Unofficial Consolidated Server Deployment Guide

for Microsoft[®] Solution for Hosted Messaging and Collaboration version 4.0

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Introduction

The Unofficial *Consolidated Server Deployment Guide* provides prescriptive guidance for deploying the Consolidated Server platform for the Microsoft Solution for Hosted Messaging and Collaboration version 4.0.

The Consolidated Server platform is a scaled-down variation of the Hosted Messaging and Collaboration solution—the high-performance Microsoft Windows®-based messaging system that enables service providers to host enterprise-level e-mail services and other applications. Where a full deployment of the Hosted Messaging and Collaboration solution can call for setup and configuration of more than 30 separate servers in a data center, the Consolidated Server platform is able to provide the same core infrastructure and services on as few as four servers. The platform reduces your initial investment while providing a valuable introduction to the Hosted Messaging and Collaboration solution components and technologies.

You can find additional information about the Consolidated Server platform in the *Consolidated Server Planning Guide*. The planning guide provides a technical overview of the Consolidated Server platform, guidance on scaling out the platform, and information about the sample Control Panel — a Web-based tool that administrators can use to easily provision hosted organizations and users.

! Important: The Unofficial Consolidated Server Deployment Guide requires ready access to the Microsoft Solution for Hosted Messaging and Collaboration version 4.0 documentation. Deployment steps in the guide directly reference numerous procedures from the solution documentation. See How to Obtain Solution Documentationfor information on how to obtain the solution documentation.

How to Obtain the Solution Documentation

To deploy the Consolidated Server platform, you must have access to the Hosted Messaging and Collaboration version 4.0 solution documentation. The *Consolidated Server Deployment Guide* directly references procedures described throughout the solution documentation.

You can download or view the documentation online at the N<u>Microsoft Solution for Hosted Messaging and</u> <u>Collaboration</u> site.

You should also closely follow the deployment sequences outlined in the deployment guide. Note that a check box accompanies each procedure in the deployment guide. If you print out the guide, you can mark these check boxes to track your progress. Also, note that procedure titles preceded by "DCS" indicated a new procedure that has been appended the solution documentation.

Server Names and Domain Names

For reference purposes, the *Consolidated Server Deployment Guide* requires the use of a consistent set of server and domain names. Table DCS.1 lists the servers by name, the function they perform, and the software installed on each. Table DCS.2 lists fictitious domain names used in the guide.

Server Name	Role	Installed Software
FE01	Provisioning front-end server Front-end server for Microsoft Windows SharePoint Services version 3.0 External Domain Name System (DNS)	 Microsoft Windows Server[™] 2003, Standard Edition Service Pack (SP) 1 with R2, 32-bit Windows SharePoint Services version 3.0 Internet Information Services (IIS) 6.0 ASP.NET 2.0 MPS Client MPS Web Services (ASP.NET 2.0 and WSE)
AD01	Domain controller Global catalog server DNS server Root Certificate Authority Certificate issuing server	 Windows Server 2003, Enterprise Edition SP2 with R2, 64-bit DNS (internal domain resolution) Certificate Service

Table DCS.1: Consolidated Server Platform Servers

ExMBX01	Exchange server 2007 Mailbox Role	 Windows Server 2003, Enterprise Edition SP2 with R2, 64-bit Exchange Server 2007, Enterprise Edition, 64-bit
MPSSQL01	SQL Server Microsoft Provisioning System (MPS) databases MPS Audit and Recovery service Provisioning Engine servers Database server for Microsoft Operations Manager (MOM) Reporting server Monitoring and reporting server	 Windows Server 2003, Standard Edition SP1 with R2, 32-bit Microsoft SQL Server 2005 with SP1 with Reporting Services, 32-bit Internet Information Services (IIS) 6.0 Microsoft Operations Manager (MOM) 2005 SP1 MPF version 13.3.609.6 Microsoft Proviosining System (MPS) ResKit 13.3.609.6 All other MPS components are version 4.0
ISA01	Microsoft Internet Security and Acceleration (ISA) Server	 Windows Server 2003, Enterprise Edition SP2 with R2, 32-bit ISA Server 2006
ExEdge01	Exchange Server 2007 Edge Role	 Windows Server 2003, Enterprise Edition SP2 with R2, 64-bit Exchange Server 2007, Enterprise Edition, 64-bit
ExCAS01	Exchange Server 2007 Hub Role Exchange Server 2007 Client Access Role Exchange Server 2007 Unified Messaging Role	 Windows Server 2003, Enterprise Edition SP2 with R2, 64-bit Exchange Server 2007, Enterprise Edition, 64-bit

Table DCS.2: Example Domain Names

Domain Name	Organization	
fabrikam.com	Service provider fabrikam, Inc.	
consolidatedmessenger.com	Reseller consolidatedmessenger	
litware.com	Business customer litware	
alpineskihouse.com	Business customer alpineskihouse	

Reference Architecture

Figure DCS.1 shows the reference architecture for the Consolidated Server platform with the infrastructure and services components deployed on FrontNet and BackNet network segments



Figure DSC.1 Unofficial Consolidated Server reference architecture

Zone3

Build Centralized Management

You begin deployment of the Consolidated Server platform by building the centralized management components.

Build and Deploy the Domain Controller

With the Hosted Messaging and Collaboration v4.0 help file open, navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build Centralized Management

Complete the following procedures in the order shown:

- Procedure DWCM.1: To install Windows Server 2003 R2 on AD01
 - Procedure DWCM.2: To prepare AD01
 - ▶ Procedure DWCM.3: To deploy the first domain controller, AD01
 - ▶ Procedure DWCM.4: To check the DNS zone for your new domain controller, AD01
 - Complete verification step

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▼ Skip Procedures DWCM. 5–10. You will not deploy a second domain controller.

Configure DNS Information for Active Directory

Continuing in Build Centralized Management, now complete the following procedures:

- ▶ Procedure DWCM.11: To create the reverse lookup zone on your domain controller,AD01
- ▶ Procedure DWCM.12: To add pointer records for the domain controllers in the reverse lookup zone

Note: Since you are only deploying a single Domain Controller (AD01), ignore the instructions to repeat steps on AD02.

