How to Configure the Dynamic RAS Connector Using TCP/IP

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Overview

This document is intended to guide you through connecting two Microsoft[®] Exchange Server sites by means of the Dynamic RAS Connector. Guidance is provided in the form of a mock scenario in which two Microsoft Exchange Server sites are connected and configured for directory replication.

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Intended Audience

The target audience for this document has a working knowledge of Microsoft Windows NT[®] networking, Microsoft Windows NT Remote Access Service (RAS), Microsoft TCP/IP, Microsoft Windows NT domains, and Microsoft Exchange Server.

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Before You Begin

After you install RAS, the latest Windows NT service pack must be installed on the Microsoft Exchange Server computer that will host the Dynamic RAS Connector. If you are running Windows NT 3.51, you must have Service Pack 4 or later; if you are running Windows NT 4.0, you must have Service Pack 3 or later. If the server is a Compaq computer that supports the Compaq Software Support Disk (SSD), install the SSD after you install the Windows NT service pack. Installation of the Compaq SSD has resolved many customer issues.

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Terms and Abbreviations

Client: The RAS client DHCP: Dynamic Host Configuration Protocol DRAS: Dynamic RAS LAN: Local area network NIC: Network interface card RAS: Remote Access Service

RPC: Remote procedure call **Server:** The RAS server

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Concepts and Planning

The following example depicts the methodology used to configure the two sites in this mock scenario. The following tables describe the two servers that you configure:

Server Name	SERVER1
Organization	ORGANIZATION
SITE	SITE1
TCP/IP Address	192.168.10.1
Role	Dial-up client

Server Name	SERVER2
Organization	ORGANIZATION
SITE	SITE2
TCP/IP Address	192.168.20.1
Role	RAS server

In this scenario, you configure the Dynamic RAS Connector on SERVER1 to dial SERVER2. You set the Dynamic RAS Connector on SERVER 2 to be remotely initiated and to do no dialing.

SERVER2 assigns an IP address to the dial-up adapter from a predefined IP address pool. The choice of the remote access server IP address pool is based on your needs for Internet and intranet access for remote dial-up clients that may also be dialing in to this RAS server. When possible, choose a network ID for the RAS server that is not the same as that of the network interface card (NIC). If the RAS clients do not need access to the Internet, choosing one of the address ranges reserved for internal network use by the InterNIC is the best practice. The range of IP addresses reserved for intranet use are listed below:

Class A	10.0.0.0
Class B	172.16.0.0 to 172.31.255.254
Class C	192.168.0.0 to 192.168.255.254

The choice is ultimately yours; however, Microsoft recommends a Class C address because a Class C address pool provides up to 254 addresses, which is sufficient to support most RAS implementations.

The RAS IP address pool on the RAS server (SERVER2) is configured so that each pool represents a different Class C network.

Server	Server Starting Address Ending Addres	
SERVER2	192.168.1.1	192.168.1.2

The HOSTS file on SERVER1 is configured so that it can resolve the NetBIOS name of the RAS server (SERVER2). You do not have to configure the HOSTS file on SERVER2.

Server	HOSTS File Entry		
SERVER1	SERVER2	192.168.20.1	

Creating a Dial-Up Address Book Entry

Your first step when configuring SERVER1 is to create a Dial-Up address book entry to SERVER2.

1. Click **Start**, point to **Programs**, point to **Accessories**, and click **Dial-Up Networking**. Click **New** to create a new entry. The following dialog box appears. Type a descriptive title, and then click **Next**.

