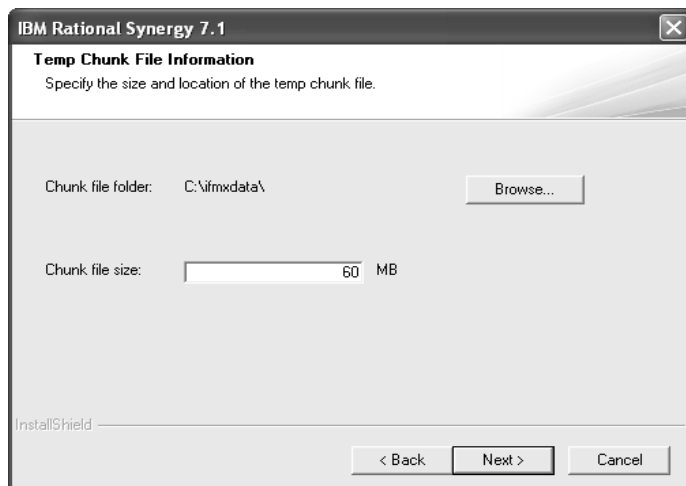


- b. If you need to change the default, type a chunk file size in the **Chunk file size** field.

To calculate any of the four (4) dbspace sizes (that is, `rootdbs`, `tempdbs`, `log`, and `ccm`), see "Create the Database Server" in the *IBM Rational Synergy Administration Guide for Windows*.

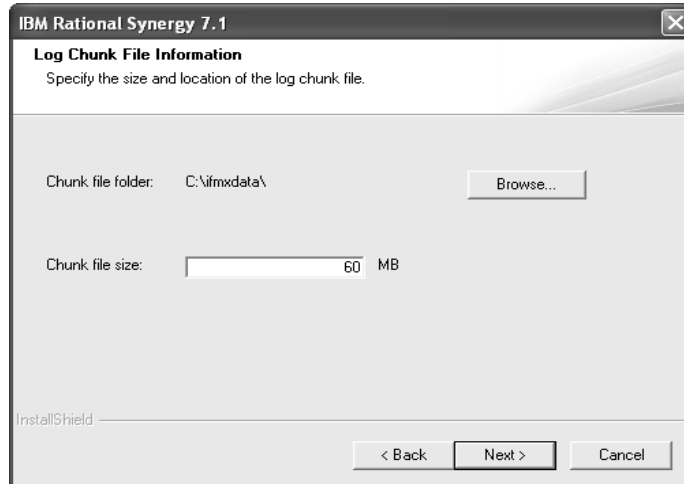
- c. Click **Next** to display the **Temp Chunk File Information** dialog box.

Note If a specified directory already contains chunk files, a Warning dialog box opens telling you that these files will be overwritten.

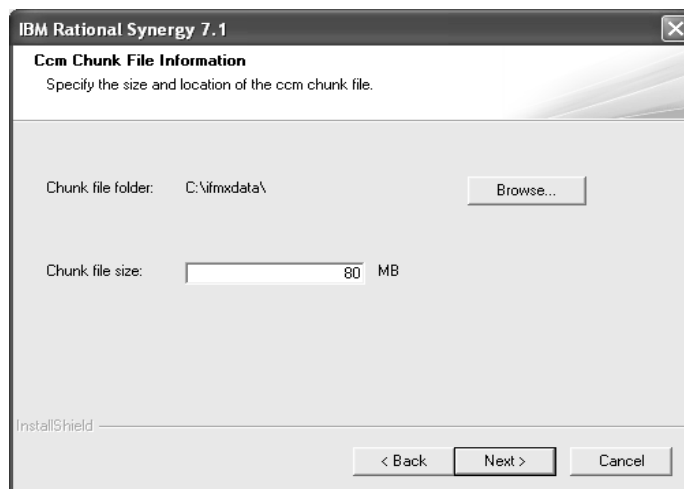


- d. In the **Temp Chunk File Information** field, accept the default location of `drive:\ifmxdata\`, or click **Browse** to specify a different location.
- e. If you need to change the default, type a chunk file size in the **Chunk file size** field.

- f. Click **Next** to display the **Log Chunk File Information** dialog box.



