Changing the IP Address of a Cisco Unity Server

This chapter contains the following sections:

Changing the IP Address of a Cisco Unity Server Without Failover

When choosing an IP address for a Cisco Unity server, note the following considerations:

- Do not choose an address accessible from the Internet. Doing so can expose the Cisco Unity server to unwanted intrusion from the Internet, even when the server is hardened.
- Do not choose an address that puts the Cisco Unity server on the opposite side of a firewall from:
  - The Domino server to which Cisco Unity sends voice messages for delivery.
  - The Domino server that Cisco Unity monitors for changes to the directory.
  - Any Domino server that homes Cisco Unity subscriber mailboxes.
  - The domain controller/global catalog server that Cisco Unity accesses when the Cisco Unity server is not a domain controller.

To Change the IP Address of a Cisco Unity Server Without Failover

Step 1 On the Cisco Unity server, on the Windows Start menu, click **Settings > Control Panel > Network and Dial-Up Connections > Local Area Connection**.

Step 2 Click **Properties**.

Step 3 In the Components Checked Are Used by This Connection list, select **Internet Protocol (TCP/IP)**, but do not uncheck the check box.

Step 4 Click **Properties**.

Step 5 In the Internet Protocol (TCP/IP) Properties dialog box, change values as applicable. Refer to Windows Help for more information.

Step 6 Click **OK** to close the Internet Protocol TCP/IP Properties dialog box.

Step 7 Click **OK** to close the Local Area Connection Properties dialog box.

Step 8 Close the Local Area Connection Status window.

Step 9 If the IP address is in a different subnet, disconnect the network cable from the original subnet, and connect the cable from the target subnet to the Cisco Unity server.

Step 10 Confirm that the server name can be resolved to the new IP address.

Changing the IP Address of a Primary Cisco Unity 4.x Server (With Failover Configured)

When choosing an IP address for the primary Cisco Unity server, note the following considerations:

- Do not choose an address accessible from the Internet. Doing so can expose the Cisco Unity server to unwanted intrusion from the Internet, even when the server is hardened.
- Do not choose an address that puts the Cisco Unity server on the opposite side of a firewall from:
  - The Domino server to which Cisco Unity sends voice messages for delivery.
  - The Domino server that Cisco Unity monitors for changes to the directory.
  - Any Domino server that homes Cisco Unity subscriber mailboxes.
  - The domain controller/global catalog server that Cisco Unity accesses.

Do the following nine procedures in the order listed.

To Disable Automatic Failover and Failback, and Stop File Replication

Step 1 On the secondary server, on the Windows Start menu, click **Programs > Cisco Unity > Failover Monitor**.

Step 2 Click **Failover**.

Step 3 Click **OK** to confirm that you want to fail over to the secondary server.

Step 4 Click **Advanced**.

Step 5 Check the **Disable Automatic Failover and Failback** check box.

Step 6 Click **OK**.

Step 7 Click **Configure**.

Step 8 Uncheck the **Force Failover If Call Arrives on Inactive Secondary** check box.

Step 9 Click **OK**.

Step 10 Close the Failover Monitor.

To Stop the Node Manager Service on the Primary and Secondary Cisco Unity 4.x Servers

Step 1 On the primary server, on the Windows Start menu, click **Programs > Administrative Tools > Services**.

Step 2 In the Services window, right-click **AvCsNodeMgr**, and click **Stop**.

Step 3 Close the Services window on the primary server.

Step 4 On the secondary server, on the Windows Start menu, click **Programs > Administrative Tools > Services**.

Step 5 In the Services window, right-click **AvCsNodeMgr**, and click **Stop**.

Step 6 Close the Services window on the secondary server.

To Change the IP Address of the Primary Cisco Unity 4.x Server

Step 1 On the primary server, on the Windows Start menu, click **Settings > Control Panel > Network and Dial-Up Connections > Local Area Connection**.

Step 2 Click **Properties**.

Step 3 In the Components Checked Are Used by This Connection list, select **Internet Protocol (TCP/IP)**, but do not uncheck the check box.

Step 4 Click **Properties**.

Step 5 In the Internet Protocol (TCP/IP) Properties dialog box, change values as applicable. Refer to Windows Help for more information.