New Phonebook Entry Wizard		
	Dial-Up Networking connects you to remote networks using your modem, ISDN, or other WAN adapter. This wizard helps you create a phonebook entry that stores the settings needed to connect to a particular remote network.	
*	Name the new phonebook <u>e</u> ntry:	
₩ 1	DRAS to SERVER2	
	I know all about phonebook entries and would rather edit the properties directly	
	< Back Next > Cancel	

2. When you are prompted with the following dialog box, do not select any of the options. Click **Next**.

Server	
	Check all that apply:
	 Send my plain text password if that's the only way to connect. <u>I</u>he non-Windows NT server I am calling expects me to type login information after connecting, or to know TCP/IP addresses before dialing.
	< <u>B</u> ack <u>N</u> ext > Cancel

3. When you are prompted with the following dialog box, type the phone number for SERVER2, and then click **Next**.

Phone Number		×
	Enter the phone number of the dial-up server you are calling. Alternate phone numbers, if any, are dialed automatically if the primary phone number cannot be reached. They may also be used to set different numbers on individual multi-linked ISDN lines.	
T	Phone number: 9, 555-0111 Alternates	-
	Use Telephony dialing properties	-
	< <u>B</u> ack <u>N</u> ext > Cancel	

4. When you are prompted with the following dialog box, click **Finish** to complete the Dial-Up address book entry setup.

New Phonebook Entry V	₩izard
	That's it. Press Finish to save 'DRAS to SERVER2'.
	< <u>B</u> ack [Finish] Cancel

Configuring SERVER1

Your next step is to configure the RAS service on SERVER1.

1. In Windows NT Control Panel, double-click **Network**. When the following dialog box appears, click the **Services** tab. Select **Remote Access Service**, and then click **Properties**.

Network			? ×
Identification Se	vices Protocols	Adapters Bin	idings
Network Service	s:		
Computer Bi Microsoft Inl NetBIOS Int Network Mc Femote Acc RPC Config Server Workstation	owser ernet Information erface nitor Agent ress Service uration	Server 3.0	
<u>A</u> dd	<u>R</u> emove	Properties	Update
Description:			
Enables users network.	o work offsite as	though connecte	d directly to a
		OK	Cancel

2. When the following dialog box appears, click **Configure**.

Remote Acc	ess Setup		×
<u>P</u> ort	Device	Туре	
COM1	Sportster 28800	Modem (unimodem)	Continue
			Cancel
			Network
			<u>H</u> elp
, <u>A</u> dd	<u>R</u> emove <u>C</u> onfigure.	Clone	

3. When the following dialog box appears, click **Dial out and Receive calls**, and then click **OK**.



4. When the following dialog box appears, click **Network**.

Remote Acce	ess Setup		×
<u>P</u> ort	Device	Туре	
COM1	Sportster 28800	Modem (unimodem)	Continue
			Cancel
			<u>N</u> etwork
			<u>H</u> elp
, 	<u>R</u> emove <u>C</u> onfigure	Clone	

5. When the following dialog box appears, under **Dial out Protocols**, verify that **TCP/IP** is the only check box selected. Click **OK**. Quit the Network application, and restart the server.

Network Configuration		×
Dial out Protocols:		ОК
	1	Cancel
E IPX		<u>H</u> elp
Server Settings:		
Allow remote clients running:		
□ Net <u>B</u> EUI	<u>C</u> onfigure	
ICP/IP	Configure	
□ IP <u>×</u>	Configure	
Encryption settings:		
C Allow <u>any</u> authentical	ion including c	lear text
C Require <u>e</u> ncrypted au	athentication	
Require <u>M</u> icrosoft end	crypted authen	tication
Require <u>d</u> ata	encryption	
Enable Multilink		

 After you restart the server you need to adjust your HOSTS file to point to the IP address of the NIC on SERVER2. Open the HOSTS file located at C:\Winnt\ System32\Driver\Etc. Add the following entry to the bottom of the file:

SERVER2 192.168.20.1

7. Save the file, and verify that it was saved with no extension (that is, HOSTS, instead of HOSTS.txt).

Note Be sure to make this entry specific to your configuration. Also make sure that you press ENTER after adding the host entry.

Configuring the Dynamic RAS Connector

Your next step is to configure the Dynamic RAS Connector on SERVER1.

1. Start the Microsoft Exchange Administrator program. On the **File** menu, click **New Other**, and then click **MTA Transport Stack**. When the following dialog box appears, select **RAS MTA Transport Stack**, and then click **OK**.