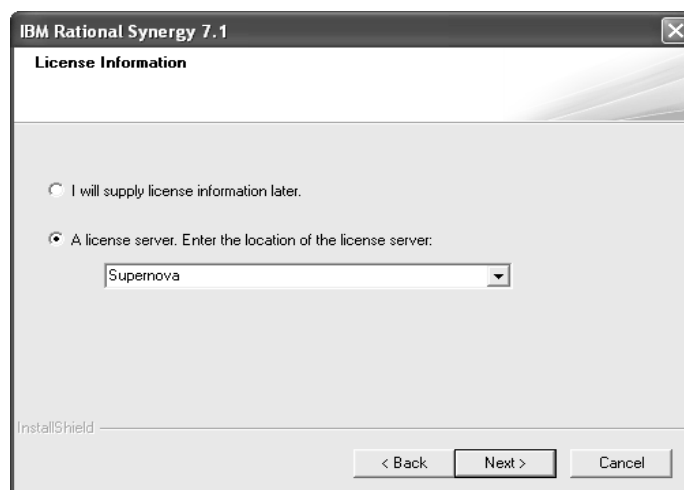
- g. In the **Log Chunk File Information** dialog box, accept the default location of `drive:\ifmxdata\` or click **Browse** to specify a different location.
- h. If you need to change the default, type a chunk file size in the **Chunk file size** field.
- i. Click **Next** to display the **Ccm Chunk File Information** dialog box.



- j. In the **Ccm Chunk File Location** field, accept the default location of `drive:\ifmxdata\` or click **Browse** to specify a different location.
 - k. If you need to change the default, type a chunk file size in the **Chunk file size** field.
 - l. You are now finished configuring the chunk files to be stored in separate directories. Click **Next** to display the **Connect to UNIX IBM Rational Synergy Server** dialog box.
16. If you are connecting the client to a UNIX server, select **Connect to UNIX IBM Rational Synergy server**. Otherwise, clear this check box.

If you selected **Connect to UNIX IBM Rational Synergy server** in step 16, type the UNIX installation path (e.g., `/usr/local/ccm71`) in the **CCM_HOME** field. Otherwise, ignore this field.

17. If the **License Information** dialog box opens, select the appropriate license option.



For more information on obtaining license information, see “Obtaining a license” on page 22.

18. Click **Next** to display the **Start Copying Files** dialog box.
- a. Scroll through the **Current Settings** list to view your setup. If you need to change any settings, click **Back** until you arrive at the dialog box where you need to make the change. After you make the change, click **Next** until you return to the **Start Copying Files** dialog box.

- b. When all of your settings are correct, click **Next**.

A progress indicator window opens while the files are being loaded onto your system.

If you see a dialog box instructing you to restart after the installation program has finished running, follow the instructions in the dialog box to complete your installation. The installation program determines whether you need to restart.

19. Click **Finish**. The Rational Synergy additional Windows server installation is complete.

Note that all setup information is written to a log file,
C:\Documents and Settings\user\Application
Data\IBM\Rational\Synergy 7.1 install.log.

You can unpack a database, then start a Rational Synergy session as the CM administrator. However, until you add users, including yourself, to the Rational Synergy database, you cannot use the database.

Instructions for unpacking a database, adding users to a database, and starting a Rational Synergy session are in the *IBM Rational Synergy Administration Guide for Windows*.

Where to go from here

To perform a custom installation, see “Performing a custom installation” on page 57.

To install the compact client, see “Installing the compact client” on page 64.

To install clients using the master installer, see the Release Note on the `win_clients` section of the DVD.

Guidelines for the automated update process

After the additional Windows server installation is complete, users can install the Rational Synergy client. The CM administrator sends email to all users informing them to install the client, and providing the URL to the Windows client installation image.

Performing a custom installation

A custom installation lets you choose which Rational Synergy components you want to install. This option is only intended for use by advanced users. If you do not know which components go together, use the prepackaged options from the **Installation Type** dialog box.

Note You may install only one main server per installation site. In order to install a Windows Server, you must be licensed to use Rational Synergy on Informix.

You must satisfy the following conditions before you can perform a custom installation.

User Requirements: Administrator privileges to install all components except the compact client

Permission to write to a local NTFS file system partition to install the main and additional Windows servers

Permission to write to a local partition for all components

Active Directory user

OS Requirements: See the Readme file or the Rational Synergy Support Web site

Prerequisites: The %windir%\System32\drivers\etc\services file must be writable to install all components except the compact client. %windir% is the Windows installation directory.