Step 6 Click **OK** to close the Internet Protocol TCP/IP Properties dialog box.

Step 7 Click **OK** to close the Local Area Connection Properties dialog box.

Step 8 Close the Local Area Connection Status window.

Step 9 If the IP address is in a different subnet, disconnect the network cable from the original subnet, and connect the cable from the target subnet to the Cisco Unity server.

Step 10 Confirm that the server name can be resolved to the new IP address.

To Check the Consistency of the Cisco Unity Database

Step 1 On the primary server, install the latest version of the Cisco Unity Directory Walker (DbWalker) utility, available at http://ciscounitytools.com/App_DirectoryWalker4.htm.

Step 2 Run DbWalker, and correct all errors that the utility finds. Refer to DbWalker Help for detailed instructions on running the utility and on correcting errors in the database. (The Help file, DbWalker.htm, is in the same directory as DbWalker.exe.)

To Set the Registry of the Secondary Cisco Unity 4.x Server by Reconfiguring Failover

Step 1 On the Windows taskbar, double-click the system clock. The Date/Time Properties dialog box appears.

Step 2 Set the time to the same hour and minute as shown on the primary server, and click **OK**.

Step 3 In Windows Explorer, browse to the **CommServer** directory.

Step 4 Double-click **FailoverConfig.exe** to start the Configure Cisco Unity Failover wizard.

Step 5 On the Welcome page, click **Next**.

Step 6 On the Specify Server Role page, click **Secondary Server**, and click **Next**.

Step 7 On the Enter the Name of Your Server page, click **Browse**, select the name of the primary server, and click **OK**. The IP address for the primary server is filled in automatically.

Step 8 Click **Next**.

Step 9 On the Enter Failover Account Information page, click **Browse**, and double-click the name of the directory and message store services account. This is the account that the failover service will log on as.

The account you select must have the right to act as part of the operating system and to log on as a service, and must be a member of the Local Administrators group.

Caution You must specify the same account on both the primary and secondary servers.

Step 10 In the Password field, enter the password for the account that the failover service will log on as, and click **Next**.

Step 11 On the Begin Configuring Your Server page, click **Configure**. The wizard verifies settings and configures failover on the secondary server.

If the wizard does not finish the configuration successfully, an error message explains why the wizard failed. Exit the wizard, correct the problem, and click **Configure** again.

Step 12 On the Completing page, click **Finish**.

To Confirm That Both Cisco Unity 4.x Servers Can Be Pinged and That SQL Replication Has No Errors

Step 1 On the primary server, on the Windows Start menu, click **Programs > Accessories > Command Prompt**.

Step 2 In the Command Prompt window, enter **C:\Ping <IP address of secondary server>**, and press **Enter**.

If the secondary server sends a reply, the IP address is valid.

If the secondary server does not send a reply, either the primary server has a problem obtaining an address from the DHCP server, or the assigned IP address conflicts with the IP address of another computer on the network. Verify the network settings. If needed, troubleshoot any problem as you would a network connectivity problem.

Step 3 In the Command Prompt window, enter **C:\Ping <Primary server name>**, and press **Enter**.

If the primary server sends a reply, the server name is valid.

Step 4 On the secondary server, on the Windows Start menu, click **Programs > Accessories > Command Prompt**.

Step 5 In the Command Prompt window, enter **C:\Ping <IP address of primary server>**, and press **Enter**.

If the primary server sends a reply, the IP address is valid.

If the primary server does not send a reply, either the secondary server has a problem obtaining an address from the DHCP server, or the assigned IP address conflicts with the IP address of another computer on the network. Verify the network settings. If needed, troubleshoot any problem as you would a network connectivity problem.

Step 6 In the Command Prompt window, enter **C:\Ping <Secondary server name>**, and press **Enter**.

If the secondary server sends a reply, the server name is valid.

Step 7 On the Windows Start menu, click **Programs > Microsoft SQL Server > Enterprise Manager**. The SQL Server Enterprise Manager window appears.

Step 8 Confirm that no errors appear for the SQL replication agents.

If errors appear for the Distribution agent, right-click the agent, and click **Start Synchronizing** to resume SQL replication. The errors will clear in a few minutes after the network connection between the primary and secondary servers is restored.