New MTA Transport Stack	×
<u>Т</u> уре	
Eicon X.25 MTA Transport Stack	
TCP/IP MTA Transport Stack TCP/IP MTA Transport Stack TP4 MTA Transport Stack	
<u>S</u> erver	
SERVER1	
T	ř
OK Cancel <u>H</u> elp	

2. When the following dialog box appears, click **OK**.

RAS (SERVER1) Properties	×
General Connectors	
📇 RAS (SEI	RVER1)
Display name:	RAS (SERVER1)
MTA <u>c</u> allback number:	
Home	e site: SITE1
	OK Cancel <u>Apply</u> Help

- 3. On the **File** menu, click **New Other**, and then click **Dynamic RAS Connector**. When the following dialog box appears:
 - a. In the **Display name** box, type a descriptive name.
 - b. In the **Directory name** box, type the same descriptive name.
 - c. In the **Remote server name** box, type the NetBIOS name of the remote server. Be sure to type this in all capital letters.
 - d. In the **Phone book entry** list, select the phone book entry to the remote server.

DRAS to SERVER2 Pro	operties			×
Connected Sites General	Address S Schedule	ipace RAS Override	Delivery Re MTA	strictions \ Override
📑 DRAS	to SERV	ER2		
Display name:	DRAS to SERVER2			
Directory <u>n</u> ame:	DRAS to SERVER2			
Remote <u>s</u> erver name:	SERVER2			
MTA transport stack:	SERVER1\RAS (SEI	RVER1)	•	
Phone book entry		Messag	e size	
DRAS to SERVER2	•] 💿 No	limit	
RAS Phone Book	. <u>R</u> efresh List	О Маз	gimum (K):	
Ad <u>m</u> inistrative note:				
Created	Home site: SIT	E1		Last modified
	ОК	Cancel	Apply	Help

4. Click the **Schedule** tab. When the following dialog box appears, ensure the schedule is set to **Always**. While you are configuring the Dynamic RAS Connector, leave the schedule set to **Always**. After your Dynamic RAS Connector is configured and functioning properly, you may want to change this option accordingly.

DRA	S to SERVER2 F	Properties				×
	Connected Sites General	s) Schedule	Address S	pace RAS Override	Delivery Restr MTA (rictions Dverride
	C Remote Initiate	S to S	SERV	ER2	Detail view- © 1 Hour © 15 <u>Mi</u> nute	3
	C Selected times	}	6 AM		6 PM)
	Sunday Monday Tuesday Wednesday					
	Thursday Friday Saturday					
)К	Cancel	Apply	Help

- 5. Click the **RAS Override** tab. When the following dialog box appears:
 - a. In the **Windows NT username** box, type the Exchange service account of the remote server.
 - b. In the **Password** box, type the password for the remote service account.
 - c. In the **Confirm password** box, retype the password.
 - d. In the **Windows NT domain name** box, type the name of the Windows NT domain that the remote server is located in.

DRAS to SERVER2 Properties	×
Connected Sites Address General Schedule	Space Delivery Restrictions RAS Override MTA Override
Connect as Windows NT <u>u</u> sername: [exchange Password: ******** Confirm password: ******** Windows NT domain name: [DOMAIN2]	Optional phone numbers MTA callback <u>n</u> umber:
ОК	Cancel <u>A</u> pply Help

- 6. Click the **MTA Override** tab. When the following dialog box appears, adjust the following settings:
 - a. Change **Checkpoint size (K)** to 15.
 - b. Change **Window size** to 3.
 - c. Change **Max open retries** to 10.
 - d. Change Max transfer retries to 5.
 - e. Change **Open interval (sec)** to 120.
 - f. Change **Transfer interval (sec)** to 60.

 - g. Change Lifetime (sec) to 15.h. Change Disconnect (sec) to 15.