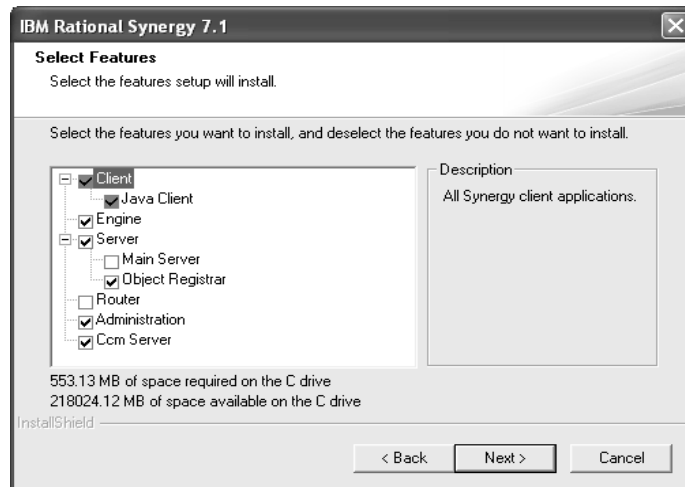
You must be logged on to a domain to install any components, except the compact client.

Note You can install the compact client on a domain, workgroup, or local computer.

To perform a custom installation, perform the following steps.

1. Log on to the Windows domain, as appropriate.
2. Start the Rational Synergy installer.
 - If you are installing from a DVD, insert the DVD that contains the Rational Synergy Windows Server in the DVD drive. On the Windows taskbar, right-click **Start** to display a shortcut menu. Click **Explore** to open Windows Explorer. Navigate to `DVD_drive:\win_servers\synergy_server`, and double-click `setup.exe` to display the **Welcome** dialog box.

- If you are installing from a download, double-click `synergy71.exe` to display the **Welcome** dialog box.
3. Click **Next** to display the **User License Agreement** dialog box. Review and agree to the terms of the license agreement.
 4. Click **Next** to display the **Setup Type** dialog box. Click **Custom**.
 5. Click **Next** to display the **Select Features** dialog box.



6. Choose the options to install. Note that the install dependencies are designated using a hierarchy listing; in other words, logical installation pieces are grouped for you.
7. Deselect the components you do not want to install. Compare the required space with the space available to ensure you have enough room to install the components.

Be sure that you understand your combination of options to avoid installing unnecessary components.

For example, you will probably never have reason to install only the Administration Server. However, you would select all of these options if you were installing a main Windows server.

Alternatively, you might install the Engine component on a system that will be used as an additional engine server, if your Rational Synergy Server system is overloaded with too many users' engine processes. See "Custom installation example: engine" on page 59.

Custom installation example: engine

Note This is one example of a valid custom installation. You may use other options.

To install an engine as a custom installation, do the following:

1. In the **Select Features** dialog box, select only **Engine**. Clear all other check boxes.
2. Click **Next** to display the **Main Windows Server Information** dialog box.
3. In the **Main Windows Server** field, type the name of the computer that will be your Rational Synergy server.
4. Click **Next**, and do one of the following, as directed:
 - If the **Rational Synergy Router Information** dialog box opens, skip to step 5.
 - If the **Ccm Server Information** dialog box opens, skip to step 8.
 - If the **Informix Port Information** dialog box opens, the installation program has determined the router port number from the main server computer. Skip to step 7.
 - If the **Start Copying Files** dialog box opens, the installation program has determined the router port number from the main server computer, and has also determined the *informix* port number. Skip to step 11.
5. If necessary, type the router host name and the router port number in the appropriate fields.
6. By default, the port number that the Rational Synergy router uses is 5412. The port number must be the same as the port number specified on the router computer. By default, the router computer is the main server.
7. Click **Next**, and do one of the following, as directed.
 - If the **Ccm Server Information** dialog box opens, proceed to step 8.
 - If the **Informix Port Information** dialog box opens, skip to step 8.
 - If the **Start Copying Files** dialog box opens, the installation program has determined the *informix* port number. Skip to step 11.
8. The **Ccm Server Information** dialog box enables you to change the server port number. The CCM server is a Web server that serves online help pages for all Rational Synergy GUI sessions, both Web mode and traditional mode. Rational Synergy requires a primary server, which runs on the router host system.

If the default server port number (8400) is already in use, change the port number in the **Server port** field. If you are not certain that port number 8400 is available, look in your Services file, which is located in the `%windir%\System32\drivers\etc\services` directory. For more information, see “Services file” on page 23.

9. Click **Next** to display the **Informix Information** dialog box.

In the **Informix Information** dialog box, if the default port number that Informix uses (1526) is already in use, type a different port number in the **Informix port** field. If you are not certain that port number 1526 is available, look in your Services file, which is located in the `%windir%\System32\drivers\etc\services` directory. For more information, see “Services file” on page 23.