▶ Procedure DWCM.13: To verify pointer records for your domain controller in the reverse lookup zone

Build and Deploy the Root Certificate Authority

Continuing in Build Centralized Management, now complete the following procedures:

Skip Procedures DWCM. 14–16. We are installing PKIROOT on your domain controller, AD01. ▼

Note: Since you are only deploying a single Domain Controller (AD01), We're installing PKIROOT on your domain controller, AD01.

- Procedure DWCM.17: To install IIS
- Procedure DWCM.18: To install Certificate Services

Install and Configure the External DNS Server

Continuing in Build Centralized Management, now complete the following procedures:

Note: In this document, we skip this section. If you are building a new network, and don't have any external DNS server, please follow the steps in HMC4.0 help document.

► Skip Procedures DWCM. 19–21. Assume you have a external DNS server already.

Build Service Provisioning

With the Hosted Messaging and Collaboration v4.0 help file open, navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build Service Provisioning

Important: The documentation instructs you to complete the following procedures on MPS01. You should instead carry out these procedures on MPSSQL01, which serves as the back-end provisioning server.

Prepare the Provisioning Back-End Server

Complete the following procedures in the order shown:

Procedure DWSPV.1: To install Windows Server 2003 R2 Enterprise Edition on MPSSQL01 server \square

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Ser	Server Reminder: You perform this procedure on MPSSQL01.		
	Procedure DWSPV.2: To prepare MPSSQL01 server		
	Procedure DWSPV.3: To add the servers to the Fabrikam domain and log on as		
	Administrator@Fabrikam.com		
	Procedure DWSPV.4: To enable Network DTC and Network COM+ Access on MPSSQL01		
	Procedure DWSPV.5: To create a service account on the domain controller, AD01		
	Note: Although clustering isn't used in the Consolidated Server architecture, the provisioning system expects this service account to be present. Make sure to create the MPSClusterAdmin account as documented in Procedure DWSPV.5		
	▼ Skip Skip Procedures DWSPV 6-11. You will not perform the steps from the following sections:		
	Install a New Server Cluster		
	Procedure DWSPV.12: To create a Microsoft SQL service account on the domain controller		
	Procedure DWSPV.13: To add MPSSQLService to the local administrators group		
	▼ Skip Procedure DWSPV.14		
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Important: Procedure DWSPV.14 includes instructions for installing Microsoft SQL Server 2005 onto a clustered server. However, in the Consolidated Server architecture, Clustering is not used. Therefore, use Procedure CS.1 which follows to install SQL 2005 onto MPSSQL01.

Install Microsoft SQL Server 2005

In this procedure, you install SQL Server 2005, which will host the MPS databases.

- Procedure DCS.1: To install SQL Server 2005 \square
 - 1. Log on to MPSSQL01 using the domain administrator account.
 - 2. Insert the SQL Server 2005, Standard Edition CD.
 - 3. If your server supports Autorun, the CD will launch the installer and display the Microsoft SQL Server
 - 4. 2005 splash screen. Click Install Server components, tools, Books Online, and samples. If your server does not support autorun, browse to the Servers directory on the CD and run Setup.exe.. (Run Autorun.exe on the CD if Autorun is disabled.)
 - 5. Read and accept the End User License Agreement.
 - 6. On the Installing Prerequisites page, review the list of software components that will be installed prior to installing SQL Server, and then click Install.
 - After the required prerequisites have been installed successfully, click Next.
 - 8. On the Welcome to the Microsoft SQL Server Installation Wizard page, click Next.

9. On the System Configuration Check page, review the configuration details for warnings or errors. If there are any errors or warnings in the list (other than IIS Feature Requirement), read the message associated with the error, and then rectify the problem. When you no longer have any errors displayed in the list, click Next to continue the installation.

Note: A warning message for the **IIS Feature Requirement** appears because Internet Information Services (IIS) has not been installed. This error message is expected and it is safe to continue with the installation.

- 10. On the **Registration Information** page, enter information in the **Name** and **Company** boxes, enter your **Product key** if prompted to do so, and then click **Next**.
- 11. On the Components to Install page, select SQL Server Database Services.
- 12. And then select Workstation components, Books Online and development tools.
- 13. Click Advanced, Expand Client Components, click Management Tools, verify it Will be installed on local hard drive.
- On the Feature Selection page, click Database Services. Under Installation Path, the default path should be *driveletter*:\Program Files\Microsoft SQL Server, edit the drive letter as appropriate for your server.
- 15. To set the Data Files location to driveletter:\Program Files\Microsoft SQL Server, click

Browse, edit the drive letter as appropriate for your server, and then click OK.

Note: For performance reasons, you should store the SQL Server program files on a different drive than the data. For example, for the program files specify drive C, and for the data files specify drive D. You should use high performance drives; we recommend using a redundant array of independent disks (RAID).

- 16. Review Disk Cost to confirm there is sufficient disk space on each drive. Click Next.
- 17. On the Instance Name page, ensure that Default Instance is selected, and then click Next.
- 18. Under Service Settings, click Use a Domain user account, type MPSSQLService for Username, the correct password for Password, fabrikam for Domain, and then select SQL Server Agent under Start services at the end of setup, then click Next.
- 19. On the Authentication Mode page, ensure that Windows Authentication Mode is selected, and then click Next.
- 20. On the **Collation Settings** page, choose the SQL Server collations that meet your compatibility requirements. For this reference architecture, accept the default value of **Dictionary order, case-insensitive, for use with 1252 Character Set**, and then click **Next**.
- 21. On the Error and Usage Report Settings page, choose any settings you like.
- 22. Finish the installation, accepting defaults.

Install SQL Server 2005 Service Pack 1

After you install SQL Server 2005, you must apply Service Pack 1 before installing MPS. To install SQL Server SP1, follow this procedure.

- Procedure DCS.2: To install SQL Server 2005 Service Pack 1
 - 1. Ensure that you are logged on to MPSSQL01 using an account that is a member of the domain administrators group.

