Transfer Exchange 2003 to Exchange 2007 (Part 1)

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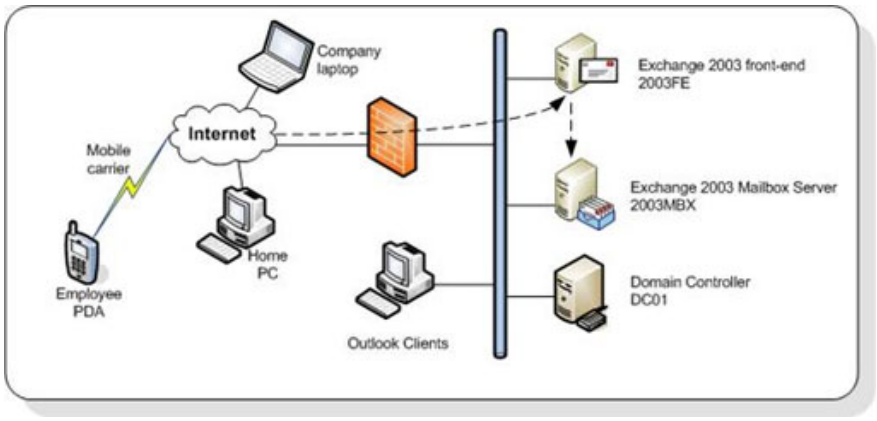
The main purpose of the article is to provide you with the most accurate order of installing the servers, instructing the method of installing the servers, performing some necessary configuration and solving some problems. problems encountered during the conversion process.

System structure

Exchange Server 2003 system is a fairly typical system including two Exchange 2003 back-end servers (base) and an Exchange 2003 front-end server (peripheral). Although two back-end servers are separate physical servers, the decision to migrate them to Clustered Continuous Replication (CCR) environment in Exchange 2007 as essential mail servers for the business. The new Edge Transport server will be used to replace an outdated MailSweeper server. An existing ISA server is still reused to provide some flexible tools such as Outlook Web Access (OWA), Exchange ActiveSync (EAS), . to allow users to access the mailbox even when they are not connected. directly connected to the corporate intranet.



In addition to the Mailbox server, the Hub Transport server and Client Access server now have the High Availability feature. As you know, fault tolerance and redundancy are built into the Hub Transport server by default so you can use two Hub Transport servers. However, the default Redundancy configurations do not work with Client Access servers that are usually implemented through additional tools such as hardware and software load balancing tools. But in fact, only OWA and EAS are used by remote users, and both of these tools are developed based on Hypertext Transfer Protocol (HTTP - Hypertext Transfer Protocol) that helps use ISA server

to perform load balancing for Client Access server. To reduce the number of servers needed, two Hub Transport servers and Client Access servers are combined as a single server and this server is used to perform Fault Tolerance and Redundancy functions.

The server that combines Hub Transport and Client Access as well as the Edge Server server is used on virtual servers. These two Cluster Nodes (including Hub Transport - Client Access, and Edge Server) will use physical hardware. Some server names are used in the series including:

1. **NODE1** and **NODE2** . *This is the name of the two existing Cluster Nodes.*
2. **CLUSTER1** . *This is the name of the Cluster.*
3. **EX2007** . *Although the two cluster nodes are called NODE1 and NODE2, and the cluster is called CLUSTER1, none of these names are used by Outlook. Outlook uses only the name associated with the Clustered Mailbox Server name (CMS), and in this case EX2007.*
4. **HUBCAS1** and **HUBCAS2** . *This is the name assigned to the servers that combine Hub Transport and Client Access.*

In this series, all servers will be installed manually instead of using the command method. Manual methods proved to be more effective with systems with few servers.

Prepare the server

All servers in use have been installed with Windows 2003 operating system, related service packs and updates. In addition, all servers have been correctly configured, such as the names of servers, domain members and drive labels, etc. Other settings need to be applied to all servers including:

1. Page File (page file remember). Microsoft states that if the server has less RAM than 8GB, you need to set the Page File size to 1.5 * [RAM capacity]. If the server has 8GB or more of RAM, the Page File size is 10MB + [RAM capacity]. And all servers must be installed in accordance with this rule.

2. Another thing to note about Page File is that you have a dedicated Page File drive. In those cases, you need to make sure that the Page File of the drive containing the operating system is configured with 100MB capacity so that a kernel dump process can be performed.

3. SMTP and **NNTP** services should not be installed on these servers because they will prevent the installation of Exchange 2007.

4. Size of the **Event Log** file of the application. Before installing Exchange 2007, every Event Log file must be at least 40MB in size, and configure the ***Overwrite events as needed option*** (override the event if necessary). The **Exchange Best Practices Analyzer** (ExBPA) fixes this problem, so it is necessary to configure the application Log file size in advance.

The first servers installed on the current Exchange system are the servers that combine Hub Transport and Client Access. Before installing these servers you need to install the following necessary components first:

1. **NET Framework** .
2. **Windows PowerShell** .
3. **World Wide Web Publishing service** of IIS.

4. **RPC** on **HTTP Proxy** service. Because **Outlook Anywhere** will be used, the **Client Access** server needs this component's support.

When making the transition from Exchange 2003 to Exchange 2007, Microsoft proposed that users deploy Exchange 2007 servers in the following order:

1. **Client Access** server.
2. **Hub Transport** server.
3. **Mailbox** server.
4. **Unified Messaging** Server.

In this system, two Client Access servers and Hub Transport servers are combined into a single server, so the combined servers will be deployed first. In the list above you do not see an Edge Transport server, which is because this server exists on an external network, so it is not part of the internal Active Directory domain. You can install this server at any time, however, during the best deployment you should install it after installing the Hub Transport server to be able to perform the Edge Subscription process.

Prepare Active Directory schema

The preparation of the Active Directory schema must be a separate process unrelated to the installation of the first Exchange 2007 server. If you start installing the first Exchange 2007 server, the Active Directory schema will be updated automatically, but you have to choose to take this important step as a separate task. In addition, some attention should be paid to:

1. This schema is updated directly from the master schema now using 32 bit version of Windows 2003. Therefore you need to use the 32 bit version of Exchange 2007 SP1. Although Microsoft does not support the 32-bit version of Exchange 2007 SP1, Exchange 2007 SP1 is supported by Microsoft to extend the Active Directory schema.

2. The setup.com / PrepareDomain command is also run in the subdomain, since the root domain has been prepared in **setup.com/PrepareAD** process.

3. Exchange 2007 SP1 software is a secondary installation. In other words, this software is only used in the process of preparing the Active Directory schema and is also used to directly install the server in this system.

Conclude

In this first section, we only focus on building the situation for the next steps as well as the entire server preparation process. In Part 2, we will perform the installation of Hub Transport and Client Access, and then prepare the CCR environment.