# CASE NOTEBOOK REMOTE ACCESS SERVER (RAS)

# USER GUIDE

Version 5.7 January 2023



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# 1 Introduction

This guide provides information about installing the Case Notebook Remote Access Server (RAS). Case Notebook is an electronic organizer and deposition tool for saving and working with important documents, research, and transcripts. Case Notebook is installed on each user's computer. There are three license types for Case Notebook: Case Notebook, Case Notebook (Research), and Case Notebook (Transcripts). Your license type does not affect the installation of the products or their use with other applications in the suite. This document refers to all these license types as Case Notebook. RAS provides remote access to your Case Notebook cases via the Internet and replaces all LiveNote Web products. When you finish working on a case in RAS, your changes are saved to the server. After you close a remote case, you must log on to another remote session to access the case again.

When you access a case remotely, most of the features in Case Notebook are available. However, RAS does not allow a user to copy a case, administer remote cases using Case Notebook Administration, or connect to LiveNote Realtime.

Note: To connect to Realtime in a case you access through RAS, you must replicate the case offline.

### Licensing

RAS requires a separate license. To purchase a license, contact your Thomson Reuters sales representative. For information on allocating seats for RAS, access the Case Notebook Administration help via the **Help** menu in the Case Notebook Administration application or consult the **Case Notebook Administration User Guide** at <a href="https://store.legal.thomsonreuters.com/law-products/c/Case-Notebook-User-Guide/p/990001143">https://store.legal.thomsonreuters.com/law-products/c/Case-Notebook-User-Guide/p/990001143</a>.

### System Requirements

You will need Case Notebook Repository version 2 or later to use RAS. When connecting via RAS, the version of RAS should match the installed versions of Case Notebook. Note that cases that need to be upgraded may not be accessible through RAS and that you cannot perform major case upgrades when connecting via RAS.

#### SUPPORTED OPERATING SYSTEMS

- Windows Server 2012 and Windows Server 2012 R2 (32-bit, 64-bit)
- Windows Server 2016 (32-bit, 64-bit)
- Windows Server 2019 (64-bit)
- Windows Server 2022 (64-bit)

### Automatic Detection and Configuration

RAS verifies and, if necessary, sets network privileges on the RAS installation folders to the following:

- traverse folder/execute file
- list folder/read data
- read attributes
- read extended attributes
- create files/write data
- create folders/append data

- write attributes
- write extended attributes
- delete sub-folders and file
- delete
- read permissions

Note: To access case files on the repository server, you must set required permissions manually for all case folders and subfolders.

If you are installing RAS on Windows Server 12, the permissions are not configured automatically. Refer to "Additional Configuration on Domain Controllers" on page 18.

For security purposes, it is recommended that you install RAS on a separate machine from Case Notebook Repository. Additionally, you should set up RAS to use Secure Sockets Layer (SSL) cryptographic protocol.

# 2 Installing IIS

Before you install RAS, you must first install Internet Information Services (IIS) on the server where RAS will be installed. If you do not plan to use the default IIS website, create a new website in IIS for RAS. For more information, see "Creating a RAS Website in IIS" on page 11.

You can install IIS on Windows Server 2012 (including 2012 R2), Windows Server 2016, Windows Server 2019, and Windows Server 2022.

Note: It is recommended that you have your Windows Server installation media available as it may be required to complete the installation of IIS.

#### Installing IIS on Windows Server 2019 or 2022 Editions

For Windows Server 2019 and 2022 editions, RAS requires ASP.NET and IIS 6 Management Compatibility to recognize your website.

- 1. Click the Start menu and click Windows Administrative Tools.
- 2. Double-click **Server Manager**.
- 3. Click Add Roles and Features.
- 4. Verify the tasks provided and click **Next**.
- 5. Select the Role-based or feature-based installation option and click Next.
- 6. Select the Select a server from the server pool option, select a server, and click Next.
- 7. Select the Web Server (IIS) check box. If you are prompted to add other features, click Add Features.