DRAS to SERVER2 Properti	ies		×
Connected Sites General Sche DRAS to	Address Sp. edule F SERVE	ace D AS Override E R2	elivery Restrictions MTA Override
RTS values <u>C</u> heckpoint size (K): <u>R</u> ecovery timeout (sec): <u>W</u> indow size:	15 60 3	Association para Lifetime (sec): Disconnect (sec Thre <u>s</u> hold (msgs	ameters 15 s): 15 s): 50
Connection retry values Max <u>o</u> pen retries: Max <u>t</u> ransfer retries: Open interval (sec): Trans <u>f</u> er interval (sec):	10 5 120 60	Transfer timeout Urgent: Nor <u>m</u> al: Non-ur <u>ge</u> nt: Re	ts (sec/K) 1000 2000 3000 eset Default <u>V</u> alues
	ОК	Cancel <u>A</u>	pply Help

7. Click the **Connected Sites** tab. When the following dialog box appears, click **New**.

DRAS to SERVER2 Prop	perties	×
General S Connected Sites	Schedule RAS Override Address Space	MTA Override Delivery Restrictions
	to SERVER2	
Organization Site	Routing address	Cost
<u><u>N</u>e</u>	ew <u>E</u> dit	<u>ł</u> emove
	Cancel	Apply Help

8. When the following dialog box appears, in the **Site** box, type the remote server's site name. Click **OK** to return to the **Connected Sites** tab. Click **OK** to quit the DRAS configuration.

Properties				×
General Rout	ing Address]			19 ¹
0				
Organization:	ORGANIZATI	ION		
<u>S</u> ite:	SITE2			
	ОК	Cancel	Apply	Help

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Configuring the Directory Replication Connector

Now that the Dynamic RAS Connector on SERVER1 is configured, you need to configure the directory replication connector.

- 1. On the **File** menu, click **New Other**, and then click **Directory Replication Connector**. When the following dialog box appears:
 - a. In the **Server in remote site** box, type the remote server's NetBIOS name.
 - b. Click **No, the remote site is not available on this network**. Click **OK** to continue.

New Directory Repli	cation Connector	×
<u>R</u> emote site name: <u>S</u> erver in remote site:	SITE2	OK Cancel Help
Information about the replication. Is the ren <u>N</u> o, the remote si <u>Y</u> es, the remote s <u>C</u> Configure by	remote site can be used to configure note site available on this network? e is not available on this network. ite is available on this network. ith sites	

2. When the following dialog box appears, click **OK** to accept the default connector settings.

Directory Replication Conn	ector (SITE2) Properties	×
General Schedule Sites		
Director	y Replication Connecto	
Display name:	Directory Replication Connector (SITE2)	
Directory name:	Directory Replication Connector (SITE2)	
<u>S</u> ite name:	SITE2	
Local bridgehead server:	SERVER1	
<u>Remote bridgehead server:</u>	SERVER2	
Administrative n <u>o</u> te:		
He	ome site: SITE1	
	OK Cancel <u>Apply</u> Help	

Configuring SERVER2

Your first step when configuring SERVER2 is to create a Dial-Up address book entry to SERVER1.

- 1. Even though SERVER2 does not initiate calls, you still need to create the address book entry because it is required when configuring the Dynamic RAS Connector. Follow the instructions in the earlier <u>Creating a Dial-Up Address Book Entry</u> section.
- Configure the RAS service. In Windows NT Control Panel, double-click Network. Click the Services tab. When the following dialog box appears, select Remote Access Service, and then click Properties.

Network			? ×	
Identification Se	rvices Protocol	s Adapters Bir	ndings)	
<u>N</u> etwork Service	IS:			
Computer Br Microsoft Int NetBIOS Int Network Mo Remote Acc RPC Configu Server Workstation	rowser ternet Information terface phitor Agent cess Service uration) Server 3.0		
<u>A</u> dd	<u>R</u> emove	<u>P</u> roperties	Update	
Description: Enables users to work offsite as though connected directly to a network.				
		ОК	Cancel	

3. When the following dialog box appears, click **Configure**.

Remote Acc	ess Setup		×
<u>P</u> ort	Device	Туре	
COM1	Sportster 28800	Modem (unimodem)	Continue
			Cancel
			<u>N</u> etwork
			Help
<u>A</u> dd	<u>R</u> emove <u>C</u> onfigure	Clone	

4. When the following dialog box appears, click either **Dial out and Receive calls** or **Receive calls only**, depending on the configuration you want, and then click **OK**.