To Restart the Primary Cisco Unity 4.x Server

Step 1 While the secondary server is active and answering calls, restart the primary server.

The primary server becomes active, and the secondary server becomes inactive.

Step 2 Confirm that the primary server starts and that there are no errors in the Application Event log.

To Confirm That the Primary Cisco Unity 4.x Server Is Active and, If Applicable, to Re-enable Automatic Failover and Failback

Step 1 On the secondary server, on the Windows Start menu, click **Programs > Cisco Unity > Failover Monitor**.

Step 2 If the secondary server is active, click **Failback**, and click **OK**.

Step 3 Re-enable automatic failover and failback, if applicable:

a. Click **Advanced**.

b. Uncheck the **Disable Automatic Failover and Failback** check box.

c. Click **OK**.

The setting will replicate to the primary server.

Step 4 Close the Failover Monitor.

During testing in the following procedure, you may need to refer to the *Cisco Unity Failover Configuration and Administration Guide, Release 4.0(5) and Later* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/fail/fail401/dom/index.htm.

To Confirm That Failover and Failback Function Correctly

Step 1 While the primary server is active, create a test file (for example, Test.txt) in the CommServer\Stream Files directory on the primary server.

Step 2 Confirm that the file replicates to the secondary server within the time set in the File Replication Interval field in the Failover Monitor (the default is 10 minutes).

If the file does not replicate, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 3 On the primary server, modify the extension of a subscriber.

Step 4 Confirm that the change replicates to the secondary server immediately. When you open the Cisco Unity Administrator on the secondary server, ignore the warnings that the secondary server is inactive.

If the change does not replicate, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 5 On the primary server, on the Windows Start menu, click **Programs > Microsoft SQL Server > Enterprise Manager**. The SQL Server Enterprise Manager window appears.

Step 6 In the left pane, expand the **Microsoft SQL Servers** node.

Step 7 Expand the **Replication Monitor** node.

If the node does not exist, failover has not been configured. You must configure failover on both the primary and secondary servers, then do this procedure again.

Step 8 If the Replication Monitor subnodes do not have red Xs on them in the left pane, UnityDb database replication for failover is functioning normally.

If the Replication Monitor subnodes have red Xs on them, restore replication for failover:

a. On the primary server, close the SQL Server Enterprise Manager window.

b. On the secondary server, run the failover configuration wizard.

Step 9 Restore the original extension of the subscriber.

Step 10 On the primary server, manually initiate failover.

Step 11 Confirm that the primary server becomes inactive and that the secondary server becomes active.

Step 12 Call in to Cisco Unity.

Step 13 Confirm that the secondary server answers the call.

If the secondary server does not answer the call, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 14 On the secondary server, delete the test file from the CommServer\Stream Files directory.

Step 15 Confirm that the file is deleted from the primary server within the time set in the File Replication Interval field in the Failover Monitor (the default is 10 minutes).

Step 16 On the secondary server, manually initiate failback.

Step 17 Confirm that the primary server becomes active and that the secondary server becomes inactive.

Step 18 Call in to Cisco Unity.

Step 19 Confirm that the primary server answers the call.

Changing the IP Address of a Secondary Cisco Unity 4.x Server (With Failover Configured)

When choosing an IP address for the secondary Cisco Unity server, note the following considerations:

- Do not choose an address accessible from the Internet. Doing so can expose the Cisco Unity server to unwanted intrusion from the Internet, even when the server is hardened.
- Do not select an address that puts the Cisco Unity server on the opposite side of a firewall from:
  - The Domino server to which Cisco Unity sends voice messages for delivery.
  - The Domino server that Cisco Unity monitors for changes to the directory.
  - Any Domino server that homes Cisco Unity subscriber mailboxes.
  - The domain controller/global catalog server that Cisco Unity accesses.

Do the following nine procedures in the order listed.

To Disable Automatic Failover and Failback, and Stop File Replication

Step 1 On the secondary server, on the Windows Start menu, click **Programs > Cisco Unity > Failover Monitor**.

Step 2 Click **Advanced**.

Step 3 Check the **Disable Automatic Failover and Failback** check box.

Step 4 Click **OK**.

Step 5 Click **Configure**.