📥 Add Roles and Features Wizard				-		×
Select server roles				DESTINA	ATION SERV	/ER
Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results	Select one or more roles to install on the selected server.  Roles  Active Directory Certificate Services Active Directory Domain Services Active Directory Federation Services Active Directory Rights Management Services Device Health Attestation DHCP Server Fax Server Fax Server Fax Server File and Storage Services (2 of 12 installed) Host Guardian Service Hyper-V Network Policy and Access Services Print and Document Services Remote Desktop Services Volume Activation Services Volume Activation Services Windows Deployment Services Windows Server Update Services	~	Description Web Server (IIS manageable, ar application infr	nd scalabl	le Web	e,
	< Previous	Next >	Ins	tall	Cance	I

- 8. Click Next.
- 9. Click **Next** and click **Next** again. The Role Services selection is displayed.

10. Expand the **Application Development** option and select the appropriate **ASP.NET** option. Ensure you select ASP.NET 3.5 and ASP.NET 4.7 for the IIS Web Service Extension needed for RAS. If you are prompted to add other features, click **Add Features**.

Add Roles and Features Wizard		- 🗆 X
Select role service	S	DESTINATION SERVER
Before You Begin	Select the role services to install for Web Server (IIS)	
Installation Type	Role services	Description
Server Selection	IIS Client Certificate Mapping Authenticatic	ASP.NET provides a server side
Server Roles	IP and Domain Restrictions URL Authorization	object oriented programming environment for building Web sites
Features	Windows Authentication	and Web applications using
Web Server Role (IIS)	▲ ✓ Application Development	managed code. ASP.NET is not simply a new version of ASP. Having
Role Services	<ul> <li>✓ .NET Extensibility 3.5</li> <li>✓ .NET Extensibility 4.7</li> </ul>	been entirely re-architected to
Confirmation	Application Initialization     ASP	provide a highly productive programming experience based on
Results	ASP ASP.NET 3.5	the .NET Framework, ASP.NET
	ASP.NET 4.7	provides a robust infrastructure for building web applications.
	✓ ISAPI Extensions	building web applications.
	Server Side Includes	
	WebSocket Protocol	
	FTP Server     FTP Service	
	FTP Extensibility	
	< >	
	< Previous Next	> Install Cancel

11. Scroll down and select the **IIS 6 Management Compatibility** check box. If you are prompted to add other features, click **Add Features**.

🚡 Add Roles and Features Wizard — 🗆 X							
Select role services		DESTINATION SERVER					
Before You Begin	Select the role services to install for Web Server (IIS)						
Installation Type	Role services	Description					
Server Selection	✓ .NET Extensibility 3.5	IIS 6 Management Compatibility					
Server Roles	INET Extensibility 4.7	provides forward compatibility for your applications and scripts that					
Features	Application Initialization	use the two IIS APIs, Admin Base					
Web Server Role (IIS)	ASP.NET 3.5	Object (ABO) and Active Directory Service Interface (ADSI). You can use					
Role Services	CGI	existing IIS 6 scripts to manage the					
Confirmation	✓ ISAPI Extensions ✓ ISAPI Filters	IIS 10 Web server.					
Results	Server Side Includes						
	WebSocket Protocol  FTP Server						
	FTP Service						
	FTP Extensibility						
	✓ Management Tools ✓ IIS Management Console						
	IIS 6 Management Compatibility						
	IIS Management Scripts and Tools						
	<						
	< Previous Next >	> Install Cancel					

- 12. Click **Next**, confirm installation selections, and click Install. If you are prompted for original installation media, please provide it as directed and follow the on-screen instructions.
- 13. When the installation is finished, click **Close**, and then close the **Server Manager** dialog.
- 14. After the Web Server (IIS) installation is complete, go to **Control Panel/All Control Panel Items/Administrative Tools/Services** and start **ASP.NET State Service**.