Configure Port Usage	×
Port: COM1 Device: Sportster 28800	Cancel
Port Usage © Dial <u>o</u> ut only © <u>R</u> eceive calls only © <u>D</u> ial out and Receive calls	<u>H</u> elp

5. When the following dialog box appears, click **Network**.

Remote Access	Setup		×
<u>P</u> ort	Device	Туре	
COM1	Sportster 28800	Modem (unimodem)	Continue
			Cancel
			<u>N</u> etwork
			<u>H</u> elp
<u>A</u> dd	<u>R</u> emove <u>C</u> onfigure	Clone	

6. When the following dialog box appears, under **Dial out Protocols**, verify that **TCP/IP** is the only check box selected. Under **Server Settings**, next to the **TCP/IP** check box, click **Configure**.

Network Configuration		×
Dial out Protocols:		ОК
NetBEU		Cancel
IPX IPX		Help
Server Settings:		
Allow remote clients running:		18 e
□ Net <u>B</u> EUI	<u>C</u> onfigure	
☑ ТС <u>Р</u> /IР	C <u>o</u> nfigure	
□ IP⊻	Configure	
Encryption settings:		
C Allow <u>a</u> ny authentica	tion including clea	ar text
O Require <u>encrypted</u> at	uthentication	
Require <u>M</u> icrosoft en	crypted authentic	ation
E Require <u>d</u> ata	a encryption	
🗖 Enable Multiļink		
		35

- 7. When the following dialog box appears, adjust the following settings:
 - a. Click **Use static address pool**.
 - b. In the **Begin** box, type the starting address of your pre-selected address pool (192.168.1.1 for this mock scenario; your address pool may vary depending on your configuration).
 - c. In the **End** box, type the ending address of your pre-selected address pool (192.168.1.2 for this mock scenario).

RAS Server TCP/IP Configuration	×
Allow remote TCP/IP clients to access: © Entire network © This computer only	OK Cancel <u>H</u> elp
 Use <u>D</u>HCP to assign remote TCP/IP client addresses Use <u>s</u>tatic address pool: <u>B</u>egin: 192.168.1.1 End: 192.168.1.2 	
Erom: Excluded ranges Io: . Add > < Remove	

8. Click **OK** to accept the changes. Quit the Network application, and restart the server.

Configuring the Dynamic RAS Connector

After you restart the server, you need to configure the Dynamic RAS Connector.

1. Start the Microsoft Exchange Administrator program on SERVER2. On the **File** menu, click **New Other**, and then click **MTA Transport Stack**. When the following dialog box appears, select **RAS MTA Transport Stack**, and then click **OK**.

New MTA Transport Stack	×
Туре	
Eicon X.25 MTA Transport Stack BAS MTA Transport Stack	
TCP/IP MTA Transport Stack TP4 MTA Transport Stack	
Server	
SERVER2	A
T	
OK Cancel <u>H</u> elp	

2. When the following dialog box appears, click $\ensuremath{\textbf{OK}}$.

RAS (SERVER2) Properties		×
General Connectors		
📑 RAS (SE	RVER2)	
<u>D</u> isplay name:	RAS (SERVER2)	L
MTA <u>c</u> allback number:		
		L
		L
		L
		L
Ho	mesite: SITE2	
	OK Cancel <u>A</u> pply Help	

- 3. On the **File** menu, click **New Other**, and then click **Dynamic RAS Connector**. When the following dialog box appears:
 - a. In the **Display name** box, type a descriptive name.
 - b. In the **Directory name** box, type the same descriptive name.
 - c. In the **Remote server name** box, type the NetBIOS name of the remote server. Be sure to type this in all capital letters.
 - d. In the **Phone book entry** list, select the phone book entry to the remote server. This address book entry is not used but the list still needs to have a valid entry selected.

