

INSTALLING RATIONAL SUITE CONTENTSTUDIO™

Version 2001.03.00

Windows Edition

Rational[®]
the e-development company™

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Installing Rational Suite ContentStudio
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Rational Software Corporation 20 Maguire Road Lexington, Massachusetts 02421

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Preface

Rational Suite ContentStudio is a content management environment and Web application deployment solution that supports the life cycle of Web application development.

About This Manual

This manual is for ContentStudio site managers or administrators who are responsible for installing, configuring, and licensing the ContentStudio system environment.

Rational Suite ContentStudio is composed of many point products and additional components. As a result, installing it is a complex process. To succeed, you must follow the instructions in the order given. Any deviations may lead to unpredictable installation failures.

Using Rational Suite ContentStudio Documentation

The documentation for this product consists of the following:

- *Introducing Rational Suite ContentStudio*
- *Installing Rational Suite ContentStudio*
- *Rational Suite ContentStudio Release Notes*
- *Rational Suite ContentStudio Sample Application Guide*
- *Using the Rational Suite ContentStudio Console* (online help)
- *Using the Rational Suite ContentStudio Administration Utility* (online help)

Using Vignette Documentation

The Vignette V/5 documentation, which is available only online, describes some features that are not available in ContentStudio:

- Personalization server
- Observation Manager
- TCL page generation
- Multi-Channel Server
- Solaris platform support
- Web server support (other than IIS)

You can ignore these manuals entirely:

- *Visitor Services Guide*
- *Java Extension Programmer's Guide and Reference*
- *Net Perceptions Recommendation Engine*
- *Resonate Central Dispatch User's Guide*
- *Internationalization Guide*

To identify which sections of the documentation you can ignore, consult the table.

Vignette Manual	Sections or Chapters to Ignore
<i>Administration Guide</i>	<ul style="list-style-type: none">➤ In Chapter 4: <i>Viewing OMS Information, Viewing MCS Information, and Viewing MCS Process Information</i>➤ In Chapter 8: <i>Obtaining Process Status—Solaris only</i>➤ Chapter 11➤ Appendix D➤ Appendix F
<i>Security Guide</i>	<ul style="list-style-type: none">➤ In Chapter 2: <i>The OMS and MCS information in Configuring Security for the CMS, CDS, or MCS</i>➤ In Chapter 6: <i>Specifying Securing Web Servers and Security for Multiple, Remote Web Servers</i>
<i>Production Center Guide</i>	In Chapter 7: <i>Keywords and the Keyword Manager</i>
<i>Template Cookbook</i>	Chapter 6 and Chapter 9

Using Rational Suite Team Unifying Products Documentation

The ContentStudio documentation refers to manuals that are available on the CD titled *Rational Solutions for Windows: Online Documentation*.

One manual that is not available on that CD is *Developing Software with ClearCase*. The information in this manual is available in the online help for ClearCase LT.

Typographical Conventions

This manual uses the following typographical conventions:

- *cs-home-dir* represents the directory into which Rational Suite ContentStudio has been installed. By default, this directory is *drive:\Program Files\Rational\ContentStudio*.
- **Bold** is used for names the user can enter; for example, all command names, file names, and branch names.
- *Italic* is used for variables, document titles, glossary terms, and emphasis.
- A monospaced font is used for examples. Where user input needs to be distinguished from program output, **bold** is used for user input.
- Key names and key combinations are capitalized and appear as follows: SHIFT, CTRL+G.

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If you have any problems with the software or documentation, please contact Rational Technical Support via telephone, fax, or electronic mail as described below. For information regarding support hours, languages spoken, or other support information, click the **Technical Support** link on the Rational Web site at www.rational.com.

Your Location	Telephone	Facsimile	Electronic Mail
North America	800-433-5444 toll free or 408-863-4000 Cupertino, CA	408-863-4194 Cupertino, CA 781-676-2460 Lexington, MA	support@rational.com

Europe, Middle East, and Africa	+31-(0)20-4546-200 Netherlands	+31-(0)20-4546-201 Netherlands	support@europe.rational.com
Asia Pacific	61-2-9419-0111 Australia	61-2-9419-0123 Australia	support@apac.rational.com

Before You Install

1

Before you install Rational Suite ContentStudio on one host or four hosts, you must complete the prerequisite installations described in this chapter.

1.1 Rational Suite ContentStudio Configuration

The configuration for ContentStudio varies on the basis of your needs and organization requirements. We break the configuration into three categories: clients hosts, development environment hosts, and production environment hosts.

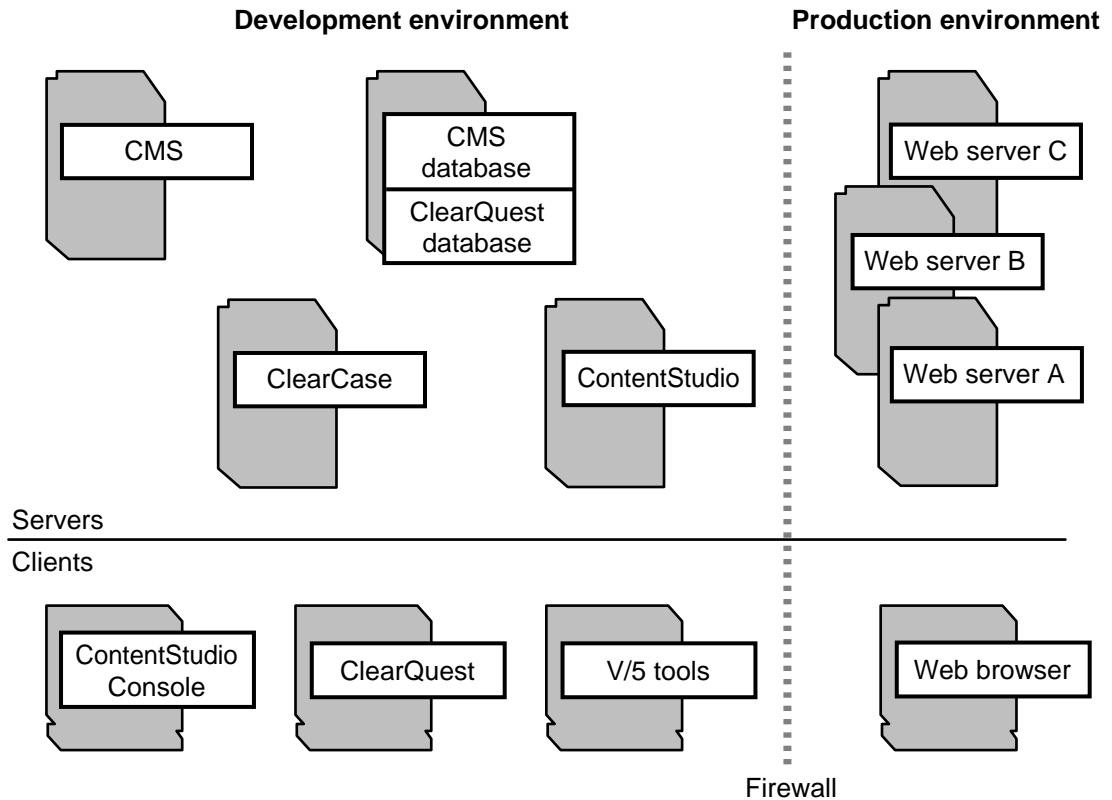
Client hosts access the development environment. You typically have a client host for each ContentStudio user. The configuration of the client machines depends on the needs of the user. Clients can be as minimal as a browser client or as powerful as a full Windows client with all the tools. After a development environment is installed and configured, you can install client software on the hosts of development team members. For more information, see Chapter 4, *Installing Client Software*.

Development environment hosts support the ContentStudio components used to develop and manage the Web application. The Web servers that run an application that your site visitors access are not considered development environment hosts. For more information, see *Determine the Host Configuration for Your Development Environment* on page 2.

Production environment hosts (target Web servers) run the Web application in the development environment. Using the Rational NetDeploy agent, the target Web servers receive copies of HTML pages, files (graphics, movies, sound) or code (JAR files, JSPs, and so on) from the development environment and store them for execution. For more information, refer to Chapter 5, *Installing and Configuring the Rational NetDeploy Agent*.

Figure 1 shows how this environment may be configured.

Figure 1 Rational ContentStudio Environment



Determine the Host Configuration for Your Development Environment

There are many ways to configure your development environment for Rational Suite ContentStudio. The typical and recommended configuration for most groups uses four host machines. At a minimum, one host can be used to run all the servers; we recommend this type of configuration only for evaluation purposes or for a small production group.

The typical configuration includes the following hosts:

- Database server and databases host (**DB_Host**)

This machine contains:

- database server software (Oracle or Microsoft SQL Server)
- Vignette CMS database (including the Rational Suite ContentStudio Server tables)
- Rational ClearQuest schema repository database
- Rational ClearQuest user database
- Rational Requisite Pro database

➤ Vignette CMS components host (**CMS_Host**)

This machine contains:

- database client software (Oracle or Microsoft SQL Server)
- Vignette CMS server
- ODBC connection to the CMS database (if SQL Server is used)
- Microsoft IIS
- Vignette V5 Tools
- Vignette development CDS (including development APE, ASP page generator)

➤ Rational ClearCase LT VOB server host (**CCASE_Host**)

This machine contains:

- Rational ClearCase LT server
- Rational ClearCase LT VOBs (admin VOB, content VOB, code VOBs)
- Rational Suite ContentStudio client (for Rational Suite Content Studio licensing)

➤ Rational Suite ContentStudio server host (**CS_Host**)

This machine contains:

- database client software (Oracle or Microsoft SQL Server)
- ODBC connection to the CMS database
- Rational Suite ContentStudio Server (Page Generator and Rational NetDeploy)
- Java Runtime Environment (JRE)
- Microsoft IIS (required for the live CDS)
- Vignette live CDS (including live APE and ASP page generator)
- Tomcat
- Rational Suite Team Unifying Platform
- FLEXlm server (optional)

For the one-host installation, these host names refer to the same physical machine; all software mentioned above is installed on that host.

Detailed instructions for the installation of this software are in Chapter 2 and Chapter 3. The remainder of this chapter takes you through specific steps you need to perform before you can install the Rational Suite ContentStudio software.

1.2 Overview of the Preinstallation Steps

1. *Install the Correct Operating System on All Hosts*
2. *Set Up the IIS Environment*
3. *Install Database Software and Create Empty Databases*
4. *Configure Licensing*

1.3 Install the Correct Operating System on All Hosts

For the one-host installation, install Windows 2000 Server running Service Pack 1 (SP1) or Windows NT Server 4.0 running Service Pack 6a (SP6a) on the server host.

NOTE: Wherever Windows 2000 Server is mentioned, Advanced Server can also be installed in its place.

For a four-host installation, install any of the operating systems listed for the specific server host.

	Applicable Operating Systems
DB_Host	Windows operating system required by the database vendor
CMS_Host	Windows 2000 Server (SP1) or Windows NT 4.0 Server (SP6a) with Internet Explorer 5.0 or Microsoft Scripting Engine 5.x
CCASE_Host	Windows operating system required for Rational ClearCase LT (see release notes)
CS_Host	Windows 2000 Server (SP1) or Windows NT 4.0 Server (SP6a)

All target Web server hosts running the Rational NetDeploy agent must be running Windows 2000 Server (SP1) or Windows NT 4.0 Server (SP6a).

The client hosts must be running Windows 2000 Professional (SP1), Windows NT 4.0 (SP6), Windows 98, or Windows Me.

1.4 Set Up the IIS Environment

The **CMS_Host** and the **CS_Host** must be set up for IIS. The way in which you install IIS depends on whether you have Windows NT 4.0 Server or Windows 2000 Server.

This section explains the interaction of the IIS installation with the Windows NT Service Pack installation and with Windows 2000. It also describes how to access the IIS Internet Services Manager.

Windows 2000 Server

IIS 5.0 is usually installed by default when you install Windows 2000 Server. To verify that IIS is installed, click **Start>Settings>Control Panel** and then double click **Add/Remove Windows Components**. If **Internet Information Services** is not included in the list of existing programs, you must install it from the Windows 2000 CD.

Windows NT Server

The V/5 components that you install in later steps require Service Pack 6a (SP6a) for Windows NT Server 4.0 to be installed on your system. Because the installation of IIS 4.0 overwrites several files from the Service Pack, you must reinstall SP6a after you install IIS to ensure correct system operation.

To check if IIS 4.0 is installed, click **Start>Programs>Windows NT 4.0 Option Pack>Microsoft Internet Information Server>Internet Service Manager** to access the Internet Service Manager window. If IIS is not installed, you must install IIS using the *Windows NT 4.0 Option Pack*.

NOTE: If you perform a custom installation of IIS, you need to also be sure to install the World Wide Web Server.

1.5 Install Database Software and Create Empty Databases

The task of creating a new database usually involves identifying the DBMS Server, determining a storage location of the database, creating a database owner, and optionally creating database users.

Before you install any database software, note the product-specific information in this section.

SQL Server

WARNING: Vignette requires a nondefault sort order of dictionary-order, case-sensitive for SQL Server. If you do not know whether this option is set, you must reinstall SQL Server following the instructions in *Install SQL Server* on page 6.

In Microsoft Sequel Server, Rational Suite Content Studio “databases” map to databases. The concept of a Database User has two levels. First, you need a server login (that is, the username and password). Next, to access a particular database, you need to be set up as a user of that database. One complication here is that MSS permits you to give that user a different name than the associated login.

Microsoft Sequel Server (MSS) comes in three versions: Desktop, Standard, and Enterprise. The difference between these versions is in the number of connections supported, and in scalability. Standard runs on Windows NT 4.0 Server and Windows 2000 Server; Enterprise runs on Windows NT 4.0 Enterprise Server and Windows 2000 Advanced Server (and Data Centre). You need to install either the Standard or Enterprise version (depending on which type of Windows server you have).

Install SQL Server

On **DB_Host**:

1. Click **Install Components**. (Follow the procedures in the vendor installation guide.)
2. You *must* perform a Custom Install so that you can choose a sort order of **Dictionary order, Case Sensitive**. Other than this, select all the installation defaults.

Create Empty Product Databases

Follow the instructions below to first create an empty database for the Vignette CMS, then the ClearQuest Schema database, and then the ClearQuest User database.

On **DB_Host**:

1. Open **SQL Server Enterprise Manager** and select the Server Host *hostname*, where *hostname* is the name of the host machine in a single server install or the name of **DB_Host** in a four server install.

2. Select the **Databases** folder and click **Action>New Database**. Use the name suggested below corresponding to the database you are creating. We will use this name throughout the installation documentation. Click **OK**.

CMS database	CMSsystem
ClearQuest Schema DB	CQschema
ClearQuest User DB	CQrequests

3. Create a SQL Server userID (not a Windows User), with **SQL Server Authentication**, and choosing the database name from Step #2 as the Default Database, using the following steps.
 - a. Open the **Security** folder and click **Logins** then right-click **New Login**.

Enter the UID Name. Use the name suggested below corresponding to the database you created. We will use this name throughout the installation documentation.

CMS database	vignette_sql
ClearQuest Schema DB	cqadmin
ClearQuest User DB	cquser

Click **SQL Server Authentication**.

Enter a Password. We suggest **rational**.

- b. Click on the **Database Access** tab.

Select **Permit** for the database created in Step #2 and enable the following access:

CMS database	public, db_ddladmin, db_datareader, db_datawriter
ClearQuest Schema DB	public, db_owner
ClearQuest User DB	public, db_owner

Click **OK**, confirm the password then exit SQL Server Enterprise Manager.

Install the SQL Server 7.0 Client

The client installation must be performed on both **CMS_Host** and **CS_Host**.

For a machine to access the SQL Server, you must install Microsoft Data Access Components (MDAC). Most likely, each client already has these components. (If you can create an MSS Data Source in the ODBC administrator, you have them.) MDAC (though not necessarily the latest version) is available on the Microsoft Sequel Server CD as **\x86\other\mdac_type.exe**.

Perform a custom install from the SQL Server CD to install **Client Connectivity** and the **Management Tools**.

Oracle 8i (8.1.16) Server

Install Oracle Server

There is nothing special to do when installing Oracle 8i on **DB_Host**. In general, accept the defaults offered, and note any names or values that you provide to the setup script.

1. Install a supported version of Oracle.

Create Empty Product Databases

On **DB_Host**:

Follow the instructions below to create empty databases for the Vignette CMS , the ClearQuest Schema database, and the ClearQuest User database .