🔍 Services					- 0	×
File Action View	Help					
🧇 🔿 🔄 🖬	) 📑 🛛 📷 🕨 🔲 💵 🕨					
🔍 Services (Local)	Services (Local)					
	ASP.NET State Service	Name	Description	Status	Startup Type	Log ^
	<u>Stop</u> the service <u>Pause</u> the service <u>Restart</u> the service	ActiveX Installer (AxInstSV) AllJoyn Router Service App Readiness	Provides Us Routes AllJo Gets apps re		Manual Manual (Trig Manual	Loc Loc Loc
	Description: Provides support for out-of-process session states for ASP.NET. If this service is stopped, out-of-process	<ul> <li>Application Host Helper Ser</li> <li>Application Identity</li> <li>Application Information</li> <li>Application Layer Gateway</li> <li>Application Management</li> </ul>	Provides ad Determines Facilitates t Provides su Processes in	Running Running	Automatic Manual (Trig Manual (Trig Manual Manual	Loc Loc Loc Loc
	requests will not be processed. If this service is disabled, any services that explicitly depend on it will fail to start.	AppX Deployment Service ( ASP.NET State Service	Provides inf Provides su	Running Running	Manual Manual	Loc Net
	explicitly depend on it will fail to start.	🍓 Auto Time Zone Updater	Automatica		Disabled	Loc
		💁 Background Intelligent Tran	Transfers fil	Running	Automatic (D	Loc
		🗛 Background Tasks Infrastru	Windows in	Running	Automatic	Loc
		💁 Base Filtering Engine	The Base Fil	Running	Automatic	Loc
	1	Reluctooth Support Service	The Rivetoo		Manual (Trig	Loc

### Installing IIS on Windows Server 2016 Editions

For Windows Server 2016 editions, RAS requires ASP.NET and IIS 6 Management Compatibility to recognize your website.

- 1. Click the Start menu and click Windows Administrative Tools.
- 2. Double-click **Server Manager**.
- 3. Click Add Roles and Features.
- 4. Verify the tasks provided and click **Next**.
- 5. Select the Role-based or feature-based installation option and click Next.
- 6. Select the Select a server from the server pool option, select a server, and click Next.
- 7. Select the Web Server (IIS) check box. If you are prompted to add other features, click Add Features.

L	Add Roles and Features Wizard	_ <b>D</b> X
Select server role Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results	S Select one or more roles to install on the selected server.  Roles  Application Server DHCP Server DNS Server Fax Server Fax Server Fax Server File and Storage Services (1 of 12 installed) Hyper-V Network Policy and Access Services Print and Document Services Remote Desktop Services Remote Desktop Services Volume Activation Services Windows Deployment Services Windows Server Update Services Vindows Server Update Services Vindows Server Update Services Vindows Server Update Services Vindows Server Update Services	DESTINATION SERVER A-Win2012R2-001 Description Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.
	< Previous Next	> <u>Install</u> Cancel

- 8. Click Next.
- 9. Click **Next** and click **Next** again. The Role Services selection is displayed.

10. Expand the **Application Development** option and select the appropriate **ASP.NET** option. Ensure you select ASP.NET 3.5 and ASP.NET 4.6 for the IIS Web Service Extension needed for RAS. If you are prompted to add other features, click **Add Features**.

📥 Add Roles and Features Wizard		- 🗆 X
Select role service	25	DESTINATION SERVER x009358-S2016
Before You Begin	Select the role services to install for Web Server (IIS)	
Installation Type	Role services	Description
Server Selection	Centralized SSL Certificate Support	Application Development provides
Server Roles	Client Certificate Mapping Authentication	infrastructure for developing and hosting Web applications. Use these
Features	<ul> <li>Digest Authentication</li> <li>IIS Client Certificate Mapping Authenticatic</li> </ul>	features to create Web content or
Web Server Role (IIS)	IP and Domain Restrictions	extend the functionality of IIS. These technologies typically provide a way
Role Services	URL Authorization Windows Authentication	to perform dynamic operations that
Confirmation	Application Development	result in the creation of HTML output, which IIS then sends to fulfill
Results	<ul> <li>✓ .NET Extensibility 3.5</li> <li>✓ .NET Extensibility 4.6</li> </ul>	client requests.
	Application Initialization	
	ASP	
	ASP.NET 4.6	
	□ CGI ✓ ISAPI Extensions	
	✓ ISAPI Extensions ✓ ISAPI Filters	
	Server Side Includes	
	WebSocket Protocol	
	· · · · · · · · · · · · · · · · · · ·	
	< Previous Next	> Install Cancel
	s rievious livext	Cancer

11. Scroll down and select the **IIS 6 Management Compatibility** check box. If you are prompted to add other features, click **Add Features**.

