

Prepare Active Directory for Exchange 2007 (Part 2)

In part one, we went over the first four steps to take to prepare the Active Directory schema to receive Exchange 2007.

In part one, we went over the first four steps to take to prepare the Active Directory schema to receive Exchange 2007.

>> Prepare Active Directory for Exchange 2007 (Part 1)

First we need to prepare the legacy permissions for Exchange in case the legacy versions of Exchange exist, such as Exchange 2000 or Exchange 2003. Also in part one we just run the setup / PrepareLegacyExchangePermissions command to display a The number of errors should be fixed before the preparation process is completed. These problems are displayed in the command window but there are a number of other methods to check what happened when running these prepared commands.

In this section we will focus on checking whether the process of preparing an Exchange heritage license is successful.

Install Log files

For every preparatory process that we will perform in this article, the Log files (logs) will be created and we can check after this process completes to see if an error occurs. The file to check is ExchangeSetup.log, created in the C: ExchangeSetupLogs folder as shown in Figure 1.

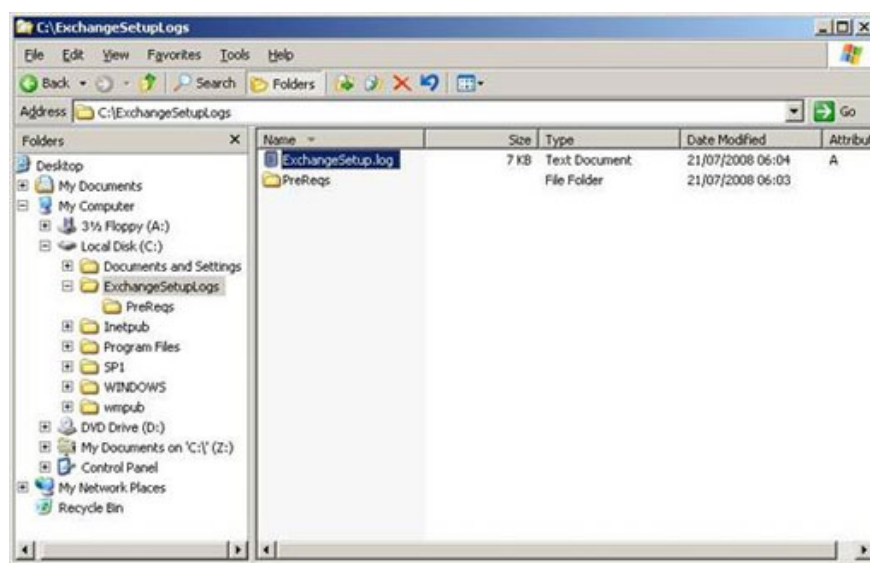
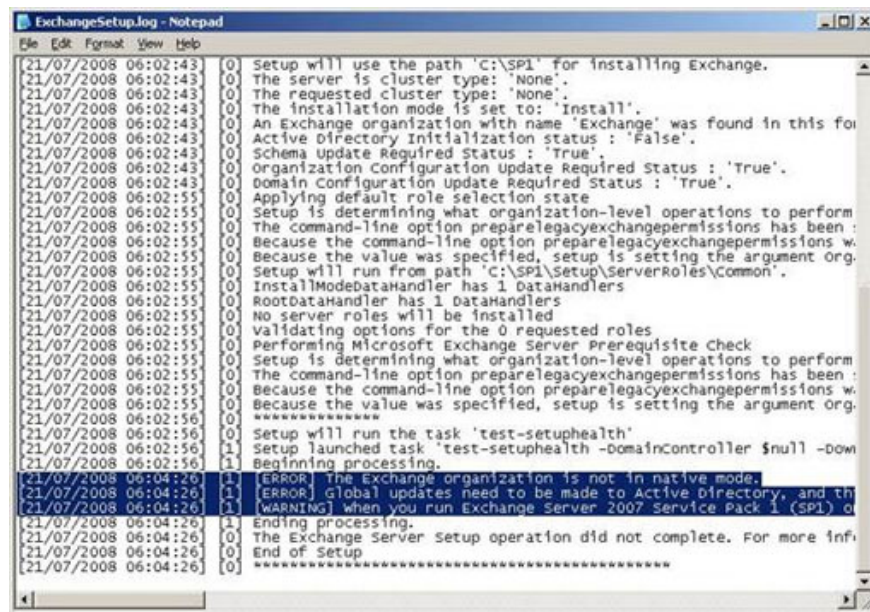


Figure 1: ExchangeSetupLog Folder.