- 2. Insert the service pack media. On the **Welcome** page, confirm the features being upgraded, and then click **Next** to begin the upgrade process.
- 3. Read and accept the End User License Agreement.
- 4. On the Feature Selection page, click Next.
- 5. On the Authentication Mode page, ensure that All Instances and Windows Authentication are selected, and then click Next.
- 6. On the Remote User Account page, enter credentials for the Domain Administrator.
- 7. On the **Ready to install** page, click **Install** to continue.

Note: You may receive a message regarding pending file operations requiring a reboot. If you encounter this message, click **Yes**, and then proceed with the installation process.

You may get one or more messages reading **Locked Filed Found**. Because you will be reboot the servers running SQL Server at the end of the installation process, it is safe to click **Continue**..

- 8. If you are prompted to reboot your server, click OK.
- 9. On the **Installation Complete** page, ensure the installation was successful, and then click **Finish** to end the upgrade process.
- 10. To complete the SQL Server 2005 Service Pack 1 installation, reboot MPSSQL01.

Deploy MPS

Continuing in Build Service Provisioning, now complete the following procedures:

- Procedure DWSPV.23: To install IIS on MPS01
- ▶ Procedure DWSPV.24: To ensure inbound and outbound DTC access are enabled on MPS01
- ▶ Procedure DWSPV.25: To delegate impersonation to Provisioning Engine servers

Note: If your Active Directory directory service has already been configured for Native Mode, then the **Trust Computer for Delegation** check box does not appear. Instead, you must click the **Delegation** tab, and select **Trust this computer for delegation** to any service (Kerberos only).

Configure MPS Security

Continuing in Build Service Provisioning, now complete the following procedures:

- Procedure DWSPV.26: To create an SPN for the MPSSQLService account Only need to execute the MPSSQL01 part.
- ▶ Procedure DWSPV.27: To verify the SPN for the MPSSQLService account

Deploy the Core Platform

Continuing in Build Service Provisioning, now complete the following procedures:

▶ Procedure DWSPV.28: To install the MPS Deployment Tool on MPSSQL01

Server Reminder: You will perform these procedures on MPSSQL01.

- In Step 3, verify that the following values are set:
 - For Config Server, specify **MPSSQL01**.
 - For Config Share name, accept the default of ConfigShare.
 - For MSI Server name, specify MPSSQL01.
 - For MSI Share name, accept the default of MSIShare.
- Procedure DWSPV.29: To configure the MPS Deployment Tool and add target servers Perform this procedure on MPSSQL01:
 - In Step 5, specify MPSSQL01.
 - In Step 7, specify **MPSSQL01**.
- ▶ Procedure DWSPV.30: To configure Active Directory using the Deployment Tool

Deploy Core MPS Components

- Procedure DWSPV.31: To configure the MPS Core Platform Perform this procedure on MPSSQL01:
 - In Step 1, specify MPSSQL01.
 - In Step 2, specify MPSSQL01.
 - In Step 4, in the **Requirements Status** pane, under **Core MPF Install**, right-click the **MPF Audit and Recovery** component, point to **Install on Server**, and then click **MPSSQL01**.
 - Skip steps 5-7.

Configure the MPS Core Platform

□ ► Procedure DWSPV.32: To configure the MPS Core Platform

Note: If you not create the **MPSClusterAdmin** account in Procedure DWSPV.5, you will need to unschedule the "Configure MPS Cluster Admin" task by right-clicking **Configure MPS Cluster Admin** and then selecting **Cancel procedure Execution**. This will leave the other actions scheduled for execution.

▼ Skip Procedure DWSPV.33: To deploy the MPS core platform

Deploy and Configure the Hosting Platform

- □ ► Procedure DWSPV.34: To deploy the Hosting Platform
 - In Step 3, specify MPSSQL01.
 - In Step 6, specify MPSSQL01.

Add the Provtest.exe Utility to the System Path

Procedure DWSPV.35: To add the Provtest.exe utility to the system path on MPSSQL01

(Optional) Install the MPF Resource Kit

In this procedure you will install the MPF Resource Kit, which installs a troubleshooting utility called TraceView. This utility is useful in troubleshooting MPS-related errors.



Procedure DWSPV.36: To install the MPF Resource Kit on MPSSQL01

Deploy and Initialize Hosted Active Directory

In this procedure you will deploy and initialize the Hosted Active Directory namespace using the MPS Deployment Tool.

- ▶ Procedure DWSPV.37: To deploy and initialize Hosted Active Directory
- ▼ Skip Procedure DWSPV.38-39.

Install the Provisioning Web Server

Important: The documentation instructs you to complete the following procedures on PROV01. You should instead carry out these procedures on **FE01**, which functions as the provisioning Web server for the Consolidated Server platform.

Prepare the Provisioning Web Server

Note: If you followed the instructions in this document to install and configure the external DNS server,
then the operating system has already been installed on FE01. If, however, you chose not to install DNS on
FE01, then perform the following steps to install Windows Server 2003 on FE01.

- Procedure DWSPV.40: To install Windows Server 2003 R2 on PROV01
 - Procedure DWSPV.41: To prepare PROV01
 - Procedure DWSPV.42: To add PROV01 to the Fabrikam domain and log on as the domain administrator
- Procedure DWSPV.43: To install IIS and ASP.NET, and then enable Network DTC and Network COM+ access on PROV01
 - Procedure DWSPV.44: To register ASP.NET 2.0 as default on PROV01
 - ▶ Procedure DWSPV.45: To verify that ASP.NET 2.0 has been enabled
 - ▶ Procedure DWSPV.46: To ensure that inbound and outbound DTC access are enabled on PROV01

• Perform all these procedure on **FE01**

Install the MPS Web Services

- ▶ Procedure DWSPV.47: To install the Web Services on PROV01
 - Perform this procedure:
 - In Step 2, specify **FE01**.

Skip Procedures DWSPV 48. ▼

Deploy the MPS DNS Client

Continuing in Build Service Provisioning, now complete the following procedures:

Important: The documentation instructs you to complete the following procedures on DNS01. DNS01 is not part of the consolidated server platform. You should instead carry out these procedures on **FE01**, the consolidated server for external DNS services. The MPS DNS Client enables the provisioning of customer DNS records via MPS. If your datacenter already has an existing DNS infrastructure, and you plan to provision customer DNS records using other methods, you may skip this section.