1. Create an Oracle System ID.
2. At a SQL*Plus prompt, type the following sequence of commands:

```
create tablespace CMSSYSTEM logging datafile 'disk:file\filename' size 200M;
alter user CMSSYSTEM default tablespace CMSSYSTEM;
alter user CMSSYSTEM temporary tablespace temp;
alter user CMSSYSTEM quota unlimited on CMSSYSTEM;
grant CONNECT to CMSSYSTEM;
grant RESOURCE to CMSSYSTEM;
```

ClearQuest schema: tablespace name and user **CQSCHEMA**, roles **CONNECT** and **RESOURCE**
ClearQuest user DB: tablespace name and user **CQREQUESTS**, roles **CONNECT** and **RESOURCE**

3. Start the Oracle listener.

Install the Oracle 8i Client

The client installation must be performed on both **CMS_Host** and **CS_Host**.

If you are setting up a Rational Suite ContentStudio machine (client or server) to connect to an ORACLE database on another server, you must install the Oracle client tools. These are available on the ORACLE installation CD.

1.6 Configure Licensing

Rational Suite ContentStudio uses Rational common licensing. For details about how Rational Common licensing works, refer to the manual *Administering Licenses for Rational Software*.

Rational Suite ContentStudio is available with either floating or node-locked licenses.

Floating Licenses

If you purchased floating licenses, you need to install a FLEXlm server to administer them. For a one-host installation, you can install FLEXlm server on that host. For the four-host installation, we recommend that you install FLEXlm server on **CS_Host**. If you already have Rational products and FLEXlm server, you can continue to use that server for your Rational Suite ContentStudio License.

To install FLEXlm server to administer floating licenses, insert the CD titled *Rational Solution for Windows*. In the Rational Software **Setup** program, click **Installation option panel**, and then click **Install license server**.

After you install the FLEXlm server, you can request your floating licenses by using Rational AccountLink. AccountLink is available on the Rational Web site www.rational.com/accountlink. You need the License Key Certificate shipped in the Rational Suite Media Kit to complete the information required for AccountLink. AccountLink will validate your request, and send your keys as an attachment to an e-mail message. Then you can use the Rational License Key Administrator to import the attachment as a file into the license server.

Node-Locked Licenses

If you purchased node-locked licenses, you do not need to install a FLEXlm license server. However, you need to request a node-locked license for each client host as well as the **CCASE_Host** and **CS_Host** and then run the License key administrator to import the key for each of those hosts.

Vignette CMS Server Licenses

To install the Vignette software according to the instructions in subsequent chapters, you will need an additional license key and a CD-ROM key. To obtain these keys, send an e-mail message to one of the addresses below. In the message, please specify that you are requesting your ContentStudio Vignette CMS server keys, and include your account number. You can find your account number in the upper left corner of the License Key Certificate shipped in the Rational Suite Media Kit. You will receive your Vignette license key by return e-mail.

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1.7 Installation Tables

The installation procedure is complex and requires you to enter a large amount of data. You must enter some of the values in multiple steps. To aid with your installation, the suggested values and

some defaults used in the installation steps are included in the following tables. Use the tables to record information specific to your installation and configuration, mapping suggested names to the names you are using. Shaded table cells reuse information that you've already supplied in another cell.

Table 1 The Four Hosts

Description (Mnemonic)	Suggested Name	Your Name
Database Host (<i>db-host</i>)	DB_Host	
Vignette CMS Host (<i>cms-host</i>)	CMS_Host	
Rational ClearCase LT Host (<i>ccase-host</i>)	CCASE_Host	
Rational Suite ContentStudio Host (<i>cs-host</i>)	CS_Host	

Table 2 Vignette-related Information (Part 1 of 2)

Description (Mnemonic)	Suggested Name	Your Name
Vignette Development CDS (<i>dev-cds</i>)	devCDS	
Vignette Development ASP (<i>dev-asp</i>)	devASP	
Vignette Live CDS (<i>live-cds</i>)	livCDS	
Vignette Live ASP (<i>live-asp</i>)	livASP	
Web server Doc Root (<i>doc-root</i>)	C:\Inetpub\wwwroot	
Directory name for Dev CDS (<i>devcds-dir-name</i>)	devCDS	
Directory name for Dev ASP (<i>devasp-dir-name</i>)	devASP	
Directory name for Live CDS (<i>livcds-dir-name</i>)	livCDS	

Table 2 Vignette-related Information (Part 2 of 2)

Description (Mnemonic)	Suggested Name	Your Name
Directory name for Live ASP (<i>livasp-dir-name</i>)	livASP	
Doc root for Development CDS Web Server	<i>doc-root\devcds-dir-name</i> C:\Inetpub\wwwroot\devCDS	
Doc root for Development ASP Web Server	<i>doc-root\devasp-dir-name</i> , that is C:\Inetpub\wwwroot\devASP	
Doc Root for Live CDS Web Server	<i>doc-root\livcds-dir-name</i> , that is C:\Inetpub\wwwroot\livCDS	
Doc Root for Live ASP Web Server	<i>doc-root\livasp-dir-name</i> , that is C:\Inetpub\wwwroot\livASP	
Anonymous User Account for development CDS, ASP	IUSR_ <i>cms-host</i> , that is IUSR_CMS_Host	
Anonymous User Account for live CDS, ASP	IUSR_ <i>cs-host</i> , that is IUSR_CS_Host	
Web Server Host	<i>cms-host</i> , that is CMS_Host	
Data Source Name (<i>db-source</i>)	vignetteODBC	
DB URL	jdbc:odbc: <i>db-source</i> , that is jdbc:odbc:vignetteODBC	
V/5 Business Platform Login/Password	admin/admin	
Metafile path for Development CDS	c:\vignette\Inst-CMSsystem\working\cds-dev-cds\metafiles	
Metafile path for Live CDS	c:\vignette\Inst-CMSsystem\working\cds-live-cds\metafiles	
Project Manager Base Project	test	
FLEXIm server host	<i>cs-host</i> , that is CS_Host	

Table 3 ClearCase-related Information

Description (Mnemonic)	Suggested Name	Your Name
ClearCase Content VOB	content	
ClearCase View	cs_pagegenerator	
ClearCase View prefix	cs_deployment	
ClearCase Label prefix	CS_DEPLOYED	
ClearCase Views directory	c:\ClearCaseStorage\Views	
ClearCase Admin VOB	projects	

Table 4 Database-related Information

Description (Mnemonic)	Suggested Name	Your Name
Host	<i>db-host</i> , that is DB_Host	
SQL Authentication Login/Password	vignette_sql/rational	
Oracle databases password	RATIONAL	
SQL Default CMS Database	CMSsystem	
Oracle CMS DB User and Tablespace Name	CMSSYSTEM	
SQL Physical ClearQuest Schema Database Name	CQschema	
Oracle ClearQuest schema User and Tablespace Name	CQSCHEMA	
Physical ClearQuest User Database Name	CQrequests	
Oracle ClearQuest User DB User and Tablespace Name	CQREQUESTS	

Table 5 Miscellaneous Information

Description (Mnemonic)	Suggested Name	Your Name
Rational Installation Directory (<i>ratl-dir</i>)	c:\Program Files\Rational	
CS Logging Directory	<i>ratl-dir</i> \ContentStudio\logs	
JRE Install Directory (default)	<i>ratl-dir</i> \common\java\jre	
Tomcat Install Directory (default)	<i>ratl-dir</i> \ContentStudio\tomcat	
ClearQuest Designer username/password	admin /(none)	
ClearQuest User Database	RSCS	
Proxy URL	/contentstudio/proxy	

Table 6 Port Numbers (Part 1 of 2)

Description	Suggested Port Number	Your Port Number
Development CDS Port	80	
Development ASP Port	81	
Dispatch Service (bob) Port, CMS Port	30210	
Request Service (vhs) Port	30211	
Placement Agent Port, Dev and Live CDS	3737 (four host Dev CDS) 3737 (four host Live CDS)	
	3737 (one host Dev CDS) 3739 (one host Live CDS)	

Table 6 Port Numbers (Part 2 of 2)

Description	Suggested Port Number	Your Port Number
Cache Manager (cmd) Port	3738 (four host Dev CDS) 3738 (four host Live CDS)	
	3738 (one host Dev CDS) 3740 (one host Live CDS)	
Page Generator (ctlv) Port	4738 (four host Dev CDS) 4738 (four host Live CDS)	
	4738 (one host Dev CDS) 4740 (one host Live CDS)	
Template Manager (tmd) Port	4739 (four host Dev CDS) 4739 (four host Live CDS)	
	4739 (one host Dev CDS) 4741 (one host Live CDS)	
CDS Port	8080	
ASP Port	8081	
Tomcat Port	8088	
Target Web site	90	

Table 7 Rational NetDeploy Agent Information

Description (Mnemonic)	Suggested Name	Your Name
Target Web site path	<i>doc-root</i> \targetsite, that is C:\inetpub\wwwroot\targetsite	

One-Host Installation

2

At a minimum, one host can be used to run all Rational Suite ContentStudio servers. We recommend this type of configuration only for evaluation purposes or for a small production group.

2.1 Overview of the Installation Procedure

Before you begin the one host installation, you must complete the prerequisite installation steps described in Chapter 1, *Before You Install*.

To install ContentStudio, you first install, configure, and license all server components, and then install, configure, and license all client components. Here is an overview of this installation:

1. Configure IIS
2. Install and Configure Vignette V/5 Server Components
3. Install and Configure ClearCase LT Server
4. Install and Configure ContentStudio Server
5. Install Rational Suite Team Unifying Platform
6. Configure ClearQuest
7. Optionally, Configure RequisitePro Database
8. Verify Operational Status

9. Refer to Chapter 4, *Installing Client Software* for the details of the client installation procedure.
10. Refer to Chapter 5, *Installing and Configuring the Rational NetDeploy Agent* for the details of installing and configuring the Rational NetDeploy agent on your target Web servers.

The remaining sections in this chapter explain how to perform Step #1 through Step #8.

2.2 Configure IIS

You must configure IIS 4.0 or later to:

- Set up IIS virtual Web services for the Vignette components
- Configure Web server properties
- Set permissions for virtual services folders

Set Up IIS Virtual Web Services for the Vignette Components

You need to set up four Web virtual services for development CDS, live CDS, development ASP, and live ASP. You also need to assign different port numbers for each of these services. Make sure that the port numbers you select are not currently in use by another Web service.

To Configure Virtual Services with IIS

1. In Windows Explorer, navigate to *drive:\Inetpub*. Create new folders for each of the Web virtual services. The default server uses *drive:\Inetpub\wwwroot*. We recommend these directory names:
 - *drive:\Inetpub\wwwroot\devCDS*
 - *drive:\Inetpub\wwwroot\livCDS*
 - *drive:\Inetpub\wwwroot\devASP*
 - *drive:\Inetpub\wwwroot\livASP*
2. Start Internet Service Manager.
3. Open the **Internet Information Server** folder and under **Internet Information Server** locate the host on which you are configuring IIS.

4. Right-click the host name and click **New>Web Site**. In the WebSite Creation Wizard for the Web Site Description, create Web sites using the information provided below.

Web site description	Port	Path
Development CDS	80	<i>drive:\Inetpub\wwwroot\devCDS</i>
Development ASP	81	<i>drive:\Inetpub\wwwroot\devASP</i>
Live CDS	8080	<i>drive:\Inetpub\wwwroot\livCDS</i>
Live ASP	8081	<i>drive:\Inetpub\wwwroot\livASP</i>

NOTE: The Default Web server uses port 80. This port number conflicts with the development CDS port recommended above. Delete the Default Web server after you create the development CDS.

- a. Enter the Web site description. Click **Next**.
 - b. Accept the default, **All Unassigned** in the **Enter the IP address to use for this Web site** box.
 - c. Enter the port number. Click **Next**.
 - d. Enter the path and allow anonymous access to the Web site. Click **Next**.
 - e. For IIS with Windows 2000, select **Allow Read, Run scripts**, and **Execute** access, and for IIS with Windows NT 4.0, select **Read Access, Script Access**, and **Execute Access**; then click **Finish**.
5. After creating the Web sites, you must enable buffering. Use the Internet Services Manager to enable buffering for each of the new Web sites.
 - a. Select each one of the new folders that you have created for the Web sites and right-click to open the Properties window.
 - b. Click the **Home Directory** tab; then click **Configuration** and click the **App Options** tab in the **Application Configuration** dialog box. Click **Enable buffering**.
 - c. Click **OK** and **OK** again.

Configure Web Server Properties

Configure Web server properties for the two IIS Virtual Servers CDSs defined previously.

NOTE: IIS 5 differs from IIS 4 with respect to selections. IIS 5 uses pull-down lists and IIS 4 employs option buttons. Naming conventions for tabs and fields remain identical or are very similar in both versions.

1. Click **Development CDS** and right-click to select **Properties**.
2. Determine the Anonymous User Account by clicking the **Directory Security** tab. Click **Edit** next to **Anonymous Access and Authentication Control**, and then click the **Edit** next to **Allow Anonymous Access**.

You will see the Anonymous User Account **IUSR_***hostname*. You will need to refer to this name later in this IIS configuration. Click **Cancel** to return to the Properties window.

3. Click the **Home Directory** tab.

In the **Application Setting** box, if using IIS 5.0, enable **Execute Permissions: Scripts and Executables**. If using IIS 4.0, enable **Permissions: Execute (Including Scripts)**.

- a. Create two application mappings: one for **.html** and one for **.htm**. To do this, select **Configuration**.
- b. Click the **Application Mappings** tab. Click **Add**. Enter the following:

Executable	Extension
<i>drive:\Winnt\system32\inetrv\ssinc.dll</i>	.htm
<i>drive:\Winnt\system32\inetrv\ssinc.dll</i>	.html

NOTE: Leave **Script Engine** check box selected. Click **OK**.

4. Click the **Documents** tab. Move **default.htm** to the top of the list. If **default.htm** isn't in the list, add it and then move it to the top of the list.
5. Close the Internet Service Manager and click **Yes** to save console settings.
6. Repeat Step #1 through Step #5 for **Live CDS**.

Set Permissions for Virtual Services Directories

7. Select **Security** and click **Permissions**. In the **Directory Permissions** window, note whether there is an entry for the Web server anonymous user whose name you found through the IIS Management (for example: **IUSR_***hostname*).
8. If the Web server anonymous user is listed go to Step #9, otherwise continue with this step to add the user:
 - a. Click **Add** to open the **Add Users and Groups** dialog box.

- b. Select the name of the Web server host (for example: **web02**) from **List Names From:** and click **Show Users** to display all configured users on this Web server.
 - c. Select the Internet Server anonymous access user whose name you found through the IIS Management Console (for example: **IUSR_web02**).
 - d. Click **Add**. Then click **OK** to return to **Directory Permissions**.
9. In Windows 2000, select the anonymous user and from the **Permissions** list box select **Modify**. In Windows NT 4.0, select the anonymous user and set the **Type of Access** to **Change** (to provide read, write, delete, and execute permissions).
 10. On Windows NT, select both options: **Replace Permissions on Subdirectories** and **Replace Permissions on Existing Files**. Click **OK**. (Windows 2000 will set these options by default.)
 11. When prompted if you want to replace security information on all existing subdirectories, click **Yes**.
 12. Return to Windows Explorer and repeat the steps above for the remaining virtual servers.
 13. Click **My Computer>Control Panel>Services** and click **World Wide Web Publishing Service**. Stop and then start it.
 14. Close **Services**.
 15. Configure ODBC Connection to CMS Database

The database environments that V/5 CMS supports are Microsoft SQL Server 7.0 and Oracle 8.1.16i.

Using the CMS database that you created using instructions in Chapter 1, *Before You Install*:

For MS SQL Server 7.0

1. Open the **Data Sources (ODBC)** Administrator in the Control Panel.
2. Click the **System DSN** tab. Perform the following steps to create a system DSN that will allow for connections to the database, whatever its location.
3. Click **Add** and select **SQL Server**, then click **Finish**.
 - a. In the **Create a New Data Source to SQL Server** dialog box, supply a name, description, and server. We suggest the following:

Name	vignetteODBC
------	---------------------

Description	enter a description
Server	DB_Host

Click **Next**.

- b.** Select **With SQL Server authentication...**

Login ID	vignette_sql
Password	rational

Select **Connect to SQL server to obtain default settings...**

Click **Next**.

- c.** Select **Change the default database to: CMSsystem**. Click **Next**. Click **Finish**.
- d.** Click **Test Data Source** to verify.
- e.** Click **OK** and **OK** again.

For Oracle 8.1.16i

- 1.** Create a System DSN in the ODBC Data Sources Administrator (in Control Panel) that will allow for connections to the database, whatever its location. Perform the following steps:
- 2.** Click **Add** and select **Oracle ODBC Driver**, then click **Finish**.
 - a.** In Oracle* ODBC Driver Setup, supply the following:

Data Source Name	vignetteODBC
Description	enter a description
Service Name	DB_Host
User ID	CMSSYSTEM
 - b.** Click **OK**.