10. Click **Next** to display the **Start Copying Files** dialog box.
11. In the **Start Copying Files** dialog box, scroll through the **Current Settings** list to view your setup. If you need to change any settings, click **Back** until you arrive at the dialog box where you need to make the change. After you make the change, click **Next** until you return to the **Start Copying Files** dialog box.
12. Click **Next**.

A progress indicator window presents the progress of the installation.

When the files have been loaded, the **InstallShield Wizard Complete** dialog box opens.

13. Click **Finish**. The Rational Synergy engine installation is complete. Now, you can run this computer as the engine locally, or use it as an engine server for multiple users running Rational Synergy clients on other computers.

Note All setup information is written to a log file,
Documents and
Settings\user\%appdata%\IBM\Rational Synergy
7.1 install.log.

Where to go from here

To install an additional Windows server, see “Installing an additional Windows server” on page 45.

To install the compact client, see “Installing the compact client” on page 64.

To install clients using the master installer, see the Release Note on the `win_clients` section of the DVD.

After you install the server software

Updating client installations automatically

You can automatically push updates to client installations of the same release. After you have updated the main server, for example, with a patch, you can force users to update their client installations to the same version of the product.

When the user starts Rational Synergy on Windows, the user is notified that an update to the product is required. These events occur:

- If the user chooses to update, the update installer is downloaded from the server, and launched. When the update is complete, the user can restart the client.
- If the user chooses not to update, the user receives a message that the client cannot be started because it is a different version from the server.

When the user starts Rational Synergy in `-nogui` mode on Windows, the user is notified that an update to the product is required. The client cannot continue, and the update must be installed manually.

6

Client installation

After a Rational Synergy Windows server has been installed on your network, you can install a Rational Synergy client.

Rational Synergy client installation

Users can install a Rational Synergy Windows client in the following ways:

- Install from the URL provided by the CM administrator. See "Client installation" on page 63.
- Install a compact client. See "Installing the compact client" on page 64.
- Install multiple Rational Synergy clients.

Guidelines for the automated update process

After the main Windows server installation is complete, users can install the Rational Synergy client. The CM administrator sends email to all users informing them to install the client, and providing the URL to the Windows client installation image.

Installing the compact client

You can install the compact client on a domain, workgroup, or local computer. The compact client installation includes the Rational Synergy and Synergy Classic interfaces.

You must satisfy the following conditions before installing the compact client.

User requirements: Member of local Administrators group

OS requirements: See the Readme file or Rational Synergy Support Web site

Prerequisites: None

Note Before you install the Rational Synergy Windows client software, be sure that TCP/IP Protocol Support is installed and activated. Windows systems are shipped with this protocol.

The compact client is installed if you are using either the downloadable installation feature or the automatic update feature. In order to start the download, you must provide a URL that identifies the Rational Synergy CCM Server, as this is where the installation is launched. The CCM server is a Web server that serves online help pages for all Rational Synergy GUI sessions, both Web mode and traditional mode. The URL has the format `http://hostname:port_number/install.html`, where *hostname* is the hostname of the computer where the server is installed, and *port_number* is the port number of the server.

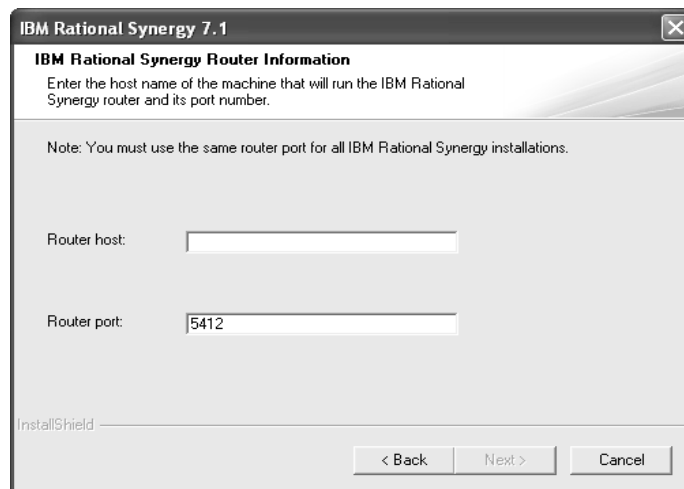
The CM administrator will need to provide the URL to users who will be performing the compact client installation via download. If users are updating their client installations after the Windows server has been updated, the connection will be made automatically. For more information about automatic updates, see “Updating client installations automatically” on page 61.