Ъ	Add Roles and Features Wizard	_ <b>D</b> X
Select role service Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results		DESTINATION SERVER A-Win2012R2-001 Description IIS 6 Management Compatibility provides forward compatibility for your applications and scripts that use the two IIS APIs, Admin Base Object (ABO) and Active Directory Service Interface (ADSI). You can use existing IIS 6 scripts to manage the IIS 7 Web server.
	IIS Management Console       IIS 6 Management Compatibility       IIS Management Scripts and Tools       Management Service       Kanagement Service	
	< Previous Next	> Install Cancel

- 12. Click **Next**, confirm installation selections, and click Install. If you are prompted for original installation media, please provide it as directed and follow the on-screen instructions.
- 13. When the installation is finished, click **Close**, and then close the **Server Manager** dialog.
- 14. After the Web Server (IIS) installation is complete, go to **Control Panel/All Control Panel Items/Administrative Tools/Services** and start **ASP.NET State Service**.

🌼 Services					- 🗆	×
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🔍 Services (Local)	Services (Local)					
	ASP.NET State Service	Name	Description	Status	Startup Type	Log ^
	Stop the service Pause the service Restart the service Description: Provides support for out-of-process	<ul> <li>ActiveX Installer (AxInstSV)</li> <li>AllJoyn Router Service</li> <li>App Readiness</li> <li>Application Host Helper Ser</li> <li>Application Identity</li> <li>Application Information</li> </ul>	Provides Us Routes AllJo Gets apps re Provides ad Determines Facilitates t	Running Running	Manual Manual (Trig Manual Automatic Manual (Trig Manual (Trig	Loc Loc Loc Loc Loc Loc
	session states for ASP.NET. If this service is stopped, out-of-process requests will not be processed. If this service is disabled, any services that explicitly depend on it will fail to start.	<ul> <li>Application Layer Gateway</li> <li>Application Management</li> <li>AppX Deployment Service (</li> <li>ASP.NET State Service</li> </ul>	Provides su Processes in Provides inf Provides su	Running Running	Manual Manual Manual Manual	Loc Loc Loc Net
		<ul> <li>Auto Time Zone Updater</li> <li>Background Intelligent Tran</li> <li>Background Tasks Infrastru</li> </ul>	Automatica Transfers fil Windows in	Running Running	Disabled Automatic (D Automatic	Loc Loc Loc
		Base Filtering Engine	The Base Fil The Bluetoo	Running	Automatic Manual (Trig	Loc

### Installing IIS on Windows Server 2012 Editions

For Windows Server 2012 editions, RAS requires ASP.NET and IIS 6 Management Compatibility to recognize your website.

- 1. Click the **Start** menu and click **Administrative Tools.**
- 2. Double-click Server Manager.
- 3. Click Add Roles and Features.
- 4. Verify the tasks provided and click **Next**.
- 5. Select the Role-based or feature-based installation option and click Next.
- 6. Select the Select a server from the server pool option, select a server, and click Next.
- 7. Select the Web Server (IIS) check box. If you are prompted to add other features, click Add Features.

<b>a</b>	Add Roles and Features Wizard	_ <b>D</b> X		
Select server role Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results		DESTINATION SERVER A-Win2012R2-001 Description Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.		
< Previous Install Cancel				

- 8. Click Next.
- 9. Click **Next** and click **Next** again. The Role Services selection is displayed.

10. Expand the **Application Development** option and select the appropriate **ASP.NET** option. Ensure you select ASP.NET 3.5 and ASP.NET 4.5 for the IIS Web Service Extension needed for RAS. If you are prompted to add other features, click **Add Features**.

<b>a</b>	Add Roles and Features Wizard	_ <b>_</b> ×
Select role service Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results	Select the role services to install for Web Server (IIS) Role services          URL Authorization         URL Authorization         Windows Authentication         Application Development         .NET Extensibility 3.5         .NET Extensibility 4.5         Application Initialization         ASP         ASP.NET 3.5         ASP.NET 4.5         CGI         Server Side Includes         WebSocket Protocol	DESTINATION SERVER A-Win2012R2-001
	< <u>P</u> revious <u>N</u> ext	>Cancel

11. Scroll down and select the **IIS 6 Management Compatibility** check box. If you are prompted to add other features, click **Add Features**.