▼ S	kip Pro	cedures	DWSPV	49-50.
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- ▶ Procedure DWSPV.51: To install the MPS DNS Client on DNS01
- ▼ Skip Procedures DWSPV 52-55. You will not perform the following actions:
 - Procedure DWSPV.52: To install the certificate chain for your CA on DNS01
 - Procedure DWSPV.53: To manually request a certificate for DNS01
 - Procedure DWSPV.54: To import the certificate into Internet Information Services for DNS01
- Procedure DCS.3: To configure the DNS Web client
 - 1. Log on to FE01 as a member of the Domain Administrators group.
 - 2. Click Start, click Administrative Tools, and then select the IIS Manager.
 - 3. Expand the <local server name>, expand Web Sites, and then expand Default Web Site.
 - 4. Select the DNSProvider, right-click Properties, and then select Directory Security.
 - 5. Click the Edit button in Authentication and Access Control to display the Authentication Methods dialog box, and then clear all check boxes except Basic Authentication.
 - 6. In the **Authentication Methods** dialog box, also clear **Default Domain** and replace it with the string value "\".
 - 7. Confirm that the only check box selected in the **Authentication Methods** dialog box is **Basic Authentication**.
 - 8. Click OK.

Next, configure security for the DNS MPS provider.

Note: In the following procedure, you will set the MPS Provider to use HTTP and Port 80 to communicate with the MPS DNS client. Do not attempt to configure SSL security at this time; in a later procedure, you will add a web server certificate for use with Exchange Outlook Web Access on this web server.

- Procedure DCS.4: To configure the DNS provider security settings
 - 1. Log onto the MPS Engine server (<u>MPSSQL01</u>) as a member of the Domain Administrators group.
 - 2. Launch Explorer and navigate to the following directory: <installpath>\Program Files\Microsoft Hosting\Provisioning\DNS Provider.
 - 3. Right-click the file named DNSProvider.dll.config and then click Properties.
 - 4. Clear the Read-only check box, and then click OK.
 - 5. Edit the file named **DNSProvider.dll.config** in Notepad.
 - 6. Change the **remotingProtocol** value to equal **http**.
 - 7. Change the **remotingPort** value to equal **80**.
 - 8. Save the file.
- ▶ Procedure DWSPV.56: To add the MPFServiceAcct to the DNSAdmins group
 - Perform this procedure on **AD01**.

Build Monitoring Infrastructure

With the Hosted Messaging and Collaboration v4.0 documentation file , navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build Monitoring

Build MOM Database and Management Servers

Begin the monitoring component deployment by building MOM database and management servers.

Prepare the MOM Server

-] ▼ Skip procedures DWM.1-6.
 - ▶ Procedure DWM.7: To install IIS and ASP.NET on MOM01

Server Reminder: Perform this procedure on MPSSQL01.

Create Service Accounts

- Procedure DWM.8: To create the MOMService account on a computer that is a domain controller
 - ▶ Procedure DWM.9: To create the MOMAction account on a computer that is a domain controller
 - ► Procedure DWM.10: To create the MOMActionAccts group and make it a member of the Local Administrators groups
 - ▶ Procedure DWM.11: To add MOMService to the Administrators group on MPSSQL01
 - ► Procedure DWM.12: To add the MOMService and MOMAction accounts to the Windows-based Hosting Service Accounts group
- **Skip procedures DWM.13–14.** SQL Server 2005 and SQL Server 2005 SP1 have already been installed on MPSSQL01.

Install MOM

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Note: The Microsoft Solution for Hosted Messaging and Collaboration version 4.0 documentation describes an installation of MOM 2005 which has the roles of Database Server and Management Server split between two different physical computers. However, in the Consolidated Server architecture, you will be combining the roles. Therefore, you will use the steps below to install MOM on MPSSQL01.

▼ Skip Procedure DWM.15-16. Instead, follow the instructions below

Important: When installing MOM 2005, use the slipstream version of the software, which includes MOM 2005 Service Pack 1.

▶ Procedure DCS.5:To install MOM 2005 with SP1 on MPSSQL01

- 1. Log on to MPSSQL01 using the MOMService account.
- 2. Close all applications.
- 3. On the MOM 2005 with SP1 Slipstream media, run Setup.exe. The Microsoft Operations Manager 2005 Setup Resources screen will appear.
- 4. Click Install Microsoft Operations Manager 2005.
- 5. On the Microsoft Operations Manager Setup Welcome page, click Next.
- 6. Read the **Microsoft Operations Manager Setup License Agreement**. To continue with the installation, select **I accept the terms in the license agreement**, and then click **Next**.
- 7. On the **Microsoft Operations Manager Setup Product Registration Information** page, type your information in the **User name** and **Organization** text boxes.

- 8. The product key should already be entered and appear dimmed if the MOM media is Microsoft Select media. If no product key appears, then locate the product key information on the MOM media. Type the key, and then click **Next** to continue.
- 9. On the Installation Options page, choose Typical, and then click Next.
- 10. On the Prerequisite Check Passed screen, click Next.
- 11. On the SQL Server Database Instance screen, select MPSSQL01 and click Next.
- 12. On the Database and Log File Options screen, set the database size to 500MB, and click Next.
- 13. On the Management Group Name page, specify <u>fabrikam</u>, and then click Next.
- 14. On the Management Server Action Account page:
 - a. For User Account, enter MOMAction.
 - b. Type the password for **MOMAction**.
 - c. Ensure that the **fabrikam** domain is selected. Click **Next**.

Note: You will receive an **Action Account Warning** box when Setup detects that the MOMAction account belongs to the domain administrators group. For this reference architecture you can safely ignore this warning.

If or more information about the Management Server Action

Account, review the N <u>Microsoft Operations Management 2005 Security Guide</u> for the security requirements and implications.