DRAS to SERVER1 Pr	operties	×
Connected Sites General	Address Space Delivery Restrictions Schedule RAS Override MTA Override	
📑 DRAS	to SERVER1	
<u>D</u> isplay name:	DRAS to SERVER1	
Directory <u>n</u> ame:	DRAS to SERVER1	
Remote <u>s</u> erver name:	SERVER1	
MTA transport stack:	SERVER2\RAS (SERVER2)	
Phone book entry	Message size	
DRAS to SERVER1	O No limit	
RAS <u>P</u> hone Book.	<u>R</u> efresh List O Ma <u>x</u> imum (K):	
Ad <u>m</u> inistrative note:		
Created	Home site: SITE2 Last modifie	d
	OK Cancel <u>A</u> pply Help	

4. Click the **Schedule** tab. When the following dialog box appears, click **Remote Initiated**. Because this server does not dial, you want SERVER1 to initiate the communication.

DRAS to SERVER1 Properties					
Connected Sites General Sch	Address Sp nedule F	ace RAS Override	Delivery Restricti	ions erride	
Handreich Server1					
Remote Initiated Never			Detail view THour		
C Always			O 15 <u>M</u> inute		
) <u>J</u> elected times	6 AM		6 PM	,)	
Sunday	+++++			II	
Monday	++++++	+++++		++-	
Tuesday	++++++	+++++	+++++	++-	
Wednesday	+++++	+++++		++-	
Friday	++++++	+++++	+++++	++-	
Saturday		+++++			
) oddiddy					
	ОК	Cancel	Apply	Help	

- 5. Click the **RAS Override** tab. When the following dialog box appears:
 - a. In the **Windows NT username** box, type the Exchange service account of the remote server.
 - b. In the **Password** box, type the password for the remote service account.
 - c. In the **Confirm password** box, retype the password.
 - d. In the **Windows NT domain name** box, type the name of the Windows NT domain that the remote server is located in.

DRAS to SERVER1 Properties	×
Connected Sites Address General Schedule	Space Delivery Restrictions RAS Override MTA Override
Connect as Windows NT <u>u</u> sername: [exchange Password: [xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	Optional phone numbers MTA callback <u>n</u> umber:
ОК	Cancel <u>Apply</u> Help

- 6. Click the **MTA Override** tab. When the following dialog box appears, adjust the following settings:
 - a. Change **Checkpoint size (K)** to 15.
 - b. Change **Window size** to 3.
 - c. Change **Max open retries** to 10.
 - d. Change Max transfer retries to 5.
 - e. Change **Open interval (sec)** to 120.
 - f. Change **Transfer interval (sec)** to 60.

 - g. Change Lifetime (sec) to 15.h. Change Disconnect (sec) to 15.

AS to SERVER1 Properti	es		
Connected Sites General Sche	Address Spa edule F	ace Deli ^a AS Override	very Restrictions MTA Override
RTS values Checkpoint size (K): <u>R</u> ecovery timeout (sec): <u>W</u> indow size:	15 60 3	 Association parama Lifetime (sec): Disconnect (sec): Threshold (msgs): 	eters 15 15 50
Connection retry values Max <u>o</u> pen retries: Max <u>t</u> ransfer retries: Open interval (sec): Trans <u>f</u> er interval (sec):	10 5 120 60	Transfer timeouts (<u>U</u> rgent: Nor <u>m</u> al: Non-ur <u>ge</u> nt: Rese	sec/K) 1000 2000 3000 t Default ⊻alues
	ОК	Cancel <u>A</u> pp	ly Help

7. Click the **Connected Sites** tab. When the following dialog box appears, click **New.**

DRAS to SERVE	R1 Properties	:	×
General Connected	Schedu	ile AS Overrid Address Space	e MTA Override Delivery Restrictions
📑 DF	RAS to \$	SERVER1	
Organization	Site	Routing address	Cost
	<u>N</u> ew	<u>E</u> dit	<u>H</u> emove
		OK Cancel	Apply Help

8. When the following dialog box appears, in the **Site** box, type the remote server's site name. Click **OK** to return to the **Connected Sites** tab.