<b>a</b>	Add Roles and Features Wizard	_ <b>D</b> X
Select role service Before You Begin Installation Type Server Selection Server Roles Features Web Server Role (IIS) Role Services Confirmation Results		DESTINATION SERVER A-Win2012R2-001 IIS 6 Management Compatibility provides forward compatibility for your applications and scripts that use the two IIS APIs, Admin Base Object (ABO) and Active Directory Service Interface (ADSI). You can use existing IIS 6 scripts to manage the IIS 7 Web server.
	< Previous Next	> Install Cancel

- 12. Click **Next**, confirm installation selections, and click Install. If you are prompted for original installation media, please provide it as directed and follow the on-screen instructions.
- 13. When the installation is finished, click **Close**, and then close the **Server Manager** dialog.
- 14. After the Web Server (IIS) installation is complete, go to **Control Panel/All Control Panel Items/Administrative Tools/Services** and start **ASP.NET State Service**.

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🔍 Services (Local)	Services (Local)					
	ASP.NET State Service	Name	Description	Status	Startup Type	Log ^
		ActiveX Installer (AxInstSV)	Provides Us		Manual	Loc
	Stop the service Pause the service	🍓 AllJoyn Router Service	Routes AllJo		Manual (Trig	Loc
	Restart the service Description: Provides support for out-of-process session states for ASP.NET. If this service is stopped, out-of-process	🍓 App Readiness	Gets apps re		Manual	Loc
		Application Host Helper Ser	Provides ad	Running	Automatic	Loc
		Application Identity	Determines		Manual (Trig	Loc
		Application Information	Facilitates t	Running	Manual (Trig	Loc
		🔍 Application Layer Gateway	Provides su		Manual	Loc
		🍓 Application Management	Processes in		Manual	Loc
	requests will not be processed. If this service is disabled, any services that	AppX Deployment Service (	Provides inf	Running	Manual	Loc
	explicitly depend on it will fail to start.	ASP.NET State Service	Provides su	Running	Manual	Net
		🍓 Auto Time Zone Updater	Automatica		Disabled	Loc
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		🍓 Background Tasks Infrastru	Windows in	Running	Automatic	Loc
		🍓 Base Filtering Engine	The Base Fil	Running	Automatic	Loc
		Rhuetooth Sunnort Service	The Riveton		Manual (Trig	Loc

# 3 Creating a RAS Website in IIS

You can use the default website in IIS or create a new one for RAS.

### Creating a Website on Windows Server 2012, 2016, 2019, or 2022

- 1. Click the **Start** menu and click **Administrative Tools.**
- 2. Double-click Internet Information Services (IIS) Manager.
- 3. Click the arrow next to the server in the left frame to expand the list. The Sites folder is listed under the server.



- 4. Right-click the **Sites** folder and select **Add Web Site**.
- 5. Type a name for the website, such as the name of your company, in the Site name field.
- 6. Type or browse for a location (physical path) for the website.

7. Under **Binding**, type or select an IP address from the field provided; type a port number in the field provided, then click **OK**.

	Add Website	? X
Site name:	Application pool:	
Content Directory Physical path: Pass-through authent	DefaultAppPool Sglect	
Binding <u>T</u> ype:	est Settings  IP address: Port: All Unassigned V 80	
Host name:	o.com or marketing.contoso.com	
✓ Start Website immedi		ancel

8. The Internet Information Services (IIS) Manager window is redisplayed. Click on the **Sites** folder to display the Sites in the center pane. To verify that the site is running, make certain that "Started" is displayed in the Status column, then close the window.

Connections	Sites		
	Filter:	•	🍞 Go 👻 💂
Application Pools	Name 📩	ID	Status
⊿ 🙆 Sites	😌 Default Web Site	1	Started (http)
Default Web Site TestingMW	🔮 TestingMW	2	Started (http)

# 4 Adding a RAS Repository

Repositories are areas on a server or computer that store case-related information (e.g. usernames and passwords) created in Case Notebook Administration. The repository does not store files associated with a case. To access cases with RAS, you must specify a Case Notebook Repository for the RAS connection. This Repository Server is referenced during the RAS installation.