- 15. On the Warning page, click Next.
- 16. On the Data Access Server Account page:
 - a. For User Account, enter MOMService.
 - b. Type the password for **MOMService**.
 - c. Ensure that the <u>fabrikam</u> domain is selected. Click Next.
- 17. On the **Licenses** page, type the number of MOM management licenses your organization has acquired. For the purposes of this lab, type **6**, and then click **Next**.
- 18. On the MOM Error Reporting page, click Next.
- 19. On the Active Directory Configuration page, select Yes, all the computers are in Active Directory domains that trust each other. Click Next.
- 20. On the **Ready to Install** page, click **Install**.
- 21. When the installation has completed, click **Finish**.

Postinstallation Tasks

- Procedure DWM.17: To enable execution of custom responses on the MOM Management Server
 - Procedure DWM.18: To install the Hosting Solutions Management Pack files
- ► Procedure DWM.19: To import the Hosting Solutions Management Packs
- Skip Procedure DWM.20: To move MOM01 to the Management OU
 - ▶ Procedure DWM.21: Run the MOM Agent Wizard to create a Computer Discovery Rule
- Skip Procedure DWM.22. ▼

- ▼ Skip Procedures DWM.23–26. You will not perform the following actions:
 - To disable the Reject new manual agent installations setting
 - To add hosts file entries for MOM01 on your DNS Server
 - To install MOM agents manually
 - To approve the manually installed agents
- ► (Optional) Configure MOM as a Notification Engine

Build Reporting Infrastructure

With the Hosted Messaging and Collaboration v4.0 documentation file , navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build Reporting

Install SQL Server Reporting Services Components

In these procedures, you will prepare for and install SQL Server 2005 Reporting Services on MPSSQL01.

Prepare for Installing SQL Server Reporting Services

▼ Skip procedures DWR.1.

Disable the Loopback Check on MOMSQL01

Procedure DWR.2: To disable the loopback check on MOMSQL01

Server Reminder: Perform this procedure on MPSSQL01.

Important: You must complete Procedure DWR.2, and reboot MPSSQL01, before you will be able to successfully install Reporting Services.

Install SQL Server Reporting Services

▶ Procedure DWR.3: To install SQL Server 2005 Reporting Services

Reapply SQL Server 2005 Service Pack 1

Procedure DWR.4: To reinstall SQL Server 2005 Service Pack 1

Install Hotfixes for SQL Server Reporting Services

- ▶ Procedure DWR.5: To install MOM hotfixes for SQL Server Reporting Services
 - KB 913812 to resolve the "Unable to discover computers in AD after upgrading to .NET Framework 2.0": <u>KB91382 hotfix</u>.
 - KB 913801 to resolve the "Deadlocks may occur with MOM 2005 SP1 on SQL 2005": <u>KB913801</u> <u>hotfix</u>.

Configure the SQL Server 2005 Report Server

- Procedure DWR.6: To configure the SQL Server Report Server
 - In Step 2, ensure that the Machine Name is MPSSQL01.
 - In Step 13, specify MPSSQL01 as the Server Name

Install MOM 2005 Reporting

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- Procedure DWR.7: To grant write access for Network Service to the Temporary ASP.NET Files folder on MPSSQL01
 - Procedure DWR.8: To open Internet Explorer and connect to http://MPSSQL01/ReportServer
 - In Step 2, specify <u>http://MPSSSQL01/ReportServer</u>..
- □ ► Procedure DWR.9: To install MOM 2005 Reporting
 - In Step 7and 9, ensure that the Server Name is MPSSQL01.
 - In Step 10, specify MPSSQL01 as the SQL Server Instance name
 - ▶ Procedure DWR.10: To install Hotfix 915785 for SQL Server Reporting Services

Create the Performance Warehouse Database (PWDB)

Server Reminder: Perform this procedure on MPSSQL01.

- Procedure DWR.11: To install the files for the PWDB40 database
- Procedure DWR.12: To create the PWDB40 database
- Procedure DWR.13: To grant the MOMService user the db_datareader role for the PlanManager database on MPSSQL01
- Procedure DWR.14: To install the files for the PWDB40 SSIS
 - Procedure DWR.15: To install the PWDB40 SSIS package
 - In Step 8, specify MPSSQL01 as the value of ProvisionSourceDbDataConnection ServerName

Property	Value
\Package.Connections[ProvisionSourceDbDataConnection].Properties[ServerName]	MPSSQL01

▶ Procedure DWR.16: To schedule the PWDB40 SSIS package on MPSSQL01

In Step 5, selecty MPSSQL01 from the drop-down list as the Server name

Install the Hosting Solutions Reports

- Procedure DWR.17: To install the Hosting Solutions Report files on MPSSQL01
 - ► Procedure DWR.18: To deploy the Hosting Solutions Reports on MPSSQL01
 - In Step 4, Open a browser to http://mpssql01/reports to verify

Move the MOM Reporting Server to the Management OU

Skip Procedure DWR.19. ▼

Build ISA Server 2006

With the Hosted Messaging and Collaboration v4.0 documentation file , navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build ISA Server 2006

Prepare the Configuration Storage Server, ISACS01

In this consolidated guide, we install ISA configuration storage server and ISA firewall server on the same server **ISA01**, so we skip the below procedures.

Skip Procedure DWISA.1-10. ▼

Prepare the Firewall Server

- ▶ Procedure DWISA.11: To install Windows Server 2003 R2 on ISA01
- ▶ Procedure DWISA.12: To prepare ISA01
- ▼ Skip Procedure DWISA.13-19.