Step 6 Uncheck the **Force Failover If Call Arrives on Inactive Secondary** check box.

Step 7 Click **OK**.

Step 8 Close the Failover Monitor.

To Stop the Node Manager Service on the Primary and Secondary Cisco Unity 4.x Servers

Step 1 On the primary server, on the Windows Start menu, click **Programs > Administrative Tools > Services**.

Step 2 In the Services window, right-click **AvCsNodeMgr**, and click **Stop**.

Step 3 Close the Services window on the primary server.

Step 4 On the secondary server, on the Windows Start menu, click **Programs > Administrative Tools > Services**.

Step 5 In the Services window, right-click **AvCsNodeMgr**, and click **Stop**.

Step 6 Close the Services window on the secondary server.

To Change the IP Address of the Secondary Cisco Unity 4.x Server

Step 1 On the secondary server, on the Windows Start menu, click **Settings > Control Panel > Network and Dial-Up Connections > Local Area Connection**.

Step 2 Click **Properties**.

Step 3 In the Components Checked Are Used by This Connection list, select **Internet Protocol (TCP/IP)**, but do not uncheck the check box.

Step 4 Click **Properties**.

Step 5 In the Internet Protocol (TCP/IP) Properties dialog box, change values as applicable. Refer to Windows Help for more information.

Step 6 Click **OK** to close the Internet Protocol TCP/IP Properties dialog box.

Step 7 Click **OK** to close the Local Area Connection Properties dialog box.

Step 8 Close the Local Area Connection Status window.

Step 9 If the IP address is in a different subnet, disconnect the network cable from the original subnet, and connect the cable from the target subnet to the Cisco Unity server.

Step 10 Confirm that the server name can be resolved to the new IP address.

To Check the Consistency of the Cisco Unity Database

Step 1 On the primary server, install the latest version of the Cisco Unity Directory Walker (DbWalker) utility, available at http://ciscounitytools.com/App_DirectoryWalker4.htm.

Step 2 Run DbWalker, and correct all errors that the utility finds. Refer to DbWalker Help for detailed instructions on running the utility and on correcting errors in the database. (The Help file, DbWalker.htm, is in the same directory as DbWalker.exe.)

To Set the Registry of the Primary Cisco Unity 4.x Server by Reconfiguring Failover

Step 1 In Windows Explorer, browse to the **CommServer** directory.

Step 2 Double-click **FailoverConfig.exe** to start the Configure Cisco Unity Failover wizard.

Step 3 On the Welcome page, click **Next**.

Step 4 On the Specify Server Role page, click **Primary Server**, and click **Next**.

Step 5 On the Enter the Name of Your Server page, click **Browse**, select the name of the secondary server, and click **OK**. The IP address for the secondary server is filled in automatically.

Step 6 Click **Next**.

Step 7 On the Enter Failover Account Information page, click **Browse**, and double-click the name of the directory and message store services account. This is the account that the failover service will log on as.

The account you select must have the right to act as part of the operating system and to log on as a service, and must be a member of the Local Administrators group.

Caution You must specify the same account on both the primary and secondary servers.

Step 8 In the Password field, enter the password for the account that the failover service will log on as, and click **Next**.

Step 9 On the Begin Configuring Your Server page, click **Configure**. The wizard verifies settings and configures failover on the primary server.

If the wizard does not finish the configuration successfully, an error message explains why the wizard failed. Exit the wizard, correct the problem, and click **Configure** again.

Step 10 On the Completing page, click **Finish**.

To Confirm That Both Cisco Unity 4.x Servers Can Be Pinged and That SQL Replication Has No Errors

Step 1 On the primary server, on the Windows Start menu, click **Programs > Accessories > Command Prompt**.

Step 2 In the Command Prompt window, enter **C:\Ping <IP address of secondary server>**, and press **Enter**.

If the secondary server sends a reply, the IP address is valid.

If the secondary server does not send a reply, either the primary server has a problem obtaining an address from the DHCP server, or the assigned IP address conflicts with the IP address of another computer on the network. Verify the network settings. If needed, troubleshoot any problem as you would a network connectivity problem.

Step 3 In the Command Prompt window, enter **C:\Ping <Primary server name>**, and press **Enter**.

If the primary server sends a reply, the server name is valid.