To add a RAS repository, complete these steps:

- 1. From Case Notebook, click the **Tools** menu, point to **Advanced**, and select **Repositories**.
- 2. If you have never connected to a repository, browse for or type the server name or IP address for the repository location. For example, https://server/wlnras or http://server/wlnras.
  - a. Click **Locate** to select from a list of available repositories.
  - b. If Case Notebook does not display your repository, click **Add** and browse for or type the server name or IP address for the repository location.
  - c. Upon access to a repository, enter a username and password, if prompted. You can also select to save or change the password.
- 3. Click **OK**. Case Notebook attempts to add the RAS repository to the Repositories list.

# 5 Installing RAS

Each instance of RAS can connect to only one repository. However, you can have up to 10 instances of RAS on a server. Simply install another instance of RAS to connect to a different repository.

When you install RAS, you will need to provide the following:

- A license code for RAS.
- A website that will host the RAS web application.
- A unique web application name (virtual directory) for each instance of RAS that is to be installed on a single server.
- The name of a server hosting an existing repository and the name of the SQL instance where the repository is installed.
- The domain user (with minimum network service privileges) under which RAS will run.
- Privileges for the repositories or cases.

### Upgrades and Previous Versions

If you install RAS on a server where a single instance of a previous version of RAS is already installed, then you will be asked if you want to remove that instance and install the current version. If you choose to leave the existing instance, a new instance of the current version of RAS will be installed.

Westlaw Case Notebook RAS 5.7	$\times$
An existing installation of a previous version of RAS has been found. To upgrade this installation it must be uninstalled before proceeding. Would you like to uninstall the existing RAS installation now?	
Yes No	

Note: The installer can only upgrade a single instance of a previous RAS version. If multiple instances of a previous version are installed, the installer can only create a new instance. In such a case, you can uninstall the existing instances manually using the Windows Control Panel.

### Configuring RAS

It is recommended that you accept the default configuration of RAS during installation. If you need to configure the repository to which you want to connect, please contact Customer Technical Support at 1-800-290-9378 for further information. You can also visit the Case Notebook customer support page at <a href="https://legal.thomsonreuters.com/en/support/case-notebook">https://legal.thomsonreuters.com/en/support/case-notebook</a>.

#### Installing RAS

- 1. Click the link for Case Notebook RAS in the email sent to you from Thomson Reuters.
- 2. Complete the registration form and click **Proceed to Download** at the bottom of the page.
- 3. Click **Proceed to Download** to save the RAS installer to your computer, then move the file to the server where you want to install RAS.
- 4. On the target server, double-click the downloaded file to launch the installer.
  - Note: A message indicating that you need to install Microsoft Foundation Class Library (MFC) may be displayed. This application is required for RAS. Click **Install** to proceed.

5. Click Next.

Note: If you receive an error message that the ASP.NET Web Service Extension is not installed, refer to "Installing IIS" on page 2. If you receive an error message that the ASP.NET 4.0 Web Service Extension is prohibited, refer to "Enabling the ASP.NET 4.0 Web Service Extension" on page 17.

- 6. The License Agreement is displayed. You must scroll to the bottom of the license agreement as you read it, click **I agree to the terms in the license agreement**, then click **Next**.
- 7. Type your information and serial number in the fields provided, then click **Next**.
- 8. Type the website name, web application name, and repository server name in the appropriate fields.
  - For the website, select the default site or one that you created for RAS.
  - You can use the default web application name or a new web application name (without spaces).

Note: The web application name must be unique to the server. If an existing application or instance of RAS is using the same name, the installer will display an error when you continue.

• If the repository is using the SQL instance created by the Case Notebook Repository installer, you can specify only the server name. If you are using an existing SQL instance, you must specify the server name and SQL instance as follows: <SERVER>\<INSTANCE>

In some scenarios you may wish to specify the port number for the repository server name. When doing so, specify as follows: <SERVER>\<INSTANCE>,<PORTNUMBER>

Note: If you are using the default SQL instance, the server name and instance must be specified as <SERVER>\MSSQLSERVER.

- 9. If you do not want the installer to verify that the specified repository exists, select the **Do not validate the Repository Server name** check box, and then click **Next**.
- 10. To change the default installation folder, click **Change** then click **Next**.

Note: If you are on a domain controller, you must follow additional instructions. Refer to "Additional Configuration on Domain Controllers" on page 18.

11. Type the username and password used to access Case Notebook Repository in the fields provided

Note: For security purposes, do not specify a username and password that allows access to the computer where you install RAS. It is recommended that you create a separate service account for RAS.