- ▶ Procedure DCS.6: To install ISA Server 2006 on ISA01
 - 1. Log on to ISA01 using the local Administrator account.
 - 2. Insert the ISA Server CD into the CD drive, or run ISAautorun.exe from the shared folder.
 - 3. In Microsoft ISA Server Setup, click Install ISA Server.
 - 4. After the setup program prompts that it has completed determining the system configuration, on the **Welcome** page, click **Next**.
 - 5. If you accept the terms and conditions stated in the user license agreement, click **I accept the terms in the license agreement**, and then click **Next**.
 - 6. Enter your customer details, and then click Next.
 - 7. On the Setup Scenarios page, select Install ISA Server Services and Configuration Storage server, and then click Next.
 - 8. On the Component Selection page, review the settings, and then click Next.
 - 9. On the Enterprise Installation Options page, specify Create a new ISA Server enterprise, and then click Next.
 - 10. On the New Enterprise Warning page, click Next.
 - 11. On the **Internal Network page**, specify the IP address range that will constitute the Internal network for this array. You can map your internal network to an enterprise network:
 - a) Click Add to open the Addresses dialog box.
 - b) Click Add Network.
 - c) Select Internal (the name of the enterprise network you created earlier), and then click OK.
 - d) In the Addresses dialog box, click OK.
 - 12. On the Firewall Client Connections page, click Next.
 - 13. On the **Services Warning** page, review the list of services that will be stopped or disabled during installation of ISA Server. To continue the installation, click **Next**.
 - 14. You may see a System Policy Configuration screen, click Next.
 - 15. Click Install.

Note:

During the installation, you may asked to insert the windows Server 2003 R2 Disc 2 to update the ADAM Application.

- 16. After the installation is complete, click Finish.
- 17. You may be prompted to restart the computer. Even if you are not prompted, reboot ISA01.

Configuring ISA Server 2006 Firewall Rules

- ▶ Procedure DWISA.20: To create the Internal DNS Server to Forwarder Rule
- ▶ Procedure DWISA.21: To create a Web access rule
- ▶ Procedure DWISA.22: To create a SharePoint Publishing Rule
- ▼ Skip Procedure DWISA.23.

Build the Services

With the Hosted Messaging and Collaboration v4.0 documentation file open, navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build the Services

This section provides procedures required to build the services for Microsoft Solution for Hosted Messaging and Collaboration version 4.0. When you perform the following procedures you should always log on using an account that is a member of the Domain Administrators group. You will be informed if a procedure requires you to log on to a local account instead.

Build Hosted Exchange

This section walks you through the deployment of the Microsoft Exchange Server 2007 servers.

Extend the Maximum Number of Global Address Lists

- ▶ Procedure DWHE.1: To extend the maximum number of Global Address Lists
- ▶ Procedure DWHE.2: To run Exchange Server 2007 PrepareSchema
- Procedure DWHE.3: To run PrepareAD
- ▶ Procedure DWHE.4: To verify that Active Directory has been prepared for Exchange Server 2007

Deploy Exchange Servers 2007 Server Roles

Deploy the CSA &UM&HT Server Roles

- ▶ Procedure DWHE.5: To install Windows Server 2003 R2 on ExCASUM01
- Procedure DWHE.6: To prepare the server
- Procedure DWHE.7: To add the server to the Fabrikam domain and log on as the Domain Administrator
- Procedure DWHE.8: To install Exchange 2007 Prerequisites
- Procedure DWHE.9: To run Exchange Server 2003 Setup (Client Access)
- Procedure DWHE.10: To verify successful installation
 - Procedure DWHE.11: To access Event Viewer
 - Procedure DWHE.12: To review the Setup Log Files
 - ▼ Skip Procedure DWHE.13-17.
 - Procedure DWHE.18: To run Exchange Server 2003 Setup (Hub Transport)
 - ▶ Procedure DWHE.19: To verify successful installation
 - Procedure DWHE.20: To access Event Viewer
 - Procedure DWHE.21: To review the Setup Log Files
 - ▼ Skip Procedure DWHE.22.

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Deploy the Edge Transport Server Role

- Procedure DWHE.23: To install Windows Server 2003 R2 on ExEdge01
 - Procedure DWHE.24: To prepare the server
 - ▶ Procedure DWHE.25: To install Exchange Server 2007 Prerequisites
 - Procedure DWHE.26: To configure the DNS suffix
 - Procedure DWHE.27: To create a Host record for the Edge Server on AD01
 - Procedure DWHE.28: To run Exchange Server 2003 Setup (Edge Transport)
 - Procedure DWHE.29: To verify successful installation
- Procedure DWHE.30: To access Event Viewer
 - Procedure DWHE.31: To review the Setup Log Files

Deploy a Cluster Continuous Replication Mailbox

▼ Skip Procedure DWHE.32-62.

Deploy the Standalone Mailbox Server Role

▶ Procedure DWHE.63: To install Windows Server 2003 R2 on ExMBX01

Server Reminder: Perform this procedure on ExMBX01.

- Procedure DWHE.64: To review the Setup Log Files
 - Procedure DWHE.65: To access Event Viewer
 - Procedure DWHE.65: To add this server to the Fabrikam domain and log on as the domain administrator
 - ▶ Procedure DWHE.66: To install Exchange Server 2007 prerequisites
 -] ► Procedure DWHE.67: To run Exchange Server 2007 Setup
 - Procedure DWHE.68: To verify successful installation
 - Procedure DWHE.69: To access Event Viewer
 - Procedure DWHE.70: To review the Setup Log Files
 - ▼ Skip Procedure DWHE.71.

Configure the Client Access Servers

Server Reminder: Perform this procedure on ExCAS01. Procedure DWHE.72: To configure POP and IMAP services to start automatically Procedure DWHE.73: To configure forms-based authentication and UPN logon for OWA Procedure DWHE.74: To verify that the Windows RPC over HTTP Proxy network component is installed Procedure DWHE.75: To enable Outlook Anywhere and RPC over HTTP Procedure DWHE.76: To assign two new unique IP addresses to the EXCASUM01 machine \square ▶ Procedure DWHE.77: To create the autodiscover DNS record \square Procedure DWHE.78: To create the autodiscoverredirect DNS record \square Procedure DWHE.79: To create a new Web site for AutoDiscover Redirection \square

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- □ ► Procedure DWHE.80: To create the AutoDiscover virtual directory for the new Web site for AutoDiscover Redirection
- Procedure DWHE.81: To create the AutoDiscover.xml file for the new Web site for AutoDiscover Redirection
- Procedure DWHE.82: To configure the AutoDiscover.xml file for redirection
- Procedure DWHE.83: To create a new Web site for the AutoDiscover service
- Procedure DWHE.84: To use the Exchange Management Shell to configure a new Web site for the AutoDiscover service
- Procedure DWHE.85: To configure the Exchange Services for the Autodiscover Service
- Procedure DWHE.86: To request and import an SSL certificate for the Default Web Site
- Procedure DWHE.87: To request and import an SSL certificate for the AutoDiscover Web Site