To install the compact client, perform the following steps.

1. Log on to the Windows domain.
2. Start the Rational Synergy installer.
 - If you are installing from a DVD, insert the DVD that contains the Rational Synergy Windows Server in the DVD drive. On the Windows taskbar, right-click **Start** to display a shortcut menu. Click **Explore** to open Windows Explorer. Navigate to

`DVD_drive:\win_clients\synergy`, and double-click `setup.exe` to display the **Welcome** dialog box.

- If you are installing from a download, double-click `synergy71.exe` to display the **Welcome** dialog box.
 - If you are installing from a web location, enter the URL of the installation web page, which will have the format of:
`http://hostname:port_number/install.html`.
3. Click **Next** to display the **License Agreement** dialog box. Review and accept the terms of the license agreement.
 4. Click **Next** to view the **Setup Type** dialog box. If you install from the URL provided by the CM administrator, you will not see this dialog; skip to step 5.
 5. Click **Compact Client** to display the **IBM Rational Synergy Router Information** dialog box.



In some cases, the installation program can get the router port number from the main server computer.

6. If you need to change the default settings, type the router host name and router port number in the appropriate fields.

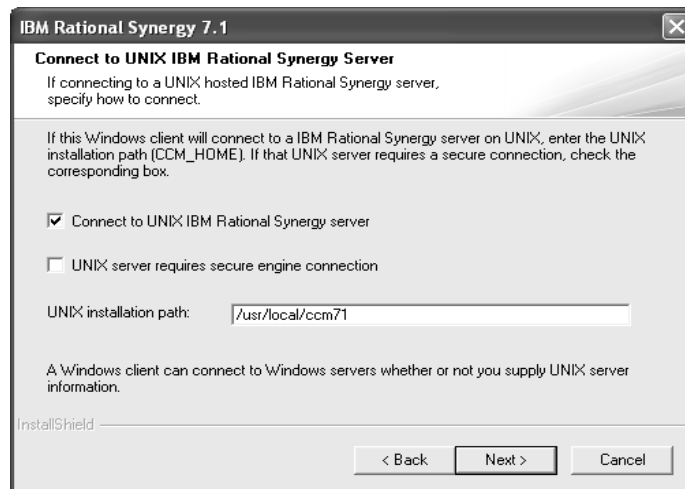
The router host is usually the name of the computer that contains the Rational Synergy main Windows server, but it might also be a UNIX computer. By default, the port number that the Rational Synergy router uses

is 5412. If the installed router uses a different port number, type that number in the **Router Port** field.

If you are not certain which port number to use, look in the `%windir%\System32\drivers\etc\services` directory on the Windows router computer, or the `/etc/services` directory on the UNIX computer. For more information, see “Services file” on page 23.

Note You must use the correct router port and ensure that it is the same as for the server.

7. Click **Next** to display the **Connect to UNIX IBM Rational Synergy Server** dialog box.



8. Update the **Connect to UNIX IBM Rational Synergy Server** dialog box.
 - a. If you will connect the client to a UNIX server, select **Connect to UNIX IBM Rational Synergy server**. Otherwise, clear this check box.
 - b. If you selected **Connect to UNIX IBM Rational Synergy server**, specify whether a secure connection is to be used.
 - c. If you selected **Connect to UNIX IBM Rational Synergy server**, type the UNIX installation path in the **CCM_HOME** field.
9. Click **Next** to display the **Start Copying Files** dialog box.
10. Scroll through the **Current Settings** list to view your setup. If you need to change any settings, click **Back** until you arrive at the dialog box where you

need to make the change. After you make the change, click **Next** until you return to the **Setup Summary** dialog box.

11. When all of your settings are correct, click **Next**.

A progress indicator window presents the progress of the installation. When the files have been loaded onto your computer, the **InstallShield Wizard Complete** dialog box opens.

12. If you do not want to create a shortcut on your desktop, clear the check box, otherwise, click **Finish**. The Rational Synergy typical client installation is complete.

View the Readme file anytime after the installation is complete. On the Windows taskbar, click **Start > All Programs > IBM Rational > IBM Rational Tools > IBM Rational Synergy 7.1 > Read Me**. This path assumes that you used the default program folder during your installation.

You can start a Rational Synergy session, provided you are a valid user in the database. If you have problems starting a session, consult your CM administrator.