2.3 Install and Configure Vignette V/5 Server Components

The following sections provide the procedures for installing Vignette V/5 Server components.

Install V/5 Base Platform

You must install the Base Platform software on each system on which you will create a CMS and/or a CDS. If you are configuring a Web server on a host that is remote from its CDS, you must install this software on that host.

To perform this part of the installation, insert the CD titled *Rational Suite ContentStudio Vignette Content Management Server*.

1. In the V/5 Content Management Server 5.5 window, click **Install Software**.
2. Click **e-Business Platform Base Installation**.
3. In the **Vignette V/5 Base Platform 5.5 Setup** box, click **Next**.
4. In the **License Agreement** dialog box, click **Yes**.
5. In the **View Release Notes** dialog box, answer as you prefer.
6. In the **Select Components** dialog box, select all and click **Next**.
7. In the **Choose Destination Location** dialog box, take the default and click **Next**.
8. In the **Select Program Folder** dialog box, take the defaults and click **Next**.
9. In the **Confirm Destination** dialog box, click **Next**.
10. After files are updated, click **Finish**.
11. Exit.

Apply the Vignette 5.5.1 Patch

The Vignette 5.5.1 Patch is required to run ContentStudio. This patch is available on the CD titled *Rational Suite ContentStudio Integrations*. Perform the following steps:

1. Insert the CD and navigate to `\ContentStudio\misc\updates\Vignette`.
2. Double-click `ss55-551.exe`.
3. From the **Install Shield Wizard**, click **Next**.

4. Click **Yes** on the **License Agreement** dialog box.
5. In the **Choose Destination Location** dialog box, take the default and click **Next**.
6. Click **Finish**.

Create and Configure a New CMS

The content management server (CMS) is the control center for V/5 Platform software, storing its information in the system database (CMS system in our example). The CMS processes production management information for a site. Only one CMS can be configured per instance of V/5 platform software. Admin and guest user IDs are created during installation. For details, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. Start the Platform Manager. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Manager**.
2. In the **Vignette V/5 e-Business Platform Configuration** box, click **Create a new Content Management Server** and then click **OK**.
3. In the **V/5 e-Business Platform: New CDS** wizard:
 - a. In the **Contact and License Information** pane, complete all of the fields. You must have previously requested the **CD Key** and **License Key** through email using the instructions in Chapter 1.
 - b. In the **Local Host Information** pane, take the default value in the **Name for this Host** field, which is your host name.
 - c. In the **Assign Instance Name** pane, provide a name for the platform instance. We recommend **CMSsystem**.
 - d. In the **Server Host and Ports** pane, take the default values:

Host	<i>hostname.domain-name</i>
Dispatch Service (bob) Port	30210
Request Service (vhs) Port	30211
 - e. In the **Database Type** pane, select the vendor and version you are using.

- f. In the **Database Server and Login** pane, take the defaults for these fields, which were specified in a previous step:

Data Source Name	vignetteODBC
Data User Login	vignette_sql
Database User Password	rational
- g. In the **Secure Database Setup** pane, click **Use the Login configured with the system database**.
- h. In the **Auto Start CMS** pane, click **Start the CMS if the system is rebooted**.
- i. Click **Finish**.

Create and Configure a Development CDS

If you are still in the V/5 e-Business Platform Manager, begin at Step #4.

1. To start the Platform Manager, click **Start>Programs>Vignette e-Business Platform 5.5>Platform Manager**.
2. Click **Configure an Existing Content Management Server**.
3. In the **V/5 e-Business Platform Login** box, use the recommended values:

Location	<i>hostname.domain-name:port</i> (the default port is 30210)
Userid	admin
Password	admin
4. Select **Content Management Server (CMS)**, right-click and then click **New Content Delivery Server (CDS)**.
5. In the **V/5 e-Business Platform: New CMS** wizard:
 - a. In the **CDS type** pane, click **Development**, then click **Next**.
 - b. In the **Assign Name** pane, provide a name. We recommend **devCDS**. Click **Next**.
 - c. In the **Docroot Manager Host and Ports** pane, take the default values, then click **Next**.

Host	<i>hostname.domain-name</i>
Placement Agent	3737
Cache Manager (cmd) Port	3738

- d. In the **Docroot Information** pane, specify the path from a previous step: *drive:\Inetpub\wwwroot\devCDS*, then click **Next**.
- e. In the **Cached Pages** pane, click **Web Server**, then click **Next**.
- f. In the **Auto Start CDS** pane, click **Start the CDS if the system is rebooted**, then click **Next**.
- g. In the **Initial Docroot Manager Startup** pane, click **Start the Docroot Manager now**, then click **Next**.
- h. Click **Finish**.

Create and Configure a Development APE

Use the application engine (APE) to associate a Web server with the CDS, so that the CDS can begin serving pages. For details, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. In V/5 e-Business Platform Manager, select the development CDS name, right-click and then click **Application Engine>New Application Engine**.
2. In the **V/5 e-Business Platform: New Application Engine** wizard:
 - a. In the **Application Engine Host and Ports** pane, take the default values:

Host Name	<i>hostname.domain-name</i>
Page Generator (ctlv) Port	4738
Template Manager (tmd) Port	4739
 - b. In the **Initial Application Engine Startup** pane, click **Start the Application Engine now**.
 - c. Click **Finish**.
3. Select the APE that you created. Right-click and then click **Enable COM extensions**. Click **Finish**.

Associate the Web Server

You must associate one or more Web servers for each CDS. When you associate multiple Web servers with a CDS, make sure that all Web servers use the same doc root. For more information, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. In V/5 e-Business Platform Manager, select the named development CDS, right-click and click **Associate Web Server**.

2. In the **V/5 e-Business Platform: Associate Web Server** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Assign Name** pane, provide a name. We recommend **devCDS**.
 - c. In the **Web Server Type** pane, click your server type (for example, **Internet Information Server 5.0**.)
 - d. In the **Web Server Instance** pane, click **Development CDS**.
 - e. In the **Secure Web Server Setup** pane, click **No**.
 - f. In the **Directory Information** pane, take the defaults for these fields:

Docroot	<i>drive</i> : /Inetpub/wwwroot/devCDS
Metafiles Path	<i>drive</i> : /Vignette/Inst-CMSsystem/working/cds-dev CDS/metafiles/
Dynamic Pages Path	Leave blank
 - g. In the **Web Server Startup** pane, click **Restart the Web Server now**.
 - h. Click **Finish**.

Select ASP Generator for the Development APE

If the IIS instance that will act as an ASP Page Generator uses SSL to communicate with the V/5 platform Web server module (if CDS-CMS communication needs to be secure), you need to configure certain V/5 variables before you create the ASP Page Generator. For more information, see *Vignette V/5 Platform Installation and Configuration Guide*.

1. In Platform Manager, select the development APE name; right-click and then click **Add ASP Page Generator**.
2. In the **V/5 e-Business Platform: Add an ASP Page Generator** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Web Server Instance** pane, click **Development ASP** and click **Next**.
 - c. In the **Web Server Protocol Setup** pane, click **No**, then click **Next**.
 - d. In the **Web Server Host and Port** pane, take the defaults:

Host Name	<i>hostname.domain-name</i>
------------------	-----------------------------

Port 81

Then click **Next**.

- e. In the **Directory Information** pane, take the default:

Template Cache *drive:\Inetpub\wwwroot\devASP*

Then click **Next**.

- f. In the **ASP Page Generator Startup** pane, click **Restart the Web Server**.
- g. Click **Finish**.
- h. Exit the Platform Manager.

Create and Configure a Live CDS

- 1. Select Content Management Server (CMS), right-click and then click **New Content Delivery Server (CDS)**.

- 2. In the **V/5 e-Business Platform: New CDS** wizard:

- a. In the **CDS type** pane, click **Live**, then click **Next**.
- b. In the **Assign Name** pane, provide a name. We recommend **livCDS**. Click **Next**.
- c. In the **Docroot Manager Host and Ports** pane, take the defaults:

Host	<i>hostname.domain-name</i>
Placement Agent (pad) Port	3739
Cache Manager (cmd) Port	3740

Click **Next**.

- d. In the **Docroot Information** pane:

Docroot *drive:\Inetpub\wwwroot\livCDS*

Click **Next**.

- e. In the **Cached Pages** pane, click **Web Server**, then click **Next**.

- f. In the **Auto Start CDS** pane, click **Start the CDS if the system is rebooted**, then click **Next**.
- g. In the **Initial Docroot Manager Startup** pane, click **Start the Docroot Manager now**.
- h. Click **Finish**.

Create and Configure a Live APE

1. In Platform Manager, select the named live CDS, right-click and click **Application Engine>New Application Engine**.
2. In the **V/5 e-Business Platform: New Application Engine** wizard:
 - a. In the **Docroot Manager Host and Ports** pane, take the defaults:

Host Name	<i>hostname.domain-name</i>
Page Generator (ctlv) Port	4740
Template Manager (tmd) Port	4741

Click **Next**.
 - b. In the **Initial Application Engine Startup** pane, click **Start the Application Engine now**.
 - c. Click **Finish**.
3. Select the APE that you created. Right-click and click **Enable COM extensions**. Click **Finish**.

Associate the Web Server

1. In Platform Manager, select the live CDS name, right-click and click **Associate Web Server**.
2. In the **V/5 e-Business Platform: Associate Web Server** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Assign Name** pane, provide a name. We recommend **livCDS**.
 - c. In the **Web Server Type** pane, click your server type (for example, **Internet Information Server 5.0**.)
 - d. In the **Web Server Instance** pane, click **Live CDS**.
 - e. In the **Secure Web Server Setup** pane, click **No**.

- f. In the **Directory Information** pane, take the defaults:

Docroot	<i>drive: /Inetpub/wwwroot/livCDS</i>
Metafiles Path	<i>drive: /Vignette/Inst-CMSsystem/working/cds-livCDS /metafiles/</i>
Dynamic Pages Path	Leave blank
- g. In the **Web Server Startup** pane, click **Restart the Web Server**.
- h. Click **Finish**.

Select ASP Generator for the Live APE

1. In **V/5 e-Business Platform Manager**, select the live APE (**ape-1** under **LivCDS**), right-click and click **Add ASP Page Generator**.
2. In the **V/5 e-Business Platform: Add an ASP Page Generator** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Web Server Instance** pane, click **Live ASP**, then click **Next**.
 - c. In the **Web Server Protocol Setup** pane, click **No**, then click **Next**.
 - d. In the **Web Server Host and Port** pane, take the defaults, then click **Next**.

Host Name	<i>hostname.domain-name</i>
Port	8081
 - e. In the **Directory Information** pane, take the default, then click **Next**.

Template Cache	<i>drive: \Inetpub\wwwroot\livASP</i>
-----------------------	---------------------------------------
 - f. In the **ASP Page Generator Startup** pane, click **Restart the web server**.
 - g. Click **Finish**.
3. Close **Platform Manager**.

Setting Service Dependencies

When you install the CMS and CDS on the same Windows NT host as the database, certain services will not start properly until the database is running. The following services are

dependent on the database service: CMS Dispatch Service (**bob**), CDS Template Manager (**tmd**) and the Vignette watchdog (**vwd**). To prevent service failure, all of these services must start after the database starts. Set the dependencies for start sequence by entering commands in a Windows NT Prompt window.

For more information, see the *Vignette V/5 e-Business Platform Tools Installation Guide*.

1. Open a command prompt window and change to this directory:

```
drive:\vignette\5.5\bin\winnt
```

2. In the Windows registry, look for this key:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services
```

Be careful when navigating through the registry. Do not make any changes to it.

3. Locate the keys of form given below. (These keys were created by the Vignette installation.) The service name includes the process name (for example, **bob**, **tmd**, or **vwd**), the version number, site name, and the port (for CMS).

```
> bob 5.5 inst-mysite
> inst-mysite 5.5 _cds-devCDS_ape_tmd_tmd-1
> inst-mysite 5.5 _cds-liveCDS_ape_tmd_tmd-1
```

If you used the suggested names in the instructions, these are the keys:

```
> bob 5.5 inst-CMSsystem
> inst-CMSsystem 5.5 _cds-devCDS_ape_tmd_tmd-1
> inst-CMSsystem 5.5 _cds-livCDS_ape_tmd_tmd-1
```

4. In the command prompt window, for *each* of the keys, enter the following command on a single line:

```
bob -update -name "key-name" -depends DB-service
```

where *key-name* is the name of the key, and *DB-service* is either **MSSQLServer** or **OracleServiceORCL**, depending on your database vendor.

For example, for the keys listed in Step #2 and a SQL Server database, these are the commands:

```
bob -update -name "bob 5.5 inst-CMSsystem" -depends MSSQLServer
```

```
bob -update -name "inst-CMSsystem 5.5 _cds-devCDS_ape_tmd_tmd-1" -depends
MSSQLServer
```