Properties		×
General Rout	ing Address]	
0		
Organization:	ORGANIZATION	
<u>S</u> ite:	SITE1	
	OK Cancel <u>A</u> pply Help	

9. The **Connected Sites** tab displays this newly created entry. Click **OK** to finish the Dynamic RAS Connector configuration.

DRAS to SERVER1 Properties		×
General Schedule Connected Sites	RAS Override Address Space	MTA Override
🔡 DRAS to S	ERVER1	
Organization Site	Routing address	Cost
ORGANIZATI SITE1	X400:c=US;a= ;p=ORGANI	ZATION;o=SIT 1
		Y
New	<u>E</u> dit <u>R</u> er	nove
0	K Cancel	Apply Help

Configuring the Directory Replication Connector

Now that the Dynamic RAS Connector on SERVER2 is configured, you need to configure the directory replication connector.

- 1. On the **File** menu, click **New Other**, and then click **Directory Replication Connector**. When the following dialog box appears:
 - a. In the **Server in remote site** box, type the remote server's NetBIOS name.
 - b. Click **No, the remote site is not available on this network**. Click **OK** to continue.

New Directory Replic	ation Connector	×
<u>R</u> emote site name: <u>S</u> erver in remote site:	SITE1	OK Cancel <u>H</u> elp
Information about the r replication. Is the remote No, the remote site Yes, the remote site Configure bot	emote site can be used to configure ote site available on this network? is not available on this network. e is available on this network. h sites	

2. When the following dialog box appears, click **OK** to accept the default connector settings.

Directory Replication Connector (SITE2) Properties		
General Schedule Sites]	
Director	y Replication Connecto	
Display name:	Directory Replication Connector (SITE2)	
Directory <u>n</u> ame:	Directory Replication Connector (SITE2)	
<u>S</u> ite name:	SITE2	
Local bridgehead server:	SERVER1	
Remote bridgehead server:	SERVER2	
Administrative n <u>o</u> te:		-
н	ome site: SITE1	
	OK Cancel <u>A</u> pply Help	

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Initiating Directory Replication

Now that the Dynamic RAS Connectors and directory replication connectors are configured on both SERVER1 and SERVER2, you need to initiate directory replication.

 On SERVER2, start the Microsoft Exchange Administrator program. Click to expand the **Configuration** object, click to expand the **Servers** object, and click **SERVER2**. In the right pane, double-click **Directory Service**.



 When the following dialog box appears, click **Check Now** to begin a knowledge consistency check. When the check is complete, quit the **Directory Service Properties** page.



3. In the left pane, under the **Configuration** object, click **Directory Replication**. In the right pane, select the directory replication connector to the other site, and then double-click it.



4. Click the **Sites** tab, and then click **Request Now**.

Directory Replication Connector (SITE1)	Properties	×
General Schedule Sites		
Directory Repl	ication Connecto.	
Inbound sites	Outbound sites	
Vpdate inbound sites Request updates of selected inbound sites from the remote bridgehead server: <u>Request Now</u>	SITE2	
OK	Cancel Apply Hel	р

5. When the following dialog box appears, click **Refresh all items in the directory**, and then click **OK**. When replication finishes, close the **Directory Replication Properties** dialog box.

Directory Update	Туре	×
 Update only ne Befresh all item 	ew and modified its is in the directory	ems
OK	Cancel	Help

6. Repeat this process and force replication on SERVER1.

When replication is complete, your Microsoft Exchange Administrator program is able to see all containers for both sites.