- 12. Click Next.
- 13. Click Install to begin the installation.
- 14. Click Finish.

### Installing Multiple Instances of RAS

You can install up to 10 instances of RAS on the same server. To install multiple instances of RAS, complete these steps:

- On the server where an existing instance of RAS is installed, double-click the installer that was downloaded previously. Once the installation begins, the wizard provides you with the option to add a new RAS instance, or to maintain or upgrade an existing instance.
- 2. Select Install a new instance, then click **Next**.
- 3. Continue with the installation from step 5 under "Installing RAS" for each instance of RAS you want to install.

Note: If a single instance of a <u>previous</u> version of RAS is installed, then you will be asked if you want to remove that instance and install the current version. If you choose to leave the existing instance installed, a new instance of the current version of RAS will be installed.

The installer can only upgrade a single instance of a previous version of RAS. If multiple instances of a previous version are installed, the installer can only create a new instance. In such a case, you can uninstall the existing instances manually using the Windows Control Panel.

wInras - Westlaw Case Notebook RAS 5.7 - InstallShield Wizard			
This installation lets you install multiple instances of the product. Select the instance you would like to install, and then click Next to continue:			
<ul> <li>Install a new instance</li> </ul>			
O Maintain or upgrade an exis	ting instance		
Product Name	Versio	n Location	
wlnras - Westlaw Case Noteb	ook RAS 5.7 5.7.0.	52 C:\Program Files (x8	86)\Westlaw Case Note
<			>
		Next >	Cancel

# 6 Troubleshooting

This chapter provides information about tasks that may be required according to your specific installation environment.

- Configuring IIS in 32-bit Mode
- Enabling the ASP.NET 4.0 Web Service Extension
- Editing the web.config File
- Additional Configuration on Domain Controllers

### Configuring IIS in 32-bit Mode

If you have no other web applications on the server, you can configure IIS in 32-bit mode.

To configure IIS in 32-bit mode, complete these steps:

- 1. Click the **Start** menu and select **Run**.
- 2. Type cmd in the Open field, then click **OK**. A command window is displayed.
- 3. Navigate to the %systemdrive%\Inetpub\AdminScripts directory.
- Type the following command: cscript.exe adsutil.vbs set W3SVC/AppPools/Enable32BitAppOnWin64 "true"
- 5. Click the **Close** button or type exit to close the command window.

### Enabling the ASP.NET 4.0 Web Service Extension

RAS requires ASP.NET and the ASP.NET Web Service Extension. Follow the steps in the appropriate section below to manually

- 1. Click the **Start** menu, click **Administrative Tools**.
- 2. Click Internet Information Services (IIS) Manager. The Internet Information Services (IIS) Manager page is displayed.
- 3. Click the server name under Connections, then double-click the ISAPI and CGI Restrictions icon.
- 4. Click the 32-bit version of the ASP.NET Web Extension Service and click Allow under the Actions panel to the right.

### Editing the web.config File

If you entered the server name incorrectly or changed the server location, you can edit the server name in the web.config file. It is recommended that you make a copy of web.config before proceeding.

- 1. Click the Start menu, click Administrative Tools.
- 2. Click Internet Information Services (IIS) Manager. The Internet Information Services (IIS) Manager window is displayed.
- 3. Under **Connections**, click the arrow next to the server name, and then click arrow next to **Sites**.
- 4. Click the arrow next to the website name where RAS was installed.
- 5. Click the name of the RAS web application (wInras, by default).
- 6. Double-click the Application Settings icon in the panel to the right. A list of RAS files is displayed.
- 7. Double-click the **RASRepositoryLocation** file.
- 8. Type the correct server name in the **Value** field and click **OK**.

### Additional Configuration on Domain Controllers

If you install RAS on a domain controller, you must perform the following additional steps:

- Create a domain user.
- Add the domain user to the domain controller group.
- Add the domain user as a RAS Application Pool Identity.
- Change permissions for the Reports folder, the Temp folder, and all case folders and sub-folders.

#### CONFIGURING WINDOWS SERVER 2012

Follow the additional configuration steps in this section if you installed RAS on Windows Server 2012.