Configure the Unified Messaging Server

- ▶ Procedure DWHE.88: Procedure DWHE.88: To verify that Unified Messaging is enabled
- Procedure DWHE.89: To create a Unified Messaging IP gateway definition

Configure the Edge Servers

- ▶ Procedure DWHE.90: To export the EdgeSync subscription file
- Procedure DWHE.91: To configure External Name Resolution on the Edge Transport server
- Procedure DWHE.92: To verify name resolution between the Hub Transport server and Edge Transport server
 - ▶ Procedure DWHE.93: To create the EdgeSync Subscription on the Hub Transport Server
 - Procedure DWHE.94: To add an accepted SMTP domain
 - Procedure DWHE.95: To manually trigger Edge Synchronization

Deploy Provisioning for the Hosted Exchange Services

- Procedure DWHE.96: To install Exchange Server 2007 Prerequisites on the Provisioning Engine servers
- Procedure DWHE.97: To install the Exchange Server 2007 Management Tools on the Provisioning Engine servers

Note: You have to go to Microsoft site to download 32-bit Management tools

Microsoft Exchange Server 2007 32-bit Management tools

http://www.microsoft.com/downloads/details.aspx?FamilyID=6be38633-7248-4532-929b-76e9c677e802&displaylang=en

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- ► Procedure DWHE.98: To deploy Hosted Exchange Provisioning
- Procedure DWHE.99: To configure Hosted Exchange Provisioning
- ▶ Procedure DWHE.100: To configure MPSExchangeAccts as an OrganizationAdmin

Configure Exchange Server 2007 Resource Management

- □ ► Procedure DWHE.101: To configure Storage Groups and Databases on ExMBX01
- Procedure DWHE.102: To configure Storage Groups and Databases on ExMBX01
 - Procedure DWHE.103: To restart the Information Store service on each Mailbox Server
 - Procedure DWHE.104: To add Mailbox and Public Folder databases to Resource Manager
 - Procedure DWHE.105: To add an OAB server to Resource Manager
 - Procedure DWHE.106: To install the Hosted E-mail OAB Update batch application
 - Procedure DWHE.107: To configure security access for the Hosted E-mail OAB Update batch application registry keys
 - Procedure DWHE.108: To add the MPSOabRebuildAcct to the MPFClientAccts group
 - Procedure DWHE.109: To configure security access for the Hosted E-mail OAB Update batch application local resources
 - Procedure DWHE.110: To configure optional settings for the Hosted E-mail OAB Update batch application
 - ▶ Procedure DWHE.111: To execute Hosted E-mail OAB Update from a command line
 - ► Procedure DWHE.112: To create a scheduled task to run Hosted E-mail OAB Update daily

Deploy the RPC over HTTP Client Configuration Web Site

- Procedure DWHE.113: To install the RPC over HTTP Client Configuration Web site
- ▶ Procedure DWHE.113.1: To secure the RPC over HTTP Client Configuration Web site

Install and Configure Exchange Server 2007 Monitoring and Data Collection

- ▶ Procedure DWHE.114: To install the Exchange Server 2007 Management Pack on MOM01
- □ ► Procedure DWHE.115: To create a test mailbox for OWA, ActiveSync, and Exchange Web Services connectivity monitoring
 - ▶ Procedure DWHE.116: To enable external Outlook Web Access connectivity monitoring
 - ► Procedure DWHE.117: To add the MOMService user account as a member of the MPSExchangeAccts group
 - ▶ Procedure DWHE.118: To install the Exchange data collection application
 - ▶ Procedure DWHE.119: To modify the ExchangeServerNames.xml file
 - ▶ Procedure DWHE.120: To create a scheduled task to run the data collection application
 - ► Procedure DWHE.121: To add the MOMActionAccts group to the Local Administrators group on each Exchange server

(Optional) Add a New Exchange Mailbox Server

We skip this Section.

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▼ Skip Procedure DWHE.122-126.

Build Windows SharePoint Services Hosting

With the Hosted Messaging and Collaboration v4.0 documentation file open, navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Build Windows SharePoint Services Hosting.

Configure Domain Accounts for Windows SharePoint Services Processes

Serv	Server Reminder: Perform this procedure on FE01.		
	 Procedure DWSH.1: To create service accounts for Windows SharePoint Services Skip Procedure DWSH.2-7. 		
	 Procedure DWSH.8: To install Microsoft .NET Framework 3.0 Redistributable Package on FE01 Skip Procedure DWSH.9-14. 		
	Procedure DWSH.15: To install Windows SharePoint Services 3.0 on FE01		
	Procedure DWSH.16: To configure Windows SharePoint Services		
	Procedure DWSH.17: To prevent the event ID error messages from being logged in the System log		
	 Procedure DWSH.18: To configure the Windows SharePoint Services Search Service In Step 3, click FE01 		
	Procedure DWSH.19: To create a new Web application using SharePoint 3.0 Central Administration		
	In Step 7, click FE01		
	▼ Skip Procedure DWSH.20.		
Serv	ver Reminder: Perform this procedure on MPSSQL01.		
	Procedure DWSH.21: To install the Windows SharePoint Services 3.0 Management Pack on MPSSQL01		
	Procedure DWSH.22: To grant the SharePoint_AppID user the db_owner role for the PWDB40 database on MPSSQL01		
	In Step 1, specify MPSSQL01 as the server name		
	Procedure DWSH.23: To enable SharePoint Usage Analysis Processing		
	Procedure DWSH.24: To install the Windows SharePoint Services data collection application		
	Procedure DWSH.25: To create a scheduled task to run the data collection application		
	 In Step 8, In the Task tab, on the Run line, change the line to append -d PWDB40 -s MPSSQL01 		
	▼ Skip Procedure DWSH.26: We have already done this.		
	Procedure DWSH.27: To deploy Windows SharePoint Services Hosting		
	Procedure DWSH.28: To install the Windows SharePoint Services Web Service		
	► Procedure DWSH.29: To configure the MPSSharePointAccts group as SharePoint Farm Administrator		
	Procedure DWSH.30: To grant the MPSPrivAcct-xxxxxx full control of the Web Application		
	Procedure DWSH.31: To add the MPSSharePointAccts group to the Local Administrators group on FE01		
	Procedure DWSH.32: To configure external name resolution for Windows SharePoint Services provisioning		

Run the Infrastructure

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With the Hosted Messaging and Collaboration v4.0 documentation file open, navigate in the left-hand table of contents to the following section:

Microsoft Solution for HMC version 4.0 > Deployment Walkthrough > Build the Infrastructure > Run the Infrastructure.