```
bob -update -name "inst-CMSsystem 5.5 _cds-livCDS_ape_tmd_tmd-1" -depends
MSSQLServer
```

5. Close the command prompt window.
6. Reboot the machine.
7. After you log back in, click **Start>Programs>Administrative Tools>Event Viewer** to confirm that no errors occurred.

Install V/5 Platform Tools

Install V/5 Tools using the instructions in *Install V/5 Platform Tools* in Chapter 4 on page 92.

Install V/5 Development Center

Install V/5 Development Center using the instructions in *Install V/5 Development Center* in Chapter 4 on page 92.

Configure Vignette Global.asa sample Template

The Vignette **Global.asa sample** template must be launched for Rational Suite ContentStudio page generation to work. The **Global.asa sample** is a Vignette system template with global Vignette variable definitions. Vignette installs the **Global.asa sample** template in the **Samples** subproject.

To launch the **Global.asa sample** template:

1. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
 - a. In the **Business Platform Login** dialog box, take the defaults:

Location	<i>hostname:30210.domain-name</i>
User ID	admin
Password	admin

- b.** Click **Window>Production Center>Project Manager**.
- 2.** Select the **Global.asa** sample template located in the **Base Project >Applications>Samples** project folder, right-click, and click **Launch**.
- 3.** In the **Confirm Launch** dialog box, click **Immediately**. The file now appears with a status of **Live**.

Verify That Development and Live CDS/APE Are Running

To ensure that files will launch from a Web browser, and that the file object exists in the development and live CDS, perform the following steps:

- 1.** Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
- 2.** In the **Business Platform Login** dialog box, take the defaults:

Location	CMS_Host.domain-name
User ID	admin
Password	admin
- 3.** Click **Window>Production Center>Project Manager**.
- 4.** In the **Project Manager** dialog box, click **Base Project**.
- 5.** Then click **File>New Project**.
- 6.** Enter a new project name (we recommend **test**).
- 7.** Select the new project name. Click **File>Submit File**.
- 8.** Select a file that you want to display in your browser, for example any **.gif**, or **.html** file. When prompted, enter the name of the directory (we recommend **/test**). Then click **OK**. The selected file appears with a status of **Ready to Launch**.
- 9.** Right-click the file name and click **Preview** to display the file.

If you are prompted to select a default Web browser, click **OK**. In the **Preferences** dialog box, click **Add** and enter the browser name [**IE**], and browse for the browser location for [...\iexplore.exe]. Click **OK**.
- 10.** Verify that the new file object is in the development CDS. In Windows Explorer, look for this file: *drive:\Inetpub\wwwroot\devCDS\test\your-file*.

11. After previewing, right-click the file name and click **Launch**.
12. In the **Confirm Launch** dialog box, click **Immediately**. The file now appears with a status of `Live`.
13. Verify that the new file object is in the live CDS. In Windows Explorer, look for this file:
`drive:\Inetpub\wwwroot\livCDS\test\your-file`.

2.4 Install and Configure ClearCase LT Server

The procedure in this section installs Rational ClearCase LT. For more information, see the chapter in the manual *Installing Rational Suite*. If you want to install full ClearCase, follow the instructions in *ClearCase Product Family Installation Notes*.

Install ClearCase LT Server

To install ClearCase LT Server, insert the CD titled *Rational Solutions for Windows*.

1. In the **Rational Software Setup** dialog box, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational ClearCase LT Server**. Click **Next**.
3. In the **License Agreement** dialog box, click **Yes, I accept this agreement**, then click **Next**.
4. In the **Setup Confirmation** dialog box, click **Typical**, then click **Next**.
5. In the **Update Shared Components** dialog box, click **Next**.
6. In the **Confirmation** dialog box, click **Next**.

Please wait while ClearCase LT Server files are copied.

7. In the **Restart Windows** dialog box, select the **Restart** check box and click **Finish**.
8. After the machine reboots, login using the same credentials in order to complete the ClearCase installation.

When the ClearCase Setup Wizard starts, you will not be able to proceed if you are logged in as Local Administrator. You must logoff and login as a member of the ClearCase primary group with administrative privileges to run this wizard. Restart the wizard from **Start>Programs>Rational ClearCase LT Server>Rational ClearCase LT Server Setup Wizard**.

Configure ClearCase LT Server

1. Click **Next** in the **Welcome** dialog box.
2. In the **Create the ClearCase LT Storage Directory** pane, take the default:
drive:\ClearCaseStorage
3. Complete the field in the **Create ClearCase LT Source VOB** pane:

Source VOB Name	<i>content</i>
Import Source files	(Clear the check box.)
4. In the **Create Initial Clearcase LT Project** pane, take the default in the **Starting Project Title** field.
5. In the **Will UNIX ClearCase LT Clients Use this Server** pane, click **No**.
6. In the **ClearCase LT Summary** pane, click **Finish**.
7. Close the wizard.

NOTE: ClearCase LT will not be properly licensed until ContentStudio licenses are configured in *Configure ContentStudio Licenses* on page 38.

2.5 Install and Configure ContentStudio Server

Install ContentStudio Server

Insert the CD titled *Rational Suite ContentStudio Integrations*. In the Rational Software Setup Wizard, perform these steps:

1. In the **Rational Software Setup** dialog box, click **Next**.

2. In the **Select Installation Option** dialog box, click **Install Rational Product**. Click **Next**.
3. In the **Select and Install Licensing Option** dialog box, click **Install Product Before Licensing**. Click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite ContentStudio Server**. Click **Next**.
5. In the **License Agreement** dialog box, click **Yes**. Click **Next**.
6. In the **Setup Configuration** dialog box, click **Typical**, then click **Next**.

(See the *Rational Suite ContentStudio Release Notes* for information about any incompatibility messages you receive.)

7. In the **Confirmation** dialog box, click **Next**.

Please wait while Rational Suite installs ContentStudio Server.

8. In the **Restart Windows** dialog box, click **Restart**. Click **Finish** to restart your computer.

After the machine reboots, you must login using the same credentials in order for the installation to complete.

After setup completes, the Rational Suite ContentStudio Administration Utility will start automatically.

Configure ContentStudio Server

In the Administration Utility, perform the following steps:

1. Complete these fields on the **ClearCase** tab:

VOB Name	content
View Name	cs_pagegeneration (default)
View Prefix	cs_deployment (default)
Label Prefix	CS_DEPLOYED (default)
Views Directory	drive:\ClearCaseStorage\Views (does not yet exist)
Admin VOB Name	projects
Use Shadow Directories check box	(See the online help for more information.)

2. Complete the fields on the **ContentStudio** tab:

DB URL	jdbc:odbc:vignetteODBC
DB UserID	For SQL: vignette_sql ; For Oracle: CMSSYSTEM
DB Password	rational
Tomcat Fields	leave blank
Logging Dir	<i>drive:\Program Files\Rational\ContentStudio\logs</i>

3. Complete these fields on the **V/5** tab:

CMS Host	CMS_Host
CMS Port #	30210
CMS UserID	admin
CMS Password	admin
DB URL	jdbc:odbc:vignetteODBC
DB Userid	For SQL: vignette_sql ; for Oracle: CMSSYSTEM
DB Password	rational
CDS Host	CS_Host
CDS Port #	8080
CDS DocRoot	<i>drive:\Inetpub\wwwroot\livCDS</i>
CS Role	CS_ROLE

4. Click **OK** to close the ContentStudio Administration Utility.

Create and Assign CS_ROLE for ContentStudio Users

1. From **V/5 Tools (Start>Programs>Vignette e-Business Platform 5.5>Platform Tools)**, perform the following steps:
2. Under **Admin Center**, click **User Manager**.
3. From the **User Manager** window, click **File>New Role** to create a new role for **CS_ROLE**.

NOTE: For additional information, see the online help for V/5 Admin.
4. On the **Users** tab, click **admin**, then right click **Details**. On the **Roles** tab, click **CS_ROLE** to assign the new role to the **admin** user.
5. Create any new users who will need to log in to ContentStudio Console and add assign the **CS_ROLE** to those users as well.

Configure ContentStudio Licenses

You must configure the software to use either node locked or floating licenses. Follow the appropriate instructions below:

Configure Node Locked Licenses

1. Click **Start>Programs>Rational Suite ContentStudio Server>Rational License KeyAdministrator**.
2. Click **License>Go to Rational AccountLink**.
3. On the Account Link page, click **Get License Keys** and follow the steps.
4. Account Link will send your license keys by e-mail. Open the message and save the attachment. We recommend storing it in *drive:\temp\license_for_hostname*.
5. Click **License>Import License Key(s)** and select your license file.
6. In the **Confirm Import** pane, click **Import**, then click **OK**.

Configure Floating Licenses

1. Click **Start>Programs>Rational Suite ContentStudio Server>Rational License Key Administrator**.
2. Click **Point to FLEXlm license server to get my licenses**. Click **Next**.
3. Click **Settings>Service Configuration**. Click **Use License Server** and enter the name of the FLEXlm server host that you set up in Chapter 1. Click **OK**.

Configure CMS Database for ContentStudio

You must add the required Rational Suite ContentStudio tables to the CMS database created in Chapter 1. To do this, the ContentStudio tables must have the same owner as the Vignette tables. Steps are listed below for Oracle and for Microsoft SQL.

Configuring Microsoft SQL Server

1. Click **Start>Programs>MicroSoft SQL Server 7.0>Enterprise Manager**.

2. Expand **Microsoft SQL Server**, expand **SQL Server Group** then click **DB_Host**.
3. In the SQL Server Enterprise Manager, click **Tools>SQL Server Query Analyzer**.
4. Click **File>Connect**.

In the **Connect to SQL Server** dialog box, complete the fields:

Click Use SQL Server Authentication	Click DB_Host
Login Name	vignette_sql
Password	rational

5. Select the CMS system database created earlier (**CMSSystem**) from the **DB** drop-down box.
6. Click **File>Open** navigate to the script file: *drive:\Program Files\Rational\ContentStudio\db_scripts\RSCSinitdb.mss.sql*, then click **Open**.
7. Click **Query>Execute**.

You will see “Query Batch completed” in the bottom of the window.

8. Quit Query Analyzer and then Enterprise Manager.

Configuring Oracle

1. Start SQL*Plus Worksheet, connecting as the ORACLE schema user (default CMSSYSTEM) that has been created in Chapter 1, *Before You Install*.
2. Click **Worksheet>Run Local Script**. This command runs the script file in *drive:\Program Files\Rational\ContentStudio\db_scripts\RSCSinitdb.ora.sql*.

Configure JRE and Tomcat

JRE 1.3 and Tomcat 3.2.1 are required to enable the servers for Rational Suite ContentStudio Page Generator and Rational NetDeploy. The following are the default installation directories:

- For JRE, *drive:\Program Files\Rational\common\java\jre*
- For Tomcat, *drive:\Program Files\Rational\ContentStudio\tomcat*

Modify Tomcat Port Information

When installed by Rational Suite ContentStudio, Tomcat uses the TCP/IP port 8088 for its communication with the Web server. This setting is in the file *drive:\Program Files\Rational\ContentStudio\tomcat\conf\server.xml*. If another TCP/IP service uses this port, you must change the setting.

Establish Tomcat as a Service

The Tomcat service should run as a domain user account with full ClearCase privileges. You can change the UID the Tomcat service runs as by performing the following steps:

1. Open a command prompt window.
2. Change to the directory *drive:\Program Files\Rational\ContentStudio\tomcat\bin*
3. Install `jk_nt_service`. To do so, enter a command of this form:

```
jk_nt_service -i name-of-service path-to-wrapper-properties
```

Given the defaults used in this section, the command would be as follows:

```
jk_nt_service -i Tomcat "drive:\Program Files\Rational\ContentStudio\tomcat\conf\wrapper.properties"
```

4. Start the services applet:
On Windows 2000, click **Start>Programs>Administrative Tools>Services**.
On Windows NT 4.0, double-click the services applet in Control Panel.
5. Locate the Tomcat service in the list of services, and double-click the entry.
6. Set the **Startup Type** to **Automatic**, then
on Windows 2000, click the **Log on** tab and then click **This Account**.
on Windows NT 4.0, in the section **Log On As**, click **This Account**.
7. Enter the appropriate User ID and Password information either directly into the fields or by browsing. UserID must be entered in the form *domain-name\user-name*. To browse on Windows 2000, click **Browse**; on Windows NT 4.0, click the ... button.

NOTE: The user identity for the Tomcat service must be a member of the ClearCase primary group.

8. Start the service by clicking the **Start** button.
9. Check the application log in the Windows Event Viewer to verify that the Tomcat service has started successfully.

For more information on setting up Tomcat as a service, see the document **NT-Service-howto.html**, which is located in *drive:\Program Files\Rational\ContentStudio\tomcat\doc*.

Install Rational Suite Team Unifying Platform

The Team Unifying Platform edition of Rational Suite is designed for teams that need to share artifacts, but do not require the productivity tools available in other editions of Rational Suite. In particular, Team Unifying Platform will install ClearCase LT and ClearQuest.

To install Rational Suite Team Unifying Platform, insert the CD titled *Rational Solutions for Windows*. The Rational Software Setup Wizard starts.

1. In the **Rational Software Setup** dialog box, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational Product** and click **Next**.
3. In the **Select and Install Licensing Option** dialog box, click **Install Product Before Licensing** and click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite Team Unifying Platform** and click **Next**.
5. In the **License Agreement** dialog box, click **Yes** and click **Next**.
6. In the **Setup Configuration** dialog box, click **Typical** and click **Next**.
7. In the **Update Shared Components** dialog box, click **Next**.
8. In the **Software Use** dialog box, click **Administrator** and click **Next**.
9. In the **Confirmation** dialog box, click **Next**.

Please wait while Rational Suite installs Team Unifying Platform.

10. In the **Restart Windows** dialog box, click **Restart**. Click **Finish** to restart your computer.

After the machine reboots, you must login using the same credentials in order for the installation to complete.

2.6 Configure ClearQuest

Configuring ClearQuest involves creating a schema repository, adding the ContentStudio package to the schema, creating a user database, and installing the V/5 package templates.

Create a Schema Repository

You must have installed ClearQuest and created empty vendor databases (as instructed in Chapter 1, *Before You Install*), before you create the ClearQuest Schema Repository. The Schema Repository is the master database in which ClearQuest stores schemas.

You will need the manual *Installing Rational ClearQuest*, which is available in print as part of the media kit. In Chapter 3, *Installing ClearQuest for an administrator*, the section *Creating ClearQuest Databases* explains how to create a schema repository using the ClearQuest Maintenance Tool.

Create the schema repository now using the empty database you created.

Add the ContentStudio Package to a ClearQuest Schema

You need to use the ContentStudio package to configure content change requests. For more information, see *Content Change Requests in ClearQuest* in the manual *Introducing Rational Suite ContentStudio*.

1. Start the ClearQuest Designer and log in. The user name is **admin**; leave the password field blank.
2. In the Open Schema wizard:
 - a. In step 1 of 2, click **Check out a schema to edit or continue editing previously saved work**.

Click on the **Schema** [Enterprise]. Click **Next**.

Install V5_Package Templates

Installing the V/5 Package installs the Vignette templates and establishes **CSVgnCQSvc** as a service.

1. Modify your system path variable to include Vignette. Add the following directory:
drive:\vignette\5.5\bin\winnt.
2. **IMPORTANT:** Restart your machine so that updated path information will be used for the remaining steps.
3. Open a command prompt window.
4. Change to this directory *drive:\Program Files\Rational\ContentStudio\cq_integration.*
5. To install the V/5 integration with ClearQuest, enter a command of this form:

```
install_v5_package CMS-hostname:port CMS-username:CMS-password
```

Given the defaults used in this section, the command would be as follows:

```
install_v5_package CMS_Host:30210 admin:admin
```

6. Establish **CSVgnCQSvc** as a service.
 - a. Change to this directory:
drive:\Program Files\Rational\ContentStudio\bin
 - b. Execute a command of this form using any domain user:

```
CSVgnCQSvc -i domain-name\domain-userid domain-password
```
7. Verify the ContentStudio Administration Utility parameters for ClearQuest Integration. Start the ContentStudio Administration Utility.
 - a. Click **Start>Programs>Rational Suite ContentStudio Server>Rational Suite ContentStudio Administration Utility** and click the **ClearQuest** tab and complete the boxes.
 - b. Complete these fields on the **ClearQuest** tab.

CQ UserID	admin
CQ Password	Leave blank.
CQ DB Name	RSCS (name of ClearQuest User database)

Assigning Permission to Run as Server

The user assigned in Step #6 requires “run as server” permission. If the service does not start, you can verify user permissions as follows.

1. In Windows 2000, click **Start>Programs>Administrative Tools>Services** and in Windows NT, open the Control Panel and click **Services**. Locate the service **ContentStudio Vgn to CQ synchronizer**.
2. Double-click the **ContentStudio Vgn to CQ synchronizer** service and click the **Logon** tab. Enter password and confirm password for the user. Click **Apply**. The message that appears indicates that the **Logon as Service** right has been set.
3. Start the service.

ClearQuest Administration

1. Click **Start>Programs>Rational Suite Team Unifying Platform> Rational ClearQuest** to start ClearQuest and log in as **admin**. Leave the password blank.
2. Select the User database that you created (**RSCS**).
3. Click **Actions>New**.
4. In **Choose Record Type...** pane, click **CS_V5_Connection** and click **OK**.
5. In **Submit CS_V5_Connection** pane, complete these fields:

CMS Host Name	CMS_Host
CMS Port Number	30210
User Name	admin
Password	admin
CDS Host Name	CMS_Host (host for the development CDS)
CDS Port Number	80 (port for the development CDS)
Proxy Url	/contentstudio/proxy (default)
Default Project Path	>Base Project>Content Studio

The ClearQuest database is now set up.

2.7 Configure RequisitePro Database

RequisitePro is an optional component. If you plan to use it, you must configure a database.

For more information on configuring a RequisitePro database, see *Installing RequisitePro* which is available on the *Rational Solutions for Windows: Online Documentation* CD.

2.8 Verify Operational Status

Check to see that your ContentStudio installation is functioning properly.

Verify ContentStudio Console Login

1. Log in from ContentStudio Console from the desktop where ContentStudio Client is installed.

CS Server	<i>hostname</i>
User ID	admin
Password	admin

2. If log in fails, verify that the Tomcat service is started.
3. If Tomcat is stopped, check Windows Event Viewer for Tomcat error messages.

Verify ClearQuest Integration

1. On any host where ClearQuest client is installed, click **Start>Programs>Rational Suite Team Unifying Platform> Rational ClearQuest** to start ClearQuest and log in.
2. Click **Actions>New** to open the **Choose Record Type** dialog box. Click **ContentChangeRequest** and click **OK**.
3. In **Submit Content Change Request** dialog box, complete the **Headline**, **Owner**, and the **Description** boxes. For information about each box, right-click to display a shortcut menu and click **Help**.

4. Click **OK** to submit the content change request to the ClearQuest database.
5. Run the **V5 Tasks to Assign** query in the **CS User Queries** folder. This query retrieves all unassigned V/5 Tasks (content change requests) that the current user owns or that have no assigned owner.
6. Select the content change request that you want to assign and click **Actions>Assign**.
7. Complete the information on the **V/5 Task** tab in the **Assign Content Change Request** dialog box.
 - > To select the name of your CMS server, click **CMS**.
 - > To select a V/5 owner, click **Assignee**.
 - > Verify that the information in the **Project Path** box is correct. This is where the corresponding V/5 project task will be stored.
8. Click **Apply**.
9. Start Vignette from any host where V/5 Tools are installed and click Start Programs Vignette. Verify that it was created in Vignette task view.
10. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
 - a. In the **Business Platform Login** dialog box, take the defaults:

Location	<i>hostname</i>
User ID	admin
Password	admin
 - b. Click **Window>Production Center>Task View**.
11. Verify that there is an entry in the Task View window for the Content Change Request that was submitted and assigned using the ClearQuest client.

Four-Host Installation

3

Rational Suite ContentStudio can be installed on four server hosts; this installation is intended only for production purposes.

Database server is **DB_Host**.

Vignette CMS server is **CMS_Host**.

Rational ClearCase LT server is **CCASE_Host**.

Rational ContentStudio server is **CS_Host**.

3.1 Overview of the Four-Host Installation Procedure

Before beginning the installation for the four-host model, you must complete the steps in Chapter 1, *Before You Install*. This section provides an overview of the four-host installation.

An empty database for the CMS has already been created on Database server (**DB_Host**). If this has not yet been done, refer to the Chapter 1, *Before You Install* for instructions.

1. Install and Configure Vignette Server Components
 - > Configure IIS
 - > Create new CMS
 - > License CMS
 - > Create development CDS
 - > Create development APE

- > Create ASP Page Generator for development APE
 - > Install V/5 tools
 - > Verify the development CDS
 - > Configure IIS to create live CDS
 - > Create live CDS
 - > Create live APE
 - > Create ASP Page Generator for live APE
 - > Verify live CDS
2. Install and Configure ClearCase Host
 - > Install ContentStudio Client
 - > License ClearCase LT server
 3. Install and Configure ContentStudio Host
 - > Install ContentStudio Server
 - > Install Rational Suite Team Unifying Platform
 - > Insert ContentStudio database into the CMS database
 - > Configure ClearQuest Package for ClearQuest master schema
 - > Configure ClearQuest user database for V/5_Package
 - > Configure Requisite Pro database
 - > Configure JRE and Tomcat
 - > Rerun ContentStudio Server Administration Utility
 - > Verify that four-host environment is functional
 4. Refer to Chapter 4, *Installing Client Software* for the details of the client installation procedure.
 5. Refer to Chapter 5, *Installing and Configuring the Rational NetDeploy Agent* for the details of installing and configuring the Rational NetDeploy agent on your target Web servers.

The remaining sections in this chapter explain how to perform Step #1 through Step #3.

3.2 Install and Configure Vignette Server Components

You need to install and configure the Vignette server components for the CMS, the development CDS, development APE and development ASP on of the CMS server (**CMS_Host**). You then need to install and configure the live CDS, live APE, and live ASP on the ContentStudio Server (**CS_Host**)

Configure IIS

You must configure IIS 4.0 or later to:

- Set up IIS virtual Web services for the Vignette components
- Configure Web server properties
- Set permissions for virtual services folders

Set Up IIS Virtual Web Services for Vignette Components

On **CMS_Host**, you need to set up two Web virtual services for development CDS and the development ASP. You must assign different port numbers for these services. Make sure that the port numbers you select are not currently in use by another Web service.

To Configure Virtual Services with IIS

1. In Windows Explorer, navigate to *drive:\Inetpub*. Create new folders for each of the Web virtual services. The default server uses *drive:\Inetpub\wwwroot*. We recommend these directory names:
 - > *drive:\Inetpub\wwwroot\devCDS*
 - > *drive:\Inetpub\wwwroot\devASP*
2. Start Internet Service Manager.
3. Open the **Internet Information Server** folder and under **Internet Information Server** locate the host on which you are configuring IIS.
4. Right-click the host name and click **New>Web Site**. In the WebSite Creation Wizard for the Web Site Description, create Web sites using the information provided below.

Web site description	Port	Path
Development CDS	80	<i>drive:\Inetpub\wwwroot\devCDS</i>
Development ASP	81	<i>drive:\Inetpub\wwwroot\devASP</i>

NOTE: The Default Web server uses port 80. This port number conflicts with the development CDS port recommended above. Delete the Default Web server after you create the development CDS.

- a. Enter the Web site description. Click **Next**.
 - b. Accept the default, **All Unassigned** in the **Enter the IP address to use for this Web site** box.
 - c. Enter the port number. Click **Next**.
 - d. Enter the path and allow anonymous access to the Web site. Click **Next**.
 - e. For IIS with Windows 2000, select **Allow Read, Run scripts**, and **Execute** access, and for IIS with Windows NT 4.0, select **Read Access, Script Access**, and **Execute Access**; then click **Finish**.
5. After creating the Web sites, you must enable buffering. Use the Internet Services Manager to enable buffering for each of the new Web sites.
- a. Select each one of the new folders that you have created for the Web sites and right-click to open the Properties window.
 - b. Click the **Home Directory** tab; then click **Configuration** and click the **App Options** tab in the **Application Configuration** dialog box. Click **Enable buffering**.
 - c. Click **OK** and **OK** again.

Configure Web Server Properties

On **CMS_Host**:

Configure Web server properties for the IIS Virtual Servers development CDS defined in *Set Up IIS Virtual Web Services for Vignette Components*.

NOTE: IIS 5 differs from IIS 4 with respect to selections. IIS 5 uses pull-down lists and IIS 4 employs option buttons. Naming conventions for tabs and fields remain identical or are very similar in both versions.

1. Click **Development CDS** and right-click to select **Properties**.
2. Determine the Anonymous User Account by clicking the **Directory Security** tab. Click **Edit** next to **Anonymous Access and Authentication Control**, and then click the **Edit** next to **Allow Anonymous Access**.

You will see the Anonymous User Account **IUSR_***hostname*. You will need to refer to this name later in this IIS configuration. Click **Cancel** to return to the Properties window.

3. Click the **Home Directory** tab.

In the **Application Setting** box, if using IIS 5.0, enable **Execute Permissions: Scripts and Executables**. If using IIS 4.0, enable **Permissions: Execute (Including Scripts)**.

- a. Create two application mappings: one for **.html** and one for **.htm**. To do this, select **Configuration**.
- b. Click the **Application Mappings** tab. Click **Add**. Enter the following:

Executable	Extension
<i>drive:</i> \Winnt\system32\inetsrv\ssinc.dll	.htm
<i>drive:</i> \Winnt\system32\inetsrv\ssinc.dll	.html

NOTE: Leave **Script Engine** check box selected. Click **OK**.

4. Click the **Documents** tab. Move **default.htm** to the top of the list. If **default.htm** isn't in the list, add it and then move it to the top of the list.
5. Close the Internet Service Manager and click **Yes** to save console settings.

Set Permissions for Virtual Services Directories

1. Using Windows Explorer, open the **Properties** window of the Web servers' home directory *drive:*\Inetpub\wwwroot*folder-name* for each of the virtual services created for development CDS and development ASP. Follow this procedure for each of the virtual services.
2. Select **Security** and click **Permissions**. In the **Directory Permissions** window, note whether there is an entry for the Web server anonymous user whose name you found through the IIS Management (for example: **IUSR_***hostname*).
3. If the Web server anonymous user is listed go to Step #4, otherwise continue with this step to add the user:
 - a. Click **Add** to open the **Add Users and Groups** dialog box.
 - b. Select the name of the Web server host (for example: **web02**) from **List Names From:** and click **Show Users** to display all configured users on this Web server.

- c. Select the Internet Server anonymous access user whose name you found through the IIS Management Console (for example: **IUSR_web02**).
- d. Click **Add**. Then click **OK** to return to **Directory Permissions**.
4. In Windows 2000, select the anonymous user and from the **Permissions** list box select **Modify**. In Windows NT 4.0, select the anonymous user and set the **Type of Access** to **Change** (to provide read, write, delete, and execute permissions).
5. On Windows NT, select both options: **Replace Permissions on Subdirectories** and **Replace Permissions on Existing Files**. Click **OK**. (Windows 2000 will set these options by default.)
6. When prompted if you want to replace security information on all existing subdirectories, click **Yes**.
7. Return to Windows Explorer and repeat the steps above for the remaining virtual servers.
8. Click **My Computer>Control Panel>Services** and click **World Wide Web Publishing Service**. Stop and then start it.
9. Close **Services**.

Configure ODBC Connection to CMS Database

On **CMS_Host**, configure ODBC Connection for the CMS Database on **DB_Host**. Prior to this, you should have created an empty CMS database on host **DB_Host** called CMS system during Chapter 1, *Before You Install*.

The database environments that V/5 CMS supports are Microsoft SQL Server 7.0 and Oracle 8.1.16i.

Using the CMS database that you created using instructions in Chapter 1, *Before You Install*:

For MS SQL Server 7.0

1. Open the **Data Sources (ODBC)** Administrator in the Control Panel.
2. Click the **System DSN** tab. Perform the following steps to create a system DSN that will allow for connections to the database, whatever its location.
3. Click **Add** and select **SQL Server**, then click **Finish**.

- a.** In the **Create a New Data Source to SQL Server** dialog box, supply a name, description, and server. We suggest the following:

Name	vignetteODBC
Description	enter a description
Server	DB_Host

Click **Next**.

- b.** Select **With SQL Server authentication...**

Login ID	vignette_sql
Password	rational

Select **Connect to SQL server to obtain default settings...**

Click **Next**.

- c.** Select **Change the default database to: CMSsystem**. Click **Next**. Click **Finish**.
- d.** Click **Test Data Source** to verify.
- e.** Click **OK** and **OK** again.

For Oracle 8.1.16i

1. Create a System DSN in the ODBC Data Sources Administrator (in Control Panel) that will allow for connections to the database, whatever its location. Perform the following steps:
2. Click **Add** and select **Oracle ODBC Driver**, then click **Finish**.
 - a.** In Oracle* ODBC Driver Setup, supply the following:

Data Source Name	vignetteODBC
Description	enter a description
Service Name	DB_Host
User ID	CMSSYSTEM
 - b.** Click **OK**.

Install V/5 Base Platform

On **CMS_Host**:

You must install the Base Platform software on each system on which you will create a CMS and/or a CDS. If you are configuring a Web server on a host that is remote from its CDS, you must install this software on that host.

To perform this part of the installation, insert the CD titled *Rational Suite ContentStudio Vignette Content Management Server*.

1. In the V/5 Content Management Server 5.5 window, click **Install Software**.
2. Click **e-Business Platform Base Installation**.
3. In the **Vignette V/5 Base Platform 5.5 Setup** box, click **Next**.
4. In the **License Agreement** dialog box, click **Yes**.
5. In the **View Release Notes** dialog box, answer as you prefer.
6. In the **Select Components** dialog box, select all and click **Next**.
7. In the **Choose Destination Location** dialog box, take the default and click **Next**.
8. In the **Select Program Folder** dialog box, take the defaults and click **Next**.
9. In the **Confirm Destination** dialog box, click **Next**.
10. After files are updated, click **Finish**.
11. Exit.

Apply the Vignette 5.5.1 Patch

On **CMS_Host**:

The Vignette 5.5.1 Patch is required to run ContentStudio. This patch is available on the CD titled *Rational Suite ContentStudio Integrations*. Perform the following steps:

1. Insert the CD and navigate to `\ContentStudio\misc\updates\Vignette`.

2. Double-click **ss55-551.exe**.
3. From the **Install Shield Wizard**, click **Next**.
4. Click **Yes** on the **License Agreement** dialog box.
5. In the **Choose Destination Location** dialog box, take the default and click **Next**.
6. Click **Finish**.

Create and Configure a New CMS

On **CMS_Host**:

The content management server (CMS) is the control center for V/5 Platform software, storing its information in the system database (CMS system in our example). The CMS processes production management information for a site. Only one CMS can be configured per instance of V/5 platform software. Admin and guest user IDs are created during installation. For details, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. Start the Platform Manager. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Manager**.
2. In the **Vignette V/5 e-Business Platform Configuration** box, click **Create a new Content Management Server** and then click **OK**.
3. In the **V/5 e-Business Platform: New CDS** wizard:
 - a. In the **Contact and License Information** pane, complete all of the fields. You must have previously requested the **CD Key** and **License Key** through email using the instructions in Chapter 1.
 - b. In the **Local Host Information** pane, take the default value in the **Name for this Host** field, which is your host name.
 - c. In the **Assign Instance Name** pane, provide a name for the platform instance. We recommend **CMSsystem**.
 - d. In the **Server Host and Ports** pane, take the default values:

Host	<i>hostname.domain-name</i>
Dispatch Service (bob) Port	30210
Request Service (vhs) Port	30211

- e. In the **Database Type** pane, select the vendor and version you are using.
- f. In the **Database Server and Login** pane, take the defaults for these fields, which were specified in a previous step:

Data Source Name	vignetteODBC
Data User Login	vignette_sql
Database User Password	rational
- g. In the **Secure Database Setup** pane, click **Use the Login configured with the system database**.
- h. In the **Auto Start CMS** pane, click **Start the CMS if the system is rebooted**.
- i. Click **Finish**.

Create and Configure a Development CDS

On **CMS_Host**:

The CDS works closely with a Web server in delivering site content. Note that all CDSs within a single V/5 platform software configuration share the same CMS and system database. For details, see *Vignette V/5 Platform Installation and Configuration Guide*.

If you are still in the V/5 e-Business Platform Manager, begin at Step #4.

1. To start the Platform Manager, click **Start>Programs>Vignette e-Business Platform 5.5>Platform Manager**.
2. Click **Configure an Existing Content Management Server**.
3. In the **V/5 e-Business Platform Login** box, use the recommended values:

Location	<i>hostname.domain-name:port</i> (the default port is 30210)
Userid	admin
Password	admin
4. Select **Content Management Server (CMS)**, right-click and then click **New Content Delivery Server (CDS)**.
5. In the **V/5 e-Business Platform: New CMS** wizard:
 - a. In the **CDS type** pane, click **Development**, then click **Next**.

- b. In the **Assign Name** pane, provide a name. We recommend **devCDS**. Click **Next**.
- c. In the **Docroot Manager Host and Ports** pane, take the default values, then click **Next**.

Host	<i>hostname.domain-name</i>
Placement Agent	3737
Cache Manager (cmd) Port	3738
- d. In the **Docroot Information** pane, specify the path from a previous step: *drive:\Inetpub\wwwroot\devCDS*, then click **Next**.
- e. In the **Cached Pages** pane, click **Web Server**, then click **Next**.
- f. In the **Auto Start CDS** pane, click **Start the CDS if the system is rebooted**, then click **Next**.
- g. In the **Initial Docroot Manager Startup** pane, click **Start the Docroot Manager now**, then click **Next**.
- h. Click **Finish**.

Create and Configure a Development APE

Use the application engine (APE) to associate a Web server with the CDS, so that the CDS can begin serving pages. For details, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. In V/5 e-Business Platform Manager, select the development CDS name, right-click and then click **Application Engine>New Application Engine**.
2. In the **V/5 e-Business Platform: New Application Engine** wizard:
 - a. In the **Application Engine Host and Ports** pane, take the default values:

Host Name	<i>hostname.domain-name</i>
Page Generator (ctlv) Port	4738
Template Manager (tmd) Port	4739
 - b. In the **Initial Application Engine Startup** pane, click **Start the Application Engine now**.
 - c. Click **Finish**.
3. Select the APE that you created. Right-click and then click **Enable COM extensions**. Click **Finish**.

Associate the Web Server

You must associate one or more Web servers for each CDS. When you associate multiple Web servers with a CDS, make sure that all Web servers use the same doc root. For more information, see the *Vignette V/5 Platform Installation and Configuration Guide*.

1. In V/5 e-Business Platform Manager, select the named development CDS, right-click and click **Associate Web Server**.
2. In the **V/5 e-Business Platform: Associate Web Server** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Assign Name** pane, provide a name. We recommend **devCDS**.
 - c. In the **Web Server Type** pane, click your server type (for example, **Internet Information Server 5.0**.)
 - d. In the **Web Server Instance** pane, click **Development CDS**.
 - e. In the **Secure Web Server Setup** pane, click **No**.
 - f. In the **Directory Information** pane, take the defaults for these fields:

Docroot	<i>drive:</i> /Inetpub/wwwroot/devCDS
Metafiles Path	<i>drive:</i> /Vignette/Inst-CMSsystem/working/cds-dev CDS/metafiles/
Dynamic Pages Path	Leave blank
 - g. In the **Web Server Startup** pane, click **Restart the Web Server now**.
 - h. Click **Finish**.

Select ASP Generator for the Development APE

If the IIS instance that will act as an ASP Page Generator uses SSL to communicate with the V/5 platform Web server module (if CDS-CMS communication needs to be secure), you need to configure certain V/5 variables before you create the ASP Page Generator. For more information, see *Vignette V/5 Platform Installation and Configuration Guide*.

1. In Platform Manager, select the development APE name; right-click and then click **Add ASP Page Generator**.
2. In the **V/5 e-Business Platform: Add an ASP Page Generator** wizard:

- a. In the **Host Confirmation** pane, click **Next**.
- b. In the **Web Server Instance** pane, click **Development ASP** and click **Next**.
- c. In the **Web Server Protocol Setup** pane, click **No**, then click **Next**.
- d. In the **Web Server Host and Port** pane, take the defaults:

Host Name	<i>hostname.domain-name</i>
Port	81

Then click **Next**.
- e. In the **Directory Information** pane, take the default:

Template Cache	<i>drive:\inetpub\wwwroot\devASP</i>
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Then click **Next**.
- f. In the **ASP Page Generator Startup** pane, click **Restart the Web Server**.
- g. Click **Finish**.
- h. Exit the Platform Manager.

Install V/5 Platform Tools

On **CMS_Host**:

Install V/5 Tools using the instructions in *Install V/5 Platform Tools* in Chapter 4 on page 92.

Install V/5 Development Center

On **CMS_Host**:

Install V/5 Development Center using the instructions in *Install V/5 Development Center* in Chapter 4 on page 92.

Verify that the Development CDS and APE Are Running

On **CMS_Host**:

To ensure that files will launch from a Web browser, and that the file object exists in the development and live CDS, perform the following steps:

1. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
2. In the **Business Platform Login** dialog box, take the defaults:

Location	CMS_Host.domain-name
User ID	admin
Password	admin
3. Click **Window>Production Center>Project Manager**.
4. In the **Project Manager** dialog box, click **Base Project**.
5. Then click **File>New Project**.
6. Enter a new project name (we recommend **test**).
7. Select the new project name. Click **File>Submit File**.
8. Select a file that you want to display in your browser, for example any **.gif**, or **.html** file. When prompted, enter the name of the directory (we recommend **/test**). Then click **OK**. The selected file appears with a status of **Ready to Launch**.
9. Right-click the file name and click **Preview** to display the file.

If you are prompted to select a default Web browser, click **OK**. In the **Preferences** dialog box, click **Add** and enter the browser name [**IE**], and browse for the browser location for [...\iexplore.exe]. Click **OK**.
10. Verify that the new file object is in the development CDS. In Windows Explorer, look for this file: *drive:\Inetpub\wwwroot\devCDS\test\your-file*.

Configure IIS to Create Live CDS

On **CS_Host**, you must configure IIS as follows:

- Set up virtual services for the live CDS, live APE, and live ASP Page Generator
- Configure Web server properties
- Set permissions for virtual services directories

Set Up IIS Virtual Web Services for Vignette Live CDS and Live APE Components

On **CS_Host**, you need to set up two Web virtual services for the live CDS and the live ASP. You also need to assign different port numbers for these services. Make sure that the port numbers you select are not currently in use by another Web service.

To Configure Virtual Services with IIS

1. In Windows Explorer, navigate to *drive:\Inetpub*. Create new folders for each of the Web virtual services. The default server uses *drive:\Inetpub\wwwroot*. We recommend these directory names:
 - > *drive:\Inetpub\wwwroot\livCDS*
 - > *drive:\Inetpub\wwwroot\livASP*
2. Start Internet Service Manager.
3. Open the **Internet Information Server** folder and under **Internet Information Server** locate the host on which you are configuring IIS.