#### Creating a Domain User

- 1. Click the Start menu, click Administrative Tools, then click Active Directory Users and Computers.
- 2. Right-click the **Users** folder, point to **New**, then select **User**.
- 3. Type the user information into the fields provided then click Next.
- 4. Type the password used to connect to your RAS Case Notebook Repository in the fields provided, then click **Next**.

Note: The user logon name and password will be needed in later steps.

5. Click **Finish**. Do not close any windows.

#### Adding the Domain User to the Domain Controller Group

- 1. In the Active Directory Users and Computers window, click the **Builtin** folder.
- 2. Right-click **IIS\_IUSRS** and select **Properties**.
- 3. Click the **Members** tab.
- 4. Click Add.
- 5. Click Advanced to locate the domain user.

IS_IUSR5 Properties ?		
General Memb	bers Member Of Managed By	
Members:		
Name	Active Directory Domain Services Folder	
<b>USR</b>	NT AUTHORITY	
STWOF	RK S NT AUTHORITY	
1.0		
1		
Add	Remove	
Add	Remove	
Add	Remove	
Add	Remove OK Cancel	Apply

6. Type the user logon name you created (see step 3 in "Creating a Domain User" on page 18) in the **Name** field and click **Find Now**. The domain user is displayed at the bottom of the Select Users, Contacts, Computers, or Groups dialog.

Select Users, Contacts, Computers, or Groups	? ×
Select this object type:	
Users, Groups, Built-in security principals, or Other objects	Object Types
From this location:	
qalab.local	Locations
Common Queries	
Name: Starts with 💌 test	Columns
Description: Starts with 💌	Find Now
Disabled accounts	Stop
Non expiring password	
Days since last logon:	<b>9</b>
Search results:	OK Cancel
Name (RDN) E-Mail Address Description In Folder	
🖁 Test Last qalab.local/Us	sers

- 7. Double-click the domain user and click **OK**.
- 8. Close all open dialogs.

### Adding the Domain User as a RAS Application Pool Identity

- 1. Click the Start menu, click Administrative Tools, then click Internet Information Services (IIS) Manager.
- 2. Click the first plus symbol (+), then click the **Application Pools** folder. A list of application pools is displayed in the center pane.
- 3. Select the RAS application pool to which you want to add the user, then click Advanced Settings under Actions (right pane).
- 4. Select **Identity**, and then click the **Browse** button (....).
- 5. Select **Custom account**, then click **Set**.
- 6. Type the user logon name you created (see step 3 in "Creating a Domain User" on page 18) in the Name field and click OK.

#### Setting Permissions for Folders

You can use the following steps to set the permissions for Reports, Temp, and Case folders:

- 1. Using Windows Explorer, navigate to the RAS installation directory. By default, the directory is located in C:\Program Files (x86)\Westlaw Case Notebook\Westlaw Case Notebook RAS 5.7\wlnras.
- 2. Select the directory, right-click on it and select **Properties**.
- 3. Click the **Security** tab.
- 4. Click Edit.
- 5. Click Add.
- 6. Click **Advanced** to locate the domain user.
- Type the user logon name you created (see step 3 in "Creating a Domain User" on page 18) in the Name field and click Find Now. The domain user is displayed at the bottom of the Select Users, Computers, or Groups dialog.
- 8. Double-click the domain user and click **OK**.
- 9. Click the **Close** button in the Select Users, Computers, or Groups dialog.
- 10. On the Permissions dialog, select all permissions check boxes under **Allow** except the **Full Control** check box, and then click **OK**.
- 11. Click **OK** in the Properties dialog.
- 12. To set permissions for your temp folder, case folders, and sub-folders, locate the folders on the Case Notebook Repository server using Windows Explorer and follow steps 2–11.

📕 Reports Properties 🛛 🗙
General Sharing Security Previous Versions Customize
Object name: C:\Program Files (x86)\West LiveNote\West LiveN
Group or user names:
& CREATOR OWNER
SYSTEM
& Administrators (QALAB \Administrators)
A Hoere (DALAB\Heere)
To change permissions, click Edit. 👘 Edit
Permissions for CREATOR
OWNER Allow Deny
Full control
Modify
Read & execute
List folder contents
Read
Write
For special permissions or advanced settings, Advanced click Advanced.
OK Cancel Apply