Add the Sample Hosted E-mail Organization Plans

- Procedure RUN.1: To add the sample Hosted E-mail Organization Plans
- Procedure RUN.2: To add the sample Hosted E-mail User Plans

Deploy and Configure the Sample Provisioning UI

- Procedure RUN.3: To deploy the sample provisioning UI
- Procedure RUN.4: To configure the Sample Provisioning UI

Deploy and Configure the Sample Provisioning SignUp UI

- Procedure RUN.5: To deploy the sample provisioning SignUp UI
- Procedure RUN.6: To configure the Sample Provisioning UI
- ▶ Procedure RUN.7: To configure the HostedSignUP Web Service
- ▶ Procedure RUN.8: To initialize the Hosted SignUp namespace

Configure a Reseller Organization

In these procedures, you configure a new reseller organization for a reseller who will offer hosted services to customers.

Create the DNS Zone for a Reseller Organization

Procedure RUN.9: To create the <u>consolidatedmessenger</u>.com zone

Server Reminder: Perform this procedure on FE01.

▶ Procedure RUN.10: To create records in the reseller organization DNS zone

Perform this procedure on FE01, using the entries in Table

DCS.3. Table DCS.3: consolidatedmessenger.com Host Records

Entry	Address
www.consolidatedmessenger.com	IP address of FE01
mail.consolidatedmessenger.com	IP Address of EXCAS01
smtp.consolidatedmessenger.com	IP Address of EXCAS01
smtpEDGE.consolidatedmessenger.com	IP Address of EXEdge01
webmail.consolidatedmessenger.com	IP Address of EXCAS01

- ▶ Procedure RUN.11: To create the autodiscoveryredirect DNS record
- ▶ Procedure RUN.12: To create the autodiscover DNS record

- Procedure RUN.13: To create a reseller organization using Provtest
- □ ► Procedure RUN.14: To verify the creation of the reseller organization
 - Procedure RUN.15: To create a reseller organization admin using Provtest
 - ▶ Procedure RUN.16: To verify the creation of the Reseller Organization Admin

Create the Consumer OU and Admin User

- Procedure RUN.17: To create the litwareinc.com zone
- ▶ Procedure RUN.18: To create an MX record in the consumer organization DNS zone
- Procedure RUN.19: To create a consumer organization using Provtest

Server Reminder: Perform this procedure on MPSSQL01.

- ▶ Procedure RUN.20: To verify the creation of the consumer organization
- Procedure RUN.21: To subscribe the consumer organization to hosted e-mail using Provtest
 -] ▶ Procedure RUN.22: Add an available Mailbox plan to the Consumer Organization
- ▶ Procedure RUN.23: To add an SMTP domain to the Consumer Organization
- Procedure RUN.24: To add a consumer user using Provtest
- Procedure RUN.25: To mail-enable the consumer user using the Sample Provisioning UI
- Procedure RUN.26: To log on as the consumer user using Outlook Express
- Procedure RUN.27: To add a vanity domain to a consumer user using Provtest
- Procedure RUN.28: To create the wingtiptoys.com zone
 - Procedure RUN.29: To create an MX record in the vanity domain DNS zone
 - ▶ Procedure RUN.30: To verify consumer user vanity domain configuration

Important: Take note of the password which gets set by the CreateConsumerUser.xml and CreateResellerOrganizationAdmin.xml file. You will need this password when you configure security for the Hosted Exchange Consumer Sample Web Service.

Create a Business Organization

- Procedure RUN.31: To create the alpineskihouse.com zone
 - Procedure RUN.32: To create an MX record in the business organization DNS zone
- Procedure RUN.33: To create an autodiscover record in the business organization DNS zone
- Procedure RUN.34: To create the AlpineSkiHouse business organization
- Procedure RUN.35: To create the AlpineSkiHouse business organization admin
- Procedure RUN.36: To subscribe the business organization to Hosted E-mail using the Sample Provisioning UI
- □ Procedure RUN.37: To add available user plans to the AlpineSkiHouse organization
 - Procedure RUN.38: To create an SMTP Domain for the AlpineSkiHouse organization

- Procedure RUN.39: To mail-enable the business admin using the Sample Provisioning UI
- Procedure RUN.40: To create an AlpineSkiHouse business organization user
- Procedure RUN.41: To mail-enable the business user using the Sample Provisioning UI
- Procedure RUN.42: To log on as the business user using OWA

- ▶ Procedure RUN.43: To upsell the business user to a Rich-Mail plan using Provtest
- ► Procedure RUN.44: To log on as the business user using Outlook Web Access and verify the plan upsell

Deploy the RPC over HTTP Client Configuration Web Site

- ▶ Procedure RUN.45: To configure Outlook 2003 for RPC-HTTP using the RPC-HTTP script
- ▶ Procedure RUN.46: To install the PRF registry settings
- ▶ Procedure RUN.47: To log on to Outlook 2003 and connect to Exchange using RPC-HTTP

Create a Windows SharePoint Services Site for the Business Organization

- ▶ Procedure RUN.48: To configure DNS for the SharePoint site using Provtest
- ▶ Procedure RUN.49: To add a Windows SharePoint Services Plan using the Sample Provisioning UI
- ► Procedure RUN.50: To create a Windows SharePoint Site using the Sample Provisioning UI
- ▶ Procedure RUN.51: To log on to the SharePoint site as the Business Organization Admin