4. Right-click the host name and click **New>Web Site**. In the WebSite Creation Wizard for the Web Site Description, create Web sites using the information provided below.

Web site description	Port	Path
Live CDS	8080	<i>drive:\Inetpub\wwwroot\livCDS</i>
Live ASP	8081	<i>drive:\Inetpub\wwwroot\livASP</i>

- a. Enter the Web site description. Click **Next**.
- b. Accept the default, **All Unassigned** in the **Enter the IP address to use for this Web site** box.
- c. Enter the port number. Click **Next**.
- d. Enter the path and allow anonymous access to the Web site. Click **Next**.

- e. For IIS with Windows 2000, select **Allow Read**, **Run scripts**, and **Execute** access, and for IIS with Windows NT 4.0, select **Read Access**, **Script Access**, and **Execute Access**; then click **Finish**.
5. After creating the Web sites, you must enable buffering. Use the Internet Services Manager to enable buffering for each of the new Web sites.
 - a. Select each one of the new folders that you have created for the Web sites and right-click to open the Properties window.
 - b. Click the **Home Directory** tab; then click **Configuration** and click the **App Options** tab in the **Application Configuration** dialog box. Click **Enable buffering**.
 - c. Click **OK** and **OK** again.

Configure Web Server Properties

Configure Web server properties for the IIS Virtual Servers live CDS defined in *Set Up IIS Virtual Web Services for Vignette Live CDS and Live APE Components*.

NOTE: IIS 5 differs from IIS 4 with respect to selections. IIS 5 uses pull-down lists and IIS 4 employs option buttons. Naming conventions for tabs and fields remain identical or are very similar in both versions.

1. Click **Live CDS** and right-click to select **Properties**.
2. Determine the Anonymous User Account by clicking the **Directory Security** tab. Click **Edit** next to **Anonymous Access and Authentication Control**, and then click the **Edit** next to **Allow Anonymous Access**.

You will see the Anonymous User Account **IUSR_***hostname*. You will need to refer to this name later in this IIS configuration. Click **Cancel** to return to the Properties window.

3. Click the **Home Directory** tab.

In the **Application Setting** box, if using IIS 5.0, enable **Execute Permissions: Scripts and Executables**. If using IIS 4.0, enable **Permissions: Execute (Including Scripts)**.

- a. Create two application mappings: one for **.html** and one for **.htm**. To do this, select **Configuration**.

- b. Click the **Application Mappings** tab. Click **Add**. Enter the following:

Executable	Extension
<i>drive:\Winnt\system32\inetrv\ssinc.dll</i>	.htm
<i>drive:\Winnt\system32\inetrv\ssinc.dll</i>	.html

NOTE: Leave **Script Engine** check box selected. Click **OK**.

4. Click the **Documents** tab. Move **default.htm** to the top of the list. If **default.htm** isn't in the list, add it and then move it to the top of the list.
5. Close the Internet Service Manager and click **Yes** to save console settings.

Set Permissions for Virtual Services Directories

On **CS_Host**:

1. Using Windows Explorer, open the **Properties** window of the Web servers' home directory *drive:\Inetpub\wwwroot\folder-name* for each of the virtual services created for live CDS and live ASP. Follow this procedure for each of the virtual services.
2. Select **Security** and click **Permissions**. In the **Directory Permissions** window, note whether there is an entry for the Web server anonymous user whose name you found through the IIS Management (for example: **IUSR_hostname**).
3. If the Web server anonymous user is listed go to Step #4, otherwise continue with this step to add the user:
 - a. Click **Add** to open the **Add Users and Groups** dialog box.
 - b. Select the name of the Web server host (for example: **web02**) from **List Names From:** and click **Show Users** to display all configured users on this Web server.
 - c. Select the Internet Server anonymous access user whose name you found through the IIS Management Console (for example: **IUSR_web02**).
 - d. Click **Add**. Then click **OK** to return to **Directory Permissions**.
4. In Windows 2000, select the anonymous user and from the **Permissions** list box select **Modify**. In Windows NT 4.0, select the anonymous user and set the **Type of Access** to **Change** (to provide read, write, delete, and execute permissions).

5. On Windows NT, select both options: **Replace Permissions on Subdirectories** and **Replace Permissions on Existing Files**. Click **OK**. (Windows 2000 will set these options by default.)
6. When prompted if you want to replace security information on all existing subdirectories, click **Yes**.
7. Return to Windows Explorer and repeat the steps above for the remaining virtual servers.
8. Click **My Computer>Control Panel>Services** and click **World Wide Web Publishing Service**. Stop and then start it.
9. Close **Services**.

Install V/5 Base Platform

On **CS_Host**:

You must install the Base Platform software on each system on which you will create a CMS and/or a CDS. If you are configuring a Web server on a host that is remote from its CDS, you must install this software on that host.

To perform this part of the installation, insert the CD titled *Rational Suite ContentStudio Vignette Content Management Server*.

1. In the V/5 Content Management Server 5.5 window, click **Install Software**.
2. Click **e-Business Platform Base Installation**.
3. In the **Vignette V/5 Base Platform 5.5 Setup** box, click **Next**.
4. In the **License Agreement** dialog box, click **Yes**.
5. In the **View Release Notes** dialog box, answer as you prefer.
6. In the **Select Components** dialog box, select all and click **Next**.
7. In the **Choose Destination Location** dialog box, take the default and click **Next**.
8. In the **Select Program Folder** dialog box, take the defaults and click **Next**.
9. In the **Confirm Destination** dialog box, click **Next**.
10. After files are updated, click **Finish**.

11. Exit.

Apply the Vignette 5.5.1 Patch

On **CS_Host**:

The Vignette 5.5.1 Patch is required to run ContentStudio. This patch is available on the CD titled *Rational Suite ContentStudio Integrations*. Perform the following steps:

1. Insert the CD and navigate to `\ContentStudio\misc\updates\Vignette`.
2. Double-click `ss55-551.exe`.
3. From the **Install Shield Wizard**, click **Next**.
4. Click **Yes** on the **License Agreement** dialog box.
5. In the **Choose Destination Location** dialog box, take the default and click **Next**.
6. Click **Finish**.

Configure ODBC Connection for the CMS Database

On **CS_Host**, you must configure ODBC Connection for the CMS Database on **DB_Host**.

The database environments that V/5 CMS supports are Microsoft SQL Server 7.0 and Oracle 8.1.16i.

Using the CMS database that you created using instructions in Chapter 1, *Before You Install*:

For MS SQL Server 7.0

1. Open the **Data Sources (ODBC)** Administrator in the Control Panel.
2. Click the **System DSN** tab. Perform the following steps to create a system DSN that will allow for connections to the database, whatever its location.
3. Click **Add** and select **SQL Server**, then click **Finish**.

- a. In the **Create a New Data Source to SQL Server** dialog box, supply a name, description, and server. We suggest the following:

Name	vignetteODBC
Description	enter a description
Server	DB_Host

Click **Next**.

- b. Select **With SQL Server authentication...**

Login ID	vignette_sql
Password	rational

Select **Connect to SQL server to obtain default settings...**

Click **Next**.

- c. Select **Change the default database to: CMSsystem**. Click **Next**. Click **Finish**.
- d. Click **Test Data Source** to verify.
- e. Click **OK** and **OK** again.

For Oracle 8.1.16i

1. Create a System DSN in the ODBC Data Sources Administrator (in Control Panel) that will allow for connections to the database, whatever its location. Perform the following steps:
2. Click **Add** and select **Oracle ODBC Driver**, then click **Finish**.

- a. In Oracle* ODBC Driver Setup, supply the following:

Data Source Name	vignetteODBC
Description	enter a description
Service Name	DB_Host
User ID	CMSSYSTEM

- b. Click **OK**.

Create and Configure a Live CDS

On the **CS_Host**:

1. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Manager** to open **Vignette V/5 e-Business Platform Configuration** dialog.
2. Click **Create a connection to a Content Management Server on another host**.
3. In the **Connect to Remote CMS** wizard, in the CMS Information pane, enter the requested information. Click **Next**.

CMS	CMS_Host:30210
User	admin
Password	admin

4. In the Host Identification pane, enter the name for the **CS_Host** (accept the default). Click **Finish**.
5. Select Content Management Server (CMS), right-click and then click **New Content Delivery Server (CDS)**.
6. In the **V/5 e-Business Platform: New CDS** wizard:

- a. In the **CDS type** pane, click **Live**, then click **Next**.
- b. In the **Assign Name** pane, provide a name. We recommend **livCDS**. Click **Next**.
- c. In the **Docroot Manager Host and Ports** pane, take the defaults:

Host	<i>hostname.domain-name</i>
Placement Agent (pad) Port	3737
Cache Manager (cmd) Port	3738

Click **Next**.

- d. In the **Docroot Information** pane:

Docroot	<i>drive:\Inetpub\wwwroot\livCDS</i>
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Click **Next**.
- e. In the **Cached Pages** pane, click **Web Server**, then click **Next**.
- f. In the **Auto Start CDS** pane, click **Start the CDS if the system is rebooted**, then click **Next**.
- g. In the **Initial Docroot Manager Startup** pane, click **Start the Docroot Manager now**.
- h. Click **Finish**.

Configure a Live APE

1. In Platform Manager, select the named live CDS, right-click and click **Application Engine>New Application Engine**.
2. In the **V/5 e-Business Platform: New Application Engine** wizard:
 - a. In the **Docroot Manager Host and Ports** pane, take the defaults:

Host Name	<i>hostname.domain-name</i>
Page Generator (ctlv) Port	4738
Template Manager (tmd) Port	4739

Click **Next**.
 - b. In the **Initial Application Engine Startup** pane, click **Start the Application Engine now**.
 - c. Click **Finish**.
3. Select the APE that you created. Right-click and click **Enable COM extensions**. Click **Finish**.

Associate the Web Server

1. In Platform Manager, select the live CDS name, right-click and click **Associate Web Server**.
2. In the **V/5 e-Business Platform: Associate Web Server** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Assign Name** pane, provide a name. We recommend **livCDS**.
 - c. In the **Web Server Type** pane, click your server type (for example, **Internet Information Server 5.0**.)
 - d. In the **Web Server Instance** pane, click **Live CDS**.
 - e. In the **Secure Web Server Setup** pane, click **No**.
 - f. In the **Directory Information** pane, take the defaults:

Docroot	<i>drive : /Inetpub/wwwroot/livCDS</i>
Metafiles Path	<i>drive : /Vignette/Inst-CMSsystem/working/cds-livCDS /metafiles/</i>
Dynamic Pages Path	Leave blank
 - g. In the **Web Server Startup** pane, click **Restart the Web Server**.

- h. Click **Finish**.

Select ASP Generator for Live APE

1. In **V/5 e-Business Platform Manager**, select the live APE (**ape-1** under **LivCDS**), right-click and click **Add ASP Page Generator**.
2. In the **V/5 e-Business Platform: Add an ASP Page Generator** wizard:
 - a. In the **Host Confirmation** pane, click **Next**.
 - b. In the **Web Server Instance** pane, click **Live ASP**, then click **Next**.
 - c. In the **Web Server Protocol Setup** pane, click **No**, then click **Next**.
 - d. In the **Web Server Host and Port** pane, take the defaults, then click **Next**.

Host Name	<i>hostname.domain-name</i>
Port	8081
 - e. In the **Directory Information** pane, take the default, then click **Next**.

Template Cache	<i>drive:\inetpub\wwwroot\livASP</i>
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 - f. In the **ASP Page Generator Startup** pane, click **Restart the web server**.
 - g. Click **Finish**.
3. Close **Platform Manager**.

Configure Vignette Global.asa sample Template

On **CMS_Host**, launch the **Global.asa sample** template.

The Vignette **Global.asa sample** template must be launched for Rational Suite ContentStudio page generation to work. The **Global.asa sample** is a Vignette system template with global Vignette variable definitions. Vignette installs the **Global.asa sample** template in the **Samples** subproject.

To launch the **Global.asa sample** template:

1. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.

- a. In the **Business Platform Login** dialog box, take the defaults:

Location	<i>hostname:30210.domain-name</i>
User ID	admin
Password	admin

- b. Click **Window>Production Center>Project Manager**.
2. Select the **Global.asa** sample template located in the **Base Project >Applications>Samples** project folder, right-click, and click **Launch**.
3. In the **Confirm Launch** dialog box, click **Immediately**. The file now appears with a status of **Live**.

Create and Assign CS_ROLE for ContentStudio Users

On **CMS_Host**:

1. From V/5 Tools (**Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**), perform the following steps:
2. Under **Admin Center**, click **User Manager**.
3. From the **User Manager** window, click **File>New Role** to create a new role for **CS_ROLE**.

NOTE: For additional information, see the online help for V/5 Admin.
4. On the **Users** tab, click **admin**, then right click **Details**. On the **Roles** tab, click **CS_ROLE** to assign the new role to the **admin** user.
5. Create any new users who will need to log in to ContentStudio Console and add assign the **CS_ROLE** to those users as well.

Verify Live CDS and APE are Operational

On **CMS_Host**, verify that the development and live CDS/APE are operational.

To ensure that files will launch from a Web browser, and that the file object exists in the development and live CDS, perform the following steps:

1. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
2. In the **Business Platform Login** dialog box, take the defaults:

Location	CMS_Host . <i>domain-name</i>
User ID	admin
Password	admin
3. Click **Window>Production Center>Project Manager**.
4. In the **Project Manager** dialog box, click **Base Project**.
 - c. Navigate into the subproject folder created earlier (**test**) to locate your file.
5. After previewing, right-click the file name and click **Launch**.
6. In the **Confirm Launch** dialog box, click **Immediately**. The file now appears with a status of *Live*.
7. Verify that the new file object is in the live CDS. In Windows Explorer on **CS_Host**, look for the file *drive:\Inetpub\wwwroot\livCDS\test\your-file*.

If the file object is in the live CDS, the Vignette services are operational.

3.3 Install and Configure ClearCase Host

On **CCASE_Host**:

NOTE: ClearCase requires IE 4.0 (with SP1) or later be present before you install. You will need to install IE from the Windows Option Pack CD if it isn't already on this machine.

The procedure in this section installs Rational ClearCase LT. For more information, see the chapter in the manual *Installing Rational Suite*. If you want to install full ClearCase, follow the instructions in *ClearCase Product Family Installation Notes*.

Install ClearCase LT Server

To install ClearCase LT Server, insert the CD titled *Rational Solutions for Windows*.

1. In the **Rational Software Setup** dialog box, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational ClearCase LT Server**. Click **Next**.
3. In the **License Agreement** dialog box, click **Yes, I accept this agreement**, then click **Next**.
4. In the **Setup Confirmation** dialog box, click **Typical**, then click **Next**.
5. In the **Update Shared Components** dialog box, click **Next**.
6. In the **Confirmation** dialog box, click **Next**.

Please wait while ClearCase LT Server files are copied.

7. In the **Restart Windows** dialog box, select the **Restart** check box and click **Finish**.
8. After the machine reboots, login using the same credentials in order to complete the ClearCase installation.

When the ClearCase Setup Wizard starts, you will not be able to proceed if you are logged in as Local Administrator. You must logoff and login as a member of the ClearCase primary group with administrative privileges to run this wizard. Restart the wizard from **Start>Programs>Rational ClearCase LT Server>Rational ClearCase LT Server Setup Wizard**.

Configure ClearCase LT Server

1. Click **Next** in the **Welcome** dialog box.
2. In the **Create the ClearCase LT Storage Directory** pane, take the default:
drive:\ClearCaseStorage
3. Complete the field in the **Create ClearCase LT Source VOB** pane:

Source VOB Name	content
Import Source files	(Clear the check box.)
4. In the **Create Initial Clearcase LT Project** pane, take the default in the **Starting Project Title** field.
5. In the **Will UNIX ClearCase LT Clients Use this Server** pane, click **No**.
6. In the **ClearCase LT Summary** pane, click **Finish**.

7. Close the wizard.

NOTE: ClearCase LT will not be properly licensed until ContentStudio licenses are configured in *License Rational Suite ContentStudio Software* on page 79.

Install ContentStudio Client

On `CCASE_Host`:

You must be logged in as Local Administrator to install the ContentStudio client. Insert the CD titled *Rational Suite ContentStudio Integrations*.

1. When the Rational Software Setup Wizard starts, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational Product**. Click **Next**.
3. In the **License Option** dialog box, click **Install Product Before Licensing**. Click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite ContentStudio Client**. Click **Next**.
5. Choose to accept the Rational Software license agreement in the **License Agreement** dialog box. If you choose not to accept the license agreement, the **Setup** program terminates. Click **Next**.
6. In the **Setup Configuration** dialog box, click **Typical**. Click **Next**.
7. In the **Upgrade Compatibility** dialog box, click **Next**.

(See the *Rational Suite ContentStudio Release Notes* for information about any incompatibility messages you receive.)
8. In the **Restart Windows** dialog box, click **Restart** and click **Finish** to restart your computer to run Rational Suite ContentStudio Client.

License ClearCase LT Server

On `CCASE_Host`:

You must configure the software to use either node locked or floating licenses. Follow the appropriate instructions below:

Configure Node Locked Licenses

1. Click **Start>Programs>Rational Suite ContentStudio Server>Rational License KeyAdministrator**.
2. Click **License>Go to Rational AccountLink**.
3. On the Account Link page, click **Get License Keys** and follow the steps.
4. Account Link will send your license keys by e-mail. Open the message and save the attachment. We recommend storing it in *drive:\temp\license_for_hostname*.
5. Click **License>Import License Key(s)** and select your license file.
6. In the **Confirm Import** pane, click **Import**, then click **OK**.

Configure Floating Licenses

1. Click **Start>Programs>Rational Suite ContentStudio Server>Rational License Key Administrator**.
2. Click **Point to FLEXlm license server to get my licenses**. Click **Next**.
3. Click **Settings>Service Configuration**. Click **Use License Server** and enter the name of the FLEXlm server host that you set up in Chapter 1. Click **OK**.

3.4 Install and Configure ContentStudio Host

Install ContentStudio Server

On **CS_Host**:

Insert the CD titled *Rational Suite ContentStudio Integrations*. In the Rational Software Setup Wizard, perform these steps:

1. In the **Rational Software Setup** dialog box, click **Next**.

2. In the **Select Installation Option** dialog box, click **Install Rational Product**. Click **Next**.
3. In the **Select and Install Licensing Option** dialog box, click **Install Product Before Licensing**. Click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite ContentStudio Server**. Click **Next**.
5. In the **License Agreement** dialog box, click **Yes**. Click **Next**.
6. In the **Setup Configuration** dialog box, click **Typical**, then click **Next**.

(See the *Rational Suite ContentStudio Release Notes* for information about any incompatibility messages you receive.)

7. In the **Confirmation** dialog box, click **Next**.

Please wait while Rational Suite installs ContentStudio Server.

8. In the **Restart Windows** dialog box, click **Restart**. Click **Finish** to restart your computer.

After the machine reboots, you must login using the same credentials in order for the installation to complete.

After setup completes, the Rational Suite ContentStudio Administration Utility will start automatically.

Configure ContentStudio Server

On **CS_Host**:

In the Administration Utility, perform the following steps:

1. Complete these fields on the **ClearCase** tab:

VOB Name	content
View Name	cs_pagegeneration (default)
View Prefix	cs_deployment (default)
Label Prefix	CS_DEPLOYED (default)
Views Directory	drive:\ClearCaseStorage\Views (does not yet exist)
Admin VOB Name	projects

Use Shadow Directories (See the online help for more information.)
check box

2. Complete the fields on the **ContentStudio** tab:

DB URL	jdbc:odbc:vignetteODBC
DB UserID	For SQL: vignette_sql ; For Oracle: CMSSYSTEM
DB Password	rational
Tomcat Fields	leave blank
Logging Dir	<i>drive</i> :\Program Files\Rational\ContentStudio\logs

3. Complete these fields on the **V/5** tab:

CMS Host	CMS_Host
CMS Port #	30210
CMS UserID	admin
CMS Password	admin
DB URL	jdbc:odbc:vignetteODBC
DB Userid	For SQL: vignette_sql ; for Oracle: CMSSYSTEM
DB Password	rational
CDS Host	CS_Host
CDS Port #	8080
CDS DocRoot	<i>drive</i> :\Inetpub\wwwroot\livCDS
CS Role	CS_ROLE

4. Click **OK** to close the ContentStudio Administration Utility.

Create the ClearCase Views Directory (*drive*:\ClearCaseStorage\Views) you specified on the ClearCase tab in Step #1.

Install Rational Suite Team Unifying Platform

On **CS_Host**:

The Team Unifying Platform edition of Rational Suite is designed for teams that need to share artifacts, but do not require the productivity tools available in other editions of Rational Suite. In particular, Team Unifying Platform will install ClearCase LT and ClearQuest.

To install Rational Suite Team Unifying Platform, insert the CD titled *Rational Solutions for Windows*. The Rational Software Setup Wizard starts.

1. In the **Rational Software Setup** dialog box, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational Product** and click **Next**.
3. In the **Select and Install Licensing Option** dialog box, click **Install Product Before Licensing** and click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite Team Unifying Platform**.
5. For the ClearCase LT host, enter the name of **CCASE_Host**, and click **Next**.

In the **License Agreement** dialog box, click **Yes** and click **Next**.

6. In the **Setup Configuration** dialog box, click **Typical** and click **Next**.
7. In the **Update Shared Components** dialog box, click **Next**.
8. In the **Software Use** dialog box, click **Administrator** and click **Next**.
9. In the **Confirmation** dialog box, click **Next**.

Please wait while Rational Suite installs Team Unifying Platform.

10. In the **Restart Windows** dialog box, click **Restart**. Click **Finish** to restart your computer.

After the machine reboots, you must login using the same credentials in order for the installation to complete.

License Rational Suite ContentStudio Software

On **CS_Host**:

You must configure the software to use either node locked or floating licenses. Follow the appropriate instructions below:

Configure Node Locked Licenses

1. Click **Start>Programs>Rational Suite ContentStudio Server>Rational License KeyAdministrator**.
2. Click **License>Go to Rational AccountLink**.
3. On the Account Link page, click **Get License Keys** and follow the steps.

Password

rational

8. Click **Add the SQL Service(s) to an existing SQL Server Group** and click **Next**.
9. Click **Finish**.
10. Select the CMS system database created earlier (**CMSSystem**) from the **DB** drop-down box.
11. Click **File>Open** navigate to the script file: *drive:\Program Files\Rational\ContentStudio\db_scripts\RSCSinitdb.mss.sql*, then click **Open**.
12. Click **Query>Execute**.

You will see “Query Batch completed” in the bottom of the window.

13. Quit Query Analyzer and then Enterprise Manager.

Configuring Oracle

1. Start SQL*Plus Worksheet, connecting as the ORACLE schema user (default CMSSYSTEM) that has been created in Chapter 1, *Before You Install*.
2. Click **Worksheet>Run Local Script**. This command runs the script file in *drive:\Program Files\Rational\ContentStudio\db_scripts\RSCSinitdb.ora.sql*.

Configure JRE and Tomcat

On **CS_Host**:

JRE 1.3 and Tomcat 3.2.1 are required to enable the servers for Rational Suite ContentStudio Page Generator and Rational NetDeploy. The following are the default installation directories:

- For JRE, *drive:\Program Files\Rational\common\java\jre*
- For Tomcat, *drive:\Program Files\Rational\ContentStudio\tomcat*

Modify Tomcat Port Information

When installed by Rational Suite ContentStudio, Tomcat uses the TCP/IP port 8088 for its communication with the Web server. This setting is in the file *drive:\Program Files\Rational\ContentStudio\tomcat\conf\server.xml*. If another TCP/IP service uses this port, you must change the setting.

Establish Tomcat as a Service

The Tomcat service should run as a domain user account with full ClearCase privileges. You can change the UID the Tomcat service runs as by performing the following steps:

1. Open a command prompt window.
2. Change to the directory *drive:\Program Files\Rational\ContentStudio\tomcat\bin*
3. Install `jk_nt_service`. To do so, enter a command of this form:

```
jk_nt_service -i name-of-service path-to-wrapper-properties
```

Given the defaults used in this section, the command would be as follows:

```
jk_nt_service -i Tomcat "drive:\Program Files\Rational\ContentStudio\tomcat\conf\wrapper.properties"
```

4. Start the services applet:

On Windows 2000, click **Start>Programs>Administrative Tools>Services**.

On Windows NT 4.0, double-click the services applet in Control Panel.

5. Locate the Tomcat service in the list of services, and double-click the entry.
6. Set the **Startup Type** to **Automatic**, then

on Windows 2000, click the **Log on** tab and then click **This Account**.

on Windows NT 4.0, in the section **Log On As**, click **This Account**.

7. Enter the appropriate User ID and Password information either directly into the fields or by browsing. UserID must be entered in the form *domain-name\user-name*. To browse on Windows 2000, click **Browse**; on Windows NT 4.0, click the ... button.

NOTE: The user identity for the Tomcat service must be a member of the ClearCase primary group.

8. Start the service by clicking the **Start** button.
9. Check the application log in the Windows Event Viewer to verify that the Tomcat service has started successfully.

For more information on setting up Tomcat as a service, see the document **NT-Service-howto.html**, which is located in *drive:\Program Files\Rational\ContentStudio\tomcat\doc*.

3.5 Configure ClearQuest

Configuring ClearQuest involves creating a schema repository, adding the ContentStudio package to the schema, creating a user database, and installing the V/5 package templates.

Create a Schema Repository

On **CS_Host** (using the empty ClearQuest master database created on **DB_Host**):

You must have installed ClearQuest and created empty vendor databases (as instructed in Chapter 1, *Before You Install*), before you create the ClearQuest Schema Repository. The Schema Repository is the master database in which ClearQuest stores schemas.

You will need the manual *Installing Rational ClearQuest*, which is available in print as part of the media kit. In Chapter 3, *Installing ClearQuest for an administrator*, the section *Creating ClearQuest Databases* explains how to create a schema repository using the ClearQuest Maintenance Tool.

Create the schema repository now using the empty database you created.

Add the ContentStudio Package to a ClearQuest Schema

On **CS_Host**:

You need to use the ContentStudio package to configure content change requests. For more information, see *Content Change Requests in ClearQuest* in the manual *Introducing Rational Suite ContentStudio*.

1. Start the ClearQuest Designer and log in. The user name is **admin**; leave the password field blank.
2. In the Open Schema wizard:

- a. In step 1 of 2, click **Check out a schema to edit or continue editing previously saved work**.
Click on the **Schema** [Enterprise]. Click **Next**.
 - b. In step 2 of 2, type a comment. Click **Finish**.
3. In the ClearQuest Designer, click **Package>Package Wizard**.
 - a. In the Package Wizard install/select package screen, click **More Packages**.
 - b. In **Install Packages** dialog box, click **ContentStudio**. Click **OK**.
 - c. In the Package Wizard install/select package screen, click **ContentStudio**.
 - d. Click **Finish**.
4. In the ClearQuest Designer, click **Edit>Record Type Family Members**.
 - a. In the **Add/Remove Record Type Family Member** pane:
 - > Click Record Type Families: **All_CS_Requests**
 - > In Available Record Types, click **Defect** and **Enhancement Request**.
 - b. Click **Add** and click **Close**.
5. Click **File>Check In**, type a comment, and click **OK**.

Create a User Database

On **CS_Host**:

You must have installed ClearQuest and created empty vendor databases as instructed in Chapter 1, *Before You Install*), before you create the ClearQuest User Database. The User Database stores data entered by the ClearQuest client and Web users. You can create as many user databases as you need.

You will need the manual *Installing Rational ClearQuest*, which is available in print as part of the media kit. In Chapter 3, *Installing ClearQuest for an administrator*, the section *Creating ClearQuest Databases*, explains how to create a user database using the ClearQuest Designer.

Create a User database now using the empty database created in Chapter 1 and the information below:

Logical database name	RSCS
Schema	Enterprise schema version 2

Install V5_Package Templates

On **CS_Host**:

Installing the V/5 Package installs the Vignette templates and establishes **CSVgnCQSvc** as a service.

1. Modify your system path variable to include Vignette. Add the following directory:
drive:\vignette\5.5\bin\winnt.
2. **IMPORTANT:** Restart your machine so that updated path information will be used for the remaining steps.
3. Open a command prompt window.
4. Change to this directory *drive:\Program Files\Rational\ContentStudio\cq_integration.*
5. To install the V/5 integration with ClearQuest, enter a command of this form:

```
install_v5_package CMS-hostname:port CMS-username:CMS-password
```

Given the defaults used in this section, the command would be as follows:

```
install_v5_package CMS_Host:30210 admin:admin
```

6. Establish **CSVgnCQSvc** as a service.
 - a. Change to this directory:
drive:\Program Files\Rational\ContentStudio\bin
 - b. Execute a command of this form using any domain user:
CSVgnCQSvc -i domain-name\domain-userid domain-password
7. Verify the ContentStudio Administration Utility parameters for ClearQuest Integration. Start the ContentStudio Administration Utility.

- a. Click **Start>Programs>Rational Suite ContentStudio Server>Rational Suite ContentStudio Administration Utility** and click the **ClearQuest** tab and complete the boxes.
- b. Complete these fields on the **ClearQuest** tab.

CQ UserID	admin
CQ Password	Leave blank.
CQ DB Name	RSCS (name of ClearQuest User database)

Assigning Permission to Run as Server

The user assigned in Step #6 requires “run as server” permission. If the service does not start, you can verify user permissions as follows.

1. In Windows 2000, click **Start>Programs>Administrative Tools>Services** and in Windows NT, open the Control Panel and click **Services**. Locate the service **ContentStudio Vgn to CQ synchronizer**.
2. Double-click the **ContentStudio Vgn to CQ synchronizer** service and click the **Logon** tab. Enter password and confirm password for the user. Click **Apply**. The message that appears indicates that the **Logon as Service** right has been set.
3. Start the service.

ClearQuest Administration

On **CS_Host**:

1. Click **Start>Programs>Rational Suite Team Unifying Platform> Rational ClearQuest** to start ClearQuest and log in as **admin**. Leave the password blank.
2. Select the User database that you created (**RSCS**).
3. Click **Actions>New**.
4. In **Choose Record Type...** pane, click **CS_V5_Connection** and click **OK**.
5. In **Submit CS_V5_Connection** pane, complete these fields:

CMS Host Name	CMS_Host
CMS Port Number	30210
User Name	admin

Password	admin
CDS Host Name	CMS_Host (host for the development CDS)
CDS Port Number	80 (port for the development CDS)
Proxy Url	<code>/contentstudio/proxy</code> (default)
Default Project Path	>Base Project>Content Studio

The ClearQuest database is now set up.

3.6 Configure RequisitePro Database

RequisitePro is an optional component. If you plan to use it, you must configure a database.

For more information on configuring a RequisitePro database, see *Installing RequisitePro* which is available on the *Rational Solutions for Windows: Online Documentation* CD.

3.7 Verify That Four-Host Environment is Operational

Check to see that your ContentStudio four-host installation is functioning properly.

Test Log in ContentStudio Console

On **CS_Host**:

1. Click **Start>Programs>Rational Suite ContentStudio Server> Rational Suite ContentStudio Console**
2. Log in to the **CS_Host**:

CS Server	CS_Host
User ID	admin
Password	Admin
3. If log in fails, verify that the Tomcat service is started on **CS_Host**.
4. If Tomcat is stopped, check Windows Event Viewer for Tomcat error messages.

Verify ClearQuest Integration

On CS_Host:

1. On any host where ClearQuest client is installed, click **Start>Programs>Rational Suite Team Unifying Platform> Rational ClearQuest** to start ClearQuest and log in.
2. Click **Actions>New** to open the **Choose Record Type** dialog box. Click **ContentChangeRequest** and click **OK**.
3. In **Submit Content Change Request** dialog box, complete the **Headline**, **Owner**, and the **Description** boxes. For information about each box, right-click to display a shortcut menu and click **Help**.
4. Click **OK** to submit the content change request to the ClearQuest database.
5. Run the **V5 Tasks to Assign** query in the **CS User Queries** folder. This query retrieves all unassigned V/5 Tasks (content change requests) that the current user owns or that have no assigned owner.
6. Select the content change request that you want to assign and click **Actions>Assign**.
7. Complete the information on the **V/5 Task** tab in the **Assign Content Change Request** dialog box.
 - > To select the name of your CMS server, click **CMS**.
 - > To select a V/5 owner, click **Assignee**.
 - > Verify that the information in the **Project Path** box is correct. This is where the corresponding V/5 project task will be stored.
8. Click **Apply**.
9. Start Vignette from any host where V/5 Tools are installed and click Start Programs Vignette. Verify that it was created in Vignette task view.
10. Click **Start>Programs>Vignette e-Business Platform 5.5>Platform Tools**.
 - a. In the **Business Platform Login** dialog box, take the defaults:

Location	<i>hostname</i>
User ID	<i>admin</i>
Password	<i>admin</i>

b. Click **Window>Production Center>Task View**.

- 11.** Verify that there is an entry in the Task View window for the Content Change Request that was submitted and assigned using the ClearQuest client.

Installing Client Software

4

Rational Suite ContentStudio client software can be installed on the server host for the one-host installation and can be installed on any number of desktop clients in the four-host installation model.

4.1 Overview of the Client Installation Procedure

Read Chapter 1, *Before You Install* before you begin to install client software. Here is an over view of the procedure:

1. Install Rational Suite ContentStudio Console.
2. Install Rational Suite Team Unifying Platform.
3. License Rational Suite ContentStudio.
4. Install Vignette clients.

4.2 Install and Configure Rational Suite ContentStudio Console

You need the CD titled *Rational Suite ContentStudio Integrations*.

1. The Rational Software Setup Wizard starts when you insert the CD. Click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational Product**. Click **Next**.

3. In the **License Option** dialog box, click **Install Product Before Licensing**. Click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite ContentStudio Client**. Click **Next**.
5. Choose to accept the Rational Software license agreement in the **License Agreement** dialog box. If you choose not to accept the license agreement, the Setup program terminates. Click **Next**.
6. In the **Setup Configuration** dialog box, click the **Typical** configuration option. Click **Next**.
7. In the **Restart Windows** dialog box, click **Restart** and click **Finish** to restart your computer to run Rational Suite ContentStudio Client.

4.3 Install Rational Suite Team Unifying Platform

To install Rational Suite Team Unifying Platform, insert the CD titled *Rational Solutions for Windows*. The Rational Software Setup Wizard starts.

1. In the **Rational Software Setup** dialog box, click **Next**.
2. In the **Select Installation Option** dialog box, click **Install Rational Product** and click **Next**.
3. In the **Select and Install Licensing Option** dialog box, click **Install Product Before Licensing** and click **Next**.
4. In the **Choose Product to Install** dialog box, click **Rational Suite Team Unifying Platform** and click **Next**.
5. In the **License Agreement** dialog box, click **Yes** and click **Next**.
6. In the **Setup Configuration** dialog box, click **Typical** and click **Next**.
7. In the **Update Shared Components** dialog box, click **Next**.
8. In the **Software Use** dialog box, click **Administrator** and click **Next**.
9. In the **Confirmation** dialog box, click **Next**.

Please wait while Rational Suite installs Team Unifying Platform.

10. In the **Restart Windows** dialog box, click **Restart**. Click **Finish** to restart your computer.

After the machine reboots, you must login using the same credentials in order for the installation to complete.

4.4 License Rational Suite ContentStudio

Rational Suite ContentStudio uses Rational common licensing. There are two types of licenses: floating and node-locked.

If you have purchased floating licenses, ask your administrator for the name of the FLEXlm server.

To start the Rational License Key Administrator, click **Start>Programs>Rational Suite ContentStudio Client>Rational License Key Administrator**. This utility runs when the Rational Suite installation completes. In the License Key Administrator Wizard, click **Point to a FLEXlm license server to get my licenses**, and follow the instructions. When prompted, enter the FLEXlm server name from your administrator.

If you have purchased node-locked licenses, ask your administrator for your account number. You will then need to request a license from Rational Account Link at www.rational.com/accountlink. Follow the instructions. Account Link sends your key by e-mail. After you receive it, save the attachment as a file on your disk.

To start the Rational License Key Administrator, click **Start>Programs>Rational Suite ContentStudio Client>Rational License Administrator**. This utility runs when the Rational Suite installation completes. In the License Key Administrator Wizard, click **Import a Rational License file**, and follow the instructions. When prompted, enter the name of the file from Account Link.

4.5 Install Vignette Clients

The Vignette clients include the V/5 Platform Tools, V/5 Development Center, and online documentation.

Install V/5 Platform Tools

NOTE: To install the V/5 client on Windows 2000 server or Windows NT server, you must have local administrator privileges.

To install Install V/5 Tools, insert the CD titled *Rational Suite ContentStudio: Tools, Vignette Content Management Server*.

1. In the **Vignette V/5 Tools** dialog box, click **Install Software**.
2. Provide information to the **Vignette V/5 Setup** wizard:
 - a. In the **Welcome** dialog box, click **Next**.
 - b. In the **License Agreement** dialog box, click **Yes**.
 - c. In the **Choose Destination Location** dialog box, take the default:
`drive:\Program Files\Vignette\Tools\5.5`
Click **Next**.
 - d. In the **Setup Type** dialog box, click **Next**.
 - e. In the **Select Program Folder** dialog box, click **Next**.
 - f. In the **Setup Complete** dialog box, click **Finish**.

For more information, see the *Vignette V/5 e-Business Platform Tools Installation Guide*.

Install V/5 Development Center

NOTE: To install the V/5 client on Windows 2000 server or Windows NT server, you must have local administrator privileges.

Insert the CD titled *Rational Suite ContentStudio: Tools Development Center*.

1. In the **Vignette V/5 Development Center** dialog box, click **Install Development Center**.
2. In the Vignette V/5 Setup Wizard:
 - a. In the **Welcome** dialog box click **Next**.

- b. In the **License Agreement** dialog box, click **Yes**.
- c. In the **Select Program Folder** dialog box, click **Next**.
- d. In the **Setup Complete** dialog box, click **Finish**.

For more information, see the *Vignette V/5 e-Business Platform Tools Installation Guide*.

Install Online Manual for V/5 CMS

You need the CD titled *Rational Suite ContentStudio: Online Manuals, Content Management Server*.

In the Vignette e-Business Platform 5.5 Online Manuals Setup Wizard:

1. In the **Welcome** dialog box, click **Next**.
2. In the **License Agreement** dialog box, click **Yes**.
3. In the **Choose Destination Location** dialog box, click **Next**.
4. In the **Select Program Folder** dialog box, click **Next**.
5. In the **Start Copying Files** dialog box, click **Next**.
6. In the **Setup Complete** dialog box, click **Finish**.

Install Online Manual for V/5 Development Center

You need the CD titled *Rational Suite ContentStudio: Online Documentation Development Center*.

In the Vignette Development Center Online Manuals Setup Wizard:

1. In the **Welcome** dialog box, click **Next**.
2. In the **License Agreement** dialog box, click **Yes**.
3. In the **Start Copying Files** dialog box, click **Next**.
4. In the **Setup Complete** dialog box, click **Finish**.

Installing and Configuring the Rational NetDeploy Agent

5

The Rational NetDeploy agent must be installed and configured on all target Web servers for ContentStudio deployments.

5.1 Overview of the Rational NetDeploy Agent Installation

Here is an overview of this installation:

1. Create the target Web server.
2. Copy files from the CD titled *Rational Suite ContentStudio Integrations*.
3. Configure JRE.
4. Configure Tomcat.
5. Configure use of shadow directory on all target Web servers.

For secure deployments only, you need to configure the Redirector on target Web servers. See *Configure the Redirector* on page 101.

Create the Target Web Server

1. In Windows Explorer, locate **C:\Inetpub**. Create new directories for the target Web site. The default server uses **C:\Inetpub\wwwroot**. We recommend this path:

C:\Inetpub\wwwroot\targetsite

2. Start Internet Service Manager.
 - > On Windows NT 4, click **Start>Programs>Windows NT 4.0 Option Pack>Microsoft Internet Information Server>Internet Service Manager**.
 - > On Windows 2000, click **Start>Programs>Administrative Tools>Internet Services Manager**.
3. Expand the Internet Information Services folder and locate the Web server on which you are configuring IIS. Create your target Web server. We recommend the following defaults.

Web Site Description	Target Site
Port	{90
Path	C:\Inetpub\wwwroot\targetsite

4. To create a Web site, right-click the host name and click **New>Web Site**.
5. In the WebSite Creation Wizard:
 - a. Enter the Web site description. Click **Next**.
 - b. Accept the default, **All Unassigned**, in the **Enter the IP address to use for this Web site** box.
 - c. Enter a TCP Port number that is unique for the host. Click **Next**.
 - d. Enter the path. Leave the **Allow anonymous access to the Web site** check box selected. Click **Next**.
 - e. Select the **Allow Read, Script**, and **Execute Access** check boxes and click **Finish**.

Copy Files from the Rational Suite ContentStudio Integrations CD

To install and configure the NetDeploy agent, you must copy the JRE and Tomcat files from the CD titled *Rational Suite ContentStudio Integrations* to exactly the same directories on the target Web server.

1. On all target Web servers, create two directories:

drive:\Program Files\Rational\common\java\jre
drive:\Program Files\Rational\ContentStudio\tomcat

2. Insert the CD titled *Rational Suite ContentStudio Integrations*:

- a. Copy the JRE files from *CD-drive:\common\java\jre* to *drive:\Program Files\Rational\common\java\jre* on the target Web server.
- b. Copy the Tomcat files from *CD-drive:\ContentStudio\tomcat* to *drive:\Program Files\Rational\ContentStudio\tomcat* on the target Web server.

3. Delete the file *drive:\Program Files\Rational\ContentStudio\tomcat\webapps\ContentStudio\web-inf\web.xml*.

4. On the target Web server, rename the file *drive:\Program Files\Rational\ContentStudio\tomcat\webapps\ContentStudio\web-inf\webtarget.xml* to *web.xml*.

Configure JRE

To configure the JRE, on each target Web server, you must modify the system path to include *drive:\Program Files\Rational\common\java\jre\bin*.

Configure Tomcat

When you use the Tomcat files from the CD titled *Rational Suite ContentStudio Integrations*, Tomcat is preconfigured to use the TCP/IP port 8088 for its communication with the ContentStudio server. This setting is in the file *drive:\Program Files\Rational\ContentStudio\tomcat\conf\server.xml*. If another TCP/IP service on your target Web server uses this port, you must change the setting.

To configure Tomcat on each target Web server, you must create these environment variables:

TOMCAT_HOME	<i>drive:\Program Files\Rational\ContentStudio\tomcat</i>
JAVA_HOME	<i>drive:\Program Files\Rational\common\java\jre</i>

Establish Tomcat as a Service

The Tomcat service should run as a domain user account with full ClearCase privileges. You can change the UID the Tomcat service runs as by performing the following steps:

1. Open a command prompt window.
2. Change to the directory *drive:\Program Files\Rational\ContentStudio\tomcat\bin*
3. Install **jk_nt_service**. To do so, enter a command of this form:

```
jk_nt_service -i name-of-service path-to-wrapper-properties
```

Given the defaults used in this section, the command would be as follows:

```
jk_nt_service -i Tomcat "drive:\Program Files\Rational\ContentStudio\tomcat\conf\wrapper.properties"
```

Reenter the password information into the password fields.

4. Start the services applet:
On Windows 2000, click **Start>Programs>Administrative Tools>Services**.
On Windows NT 4.0, double-click the services applet in Control Panel.
5. Locate the Tomcat service in the list of services, and double-click the entry.
6. Set the **Startup Type** to **Automatic**, then
on Windows 2000, click the **Log on** tab and then click **This Account**.
on Windows NT 4.0, in the section **Log On As**, click **This Account**.
7. Enter the appropriate User ID and Password information either directly into the fields or by browsing. UserID must be entered in the form *domain-name\user-name*. To browse on Windows 2000, click **Browse**; on Windows NT 4.0, click the ... button.

NOTE: The user identity for the Tomcat service must be a member of the ClearCase primary group.
8. Start the service by clicking the **Start** button.

9. Check the application log in the Windows Event Viewer to verify that the Tomcat service has started successfully.

For more information on setting up Tomcat as a service, see the document **NT-Service-howto.html**, which is located in *drive:\Program Files\Rational\ContentStudio\tomcat\doc*.

The Web server target is now configured to accept nonsecure deployment tasks from the Rational Suite ContentStudio server. You must define this Web server and port (8088) as part of your topology by using ContentStudio Console. If you are planning to deploy to a target Web server outside a firewall, you must enable SSL for secure communications to your target Web and configure your target Web server to use the Redirector. After you configure your target Web server with SSL, follow the procedure in *Configure the Redirector*

Configure Use of a Shadow Directory

In the ContentStudio Administration Utility, click the **ClearCase** tab. In the Netdeploy section, review the options that you have set for **Use Shadow Directories**. Clicking the Use Shadow Directories checkbox enables a shadow directory for all deployment tasks. For more information on using shadow directories for deployments, see *Introducing Rational Suite ContentStudio*.

5.2 Configure the Redirector

To ensure secure deployments, you must configure the Redirector. The procedure in this section pertains to the target Web servers only, not to the Rational Suite ContentStudio server.

1. In the registry, create a series of registry keys with this name:

HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Jakarta Isapi Redirector\1.0

2. Add the following string values pairs for the key 1.0 created in Step #1:

<i>extension_uri</i>	/jakarta/isapi_redirect.dll
<i>log_file</i>	drive:\Program Files\Rational\ContentStudio\tomcat\logs\isapi.log
<i>log_level</i>	For your log level (can be debug, info, error or emerg) debug

<i>worker_file</i>	<i>drive:\Program Files\Rational\ContentStudio\tomcat\conf\workers.properties</i>
<i>worker_mount_file</i>	<i>drive:\Program File\Rational\ContentStudio\tomcat\conf\uriworkermap.properties</i>

3. Start the Internet Service Manager and add a new virtual directory to service, JSP and Servlet requests for the IIS Web site that you have already created on your target Web server:
 - a. Right-click the target Web site and click **New>Virtual Directory** to access the Virtual Directory Creation Wizard.
 - b. Enter the **Alias** name for the virtual directory must be **jakarta**. Click **Next**.
 - c. The directory path must be the directory in which you placed **isapi_redirect.dll**. (In our example, it is in *drive:\Rational\ContentStudio\tomcat\bin*.) Click **Next**.
 - d. Assign **Read** and **Execute** access. Click **Next**.
4. Use the Internet Service Manager to define an ISAPI filter:
 - a. Right-click the target Web site and click **Properties**.
 - b. Click the **ISAPI Filters** tab and click **Add**.
 - c. In the **Filter Name** box, enter **jakarta**. In the **Executable** box, enter *drive:\Program Files\Rational\ContentStudio\tomcat\bin\isapi_redirect.dll*. Then click **OK**.
5. Use the Internet Service Manager to restart IIS.
 - a. Click the target Web site and click **Stop**. Then click the target Web site and click **Start**.
 - a. Right-click the target Web site; then click **Properties**.
 - b. Click the **ISAPI Filters** tab.
 - c. Verify that the **jakarta** filter is marked with a green arrow.