Step 4 On the secondary server, on the Windows Start menu, click **Programs > Accessories > Command Prompt**.

Step 5 In the Command Prompt window, enter **C:\Ping <IP address of primary server>**, and press **Enter**.

If the primary server sends a reply, the IP address is valid.

If the primary server does not send a reply, either the secondary server has a problem obtaining an address from the DHCP server, or the assigned IP address conflicts with the IP address of another computer on the network. Verify the network settings. If needed, troubleshoot any problem as you would a network connectivity problem.

Step 6 In the Command Prompt window, enter **C:\Ping <Secondary server name>**, and press **Enter**.

If the secondary server sends a reply, the server name is valid.

Step 7 On the Windows Start menu, click **Programs > Microsoft SQL Server > Enterprise Manager**. The SQL Server Enterprise Manager window appears.

Step 8 Confirm that no errors appear for the SQL replication agents.

If errors appear for the Distribution agent, right-click the agent, and click **Start Synchronizing** to resume SQL replication. The errors will clear in a few minutes after the network connection between the primary and secondary servers is restored.

To Restart the Secondary Cisco Unity 4.x Server

Step 1 While the primary server is active and answering calls, restart the secondary server.

Step 2 Confirm that the secondary server starts and that there are no errors in the Application Event log.

To Confirm That the Primary Cisco Unity 4.x Server Is Active and, If Applicable, to Re-enable Automatic Failover and Failback

Step 1 On the secondary server, on the Windows Start menu, click **Programs > Cisco Unity > Failover Monitor**.

Step 2 If the secondary server is active, click **Failback**, and click **OK**.

Step 3 Re-enable automatic failover and failback, if applicable:

a. Click **Advanced**.

b. Uncheck the **Disable Automatic Failover and Failback** check box.

c. Click **OK**.

The setting will replicate to the primary server.

Step 4 Close the Failover Monitor.

During testing in the following procedure, you may need to refer to the *Cisco Unity Failover Configuration and Administration Guide, Release 4.0(5) and Later* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/fail/fail401/dom/index.htm.

To Confirm That Failover and Failback Function Correctly

Step 1 While the primary server is active, create a test file (for example, Test.txt) in the CommServer\Stream Files directory on the primary server.

Step 2 Confirm that the file replicates to the secondary server within the time set in the File Replication Interval field in the Failover Monitor (the default is 10 minutes).

If the file does not replicate, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 3 On the primary server, modify the extension of a subscriber.

Step 4 Confirm that the change replicates to the secondary server immediately. When you open the Cisco Unity Administrator on the secondary server, ignore the warnings that the secondary server is inactive.

If the change does not replicate, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 5 On the primary server, on the Windows Start menu, click **Programs > Microsoft SQL Server > Enterprise Manager**. The SQL Server Enterprise Manager window appears.

Step 6 In the left pane, expand the **Microsoft SQL Servers** node.

Step 7 Expand the **Replication Monitor** node.

If the node does not exist, failover has not been configured. You must configure failover on both the primary and secondary servers, then do this procedure again.

Step 8 If the Replication Monitor subnodes do not have red Xs on them in the left pane, UnityDb database replication for failover is functioning normally.

If the Replication Monitor subnodes have red Xs on them, restore replication for failover:

a. On the primary server, close the SQL Server Enterprise Manager window.

b. On the secondary server, run the failover configuration wizard.

Step 9 Restore the original extension of the subscriber.

Step 10 On the primary server, manually initiate failover.

Step 11 Confirm that the primary server becomes inactive and that the secondary server becomes active.

Step 12 Call in to Cisco Unity.

Step 13 Confirm that the secondary server answers the call.

If the secondary server does not answer the call, you must configure failover on both the primary and secondary servers, then do this procedure again.

Step 14 On the secondary server, delete the test file from the CommServer\Stream Files directory.

Step 15 Confirm that the file is deleted from the primary server within the time set in the File Replication Interval field in the Failover Monitor (the default is 10 minutes).

Step 16 On the secondary server, manually initiate failback.

Step 17 Confirm that the primary server becomes active and that the secondary server becomes inactive.

Step 18 Call in to Cisco Unity.

Step 19 Confirm that the primary server answers the call.