Appendix: Notices

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Index

A

- additional server
 - install, 45
 - specify main server, 47
- additional Windows server
 - post installation, 56
- automated update process, 63
- automated updates, info needed, 63
- automatic client update, 44, 56, 61

C

- caution, defined, 6
- CCM Server, 7, 33, 64
- CCM_HOME, specify UNIX installation
 - path, 55
- chunk files
 - location, 42
 - moving to other location, 22
 - on additional server, 55
 - overwrite when creating server, 37, 50
 - separate locations, 39, 52
 - store, 37, 38, 50, 51
- client
 - requirements, 20
 - update automatically, 44, 56, 61
- compact client
 - components, 13
 - how to install, 64
 - setup summary, 66
 - where running, 14
- compatibility, 2
- custom client installation, 15
- custom installation
 - install components, 57
 - install engine, 59
 - options, 58
 - post installation, 60

D

- dbspace, defined, 22
- disk space
 - chunk file location, 22
 - client, 20
 - planning, 21
 - server, 16
- documentation for Rational Synergy, 6
- domain name, 29

E

- engine, 7, 14, 15, 59
- engine server, defined, 7
- Engine Start Service, 15
- ESS, 15

H

- hardware
 - client, 20
 - server, 17
- host router, 33

I

- IBM Customer Support, 3
- IBM Rational License Server TL Licensing Guide, where found, 10
- informix user, set up, 31
- installation prerequisites
 - license server, 24
- installing
 - add users to database, 44, 56, 67
 - additional server, 45
 - automatic updates, 44, 56, 61
 - compact client, 64
 - custom installation, 57
 - requirements, 15, 20
 - router and license manager, 31
 - status of installation, 43, 56, 60, 67
 - variety of components, 13
 - via the web, 64

L

- license files, server, 16
- license manager
 - defined, 8
 - option to install, 31
- license server
 - installation, 24
- licensing guide, where found, 10
- log
 - setup information (location), 43, 56
- log chunk file, 41, 54

M

- main Windows server
 - connect client to UNIX server, 42, 55
 - create, 36, 49
 - install router/license manager, 31
 - post installation, 44
 - setup summary, 43, 55, 60
 - store chunk files, 38, 51
 - UNIX server connection, 42, 55
- memory
 - client, 20
 - server, 17
- modes
 - traditional, 33, 59, 64
 - Web, 33, 59, 64

N

- note, defined, 6

O

- object registrar, defined, 7
- operating system
 - client, 20
 - server, 16

- overwrite

- chunk files when upgrading, 36, 50
 - Informix chunk files, 37, 50
 - onconfig file, 37, 50
 - SQLHOSTS registry entry, 37, 50

P

- patches, force installation of, 61
- planning
 - client, 20
 - server, 15, 22
 - system space, 21
- port, router, 32
- post installation
 - additional Windows server, 56
 - custom, 60
 - main Windows server, 44
- prerequisites
 - Rational Directory Server, 8, 24

R

- Rational Directory Server, 8, 24
- Rational License Server, 24
- Rational Synergy
 - automatic update, 64
 - documentation, 6
 - downloadable installation, 64
- RDS, 8, 24
- readme, 1
- release notes, 1
- requirements
 - client, 20
 - server, 15
 - services file, 23
- rootdbs chunk file, 39
- router
 - defined, 8
 - host, 33
 - option to install, 31
 - port, 32

S

server

- install additional server, 45
- name, 36, 50
- prepare for, 22
- requirements, 17
- UNIX server for client, 42, 55

services file, database server requires, 23

setup information, log file location, 43, 56

setup program

- chunk file location, 22
- install Informix database server, 36, 49

setup summary

- compact client, 66
- main Windows server, 43, 55, 60

shared client installation, 14

space

- plan for server, 18
- worksheets, 18, 21

Start menu, 1, 2

T

temp chunk file, where installed, 40

tempdbs chunk file, 40, 53

terms and concepts, 7

traditional mode, 33, 59, 64

tutorial database

- set shortcut, 44
- where installed, 37

typical client, 2

U

UNIX server, specify, 42, 55

unpack database, 11, 44, 56, 67

updates

- automatic, 44
- patch updates to clients, 61
- push to clients, 56

upgrading

- from a previous release, 1
- overwrite chunk files, 36, 50

users

- add to database, 44, 56, 67
- forcing upgrades, 44, 56
- push patches, 61
- specify number of, 36, 50

V

virtual memory, server, 17

W

Web mode, 33, 59, 64

work area, defined, 8

worksheets

- plan client space, 21
- plan server space, 18
- space planning, 21