If you open the ExchangeSetup.log file in Notepad, you will see the same errors and warnings in the text file that we have seen in the command window (in part one). These errors are highlighted in Figure 2.



```
ExchangeSetup.log - Notepad
File Edit Format View Help
(21/07/2008 06:02:43) [0] Setup will use the path 'c:\SP1' for installing Exchange.
(21/07/2008 06:02:43) [0] The server is cluster type: 'None'.
(21/07/2008 06:02:43) [0] The requested cluster type: 'None'.
(21/07/2008 06:02:43) [0] The installation mode is set to: 'Install'.
(21/07/2008 06:02:43) [0] An Exchange organization with name 'Exchange' was found in this folder.
(21/07/2008 06:02:43) [0] Active Directory Initialization status: 'False'.
(21/07/2008 06:02:43) [0] Schema update Required Status: 'True'.
(21/07/2008 06:02:43) [0] Organization Configuration Update Required Status: 'True'.
(21/07/2008 06:02:43) [0] Domain Configuration Update Required Status: 'True'.
(21/07/2008 06:02:55) [0] Applying default role selection state
(21/07/2008 06:02:55) [0] Setup is determining what organization-level operations to perform
(21/07/2008 06:02:55) [0] The command-line option preparelegacyexchangepermissions has been :
(21/07/2008 06:02:55) [0] Because the value was specified, setup is setting the argument org.
(21/07/2008 06:02:55) [0] Setup will run from path 'c:\SP1\Setup\ServerRoles\Common'.
(21/07/2008 06:02:55) [0] InstallModeDataHandler has 1 DataHandlers
(21/07/2008 06:02:55) [0] RootDataHandler has 1 DataHandlers
(21/07/2008 06:02:55) [0] No server roles will be installed
(21/07/2008 06:02:55) [0] Validating options for the 0 requested roles
(21/07/2008 06:02:55) [0] Performing Microsoft Exchange Server Prerequisite Check
(21/07/2008 06:02:55) [0] Setup is determining what organization-level operations to perform
(21/07/2008 06:02:55) [0] The command-line option preparelegacyexchangepermissions has been :
(21/07/2008 06:02:55) [0] Because the value was specified, setup is setting the argument org.
(21/07/2008 06:02:56) [0] *****
(21/07/2008 06:02:56) [0] Setup will run the task 'test-setuphealth'
(21/07/2008 06:02:56) [1] Setup launched task 'test-setuphealth -domaincontroller $null -down
(21/07/2008 06:02:56) [1] Beginning processing.
(21/07/2008 06:04:26) [1] [ERROR] The exchange organization is not in native mode.
(21/07/2008 06:04:26) [1] [ERROR] Global updates need to be made to Active Directory, and this
(21/07/2008 06:04:26) [1] [WARNING] when you run Exchange Server 2007 Service Pack 1 (SP1) o
(21/07/2008 06:04:26) [1] Ending processing.
(21/07/2008 06:04:26) [0] The Exchange Server Setup operation did not complete. For more info
(21/07/2008 06:04:26) [0] End of Setup
(21/07/2008 06:04:26) [0] *****
```

Figure 2: Errors displayed in the ExchangeSetup.log file.

You should note that some errors have hidden other errors that may appear in the legacy Exchange system. For example, when adding a current account to the Enterprise Admins group and moving the legacy Exchange system to a natural node, then run the **setup** command again.

/PrepareLegacyExchangePermissions will cause a new error as shown in Figure 3. It means that one or more Exchange 2003 servers in the legacy system have not installed Exchange 2003 SP2 version. Therefore you need to make sure that you have fully archived the legacy Exchange system and fixed any errors that may hinder the process of preparing legacy Exchange licenses before running this command. If you do not do so, you need to run this command repeatedly to detect any missing errors.



```
Command Prompt
C:\SP1>setup /PrepareLegacyExchangePermissions

Welcome to Microsoft Exchange Server 2007 Unattended Setup

Preparing Exchange Setup

No server roles will be installed

Performing Microsoft Exchange Server Prerequisite Check

Organization Checks ..... FAILED
When you run Exchange Server 2007 Service Pack 1 (SP1) on Windows Server 2003 o
r earlier versions of the operating system, we recommend that you install Micros
oft .NET Framework 2.0 Service Pack 1 (SP1). If you cannot install .NET Framewor
k 2.0 SP1, install hotfix Microsoft Knowledge Base article 942827 from http://go
.microsoft.com/fwlink/?linkid=181219.
The Exchange organization is not in native mode.

Global updates need to be made to Active Directory, and this user account is
not a member of the 'Enterprise Admins' group.

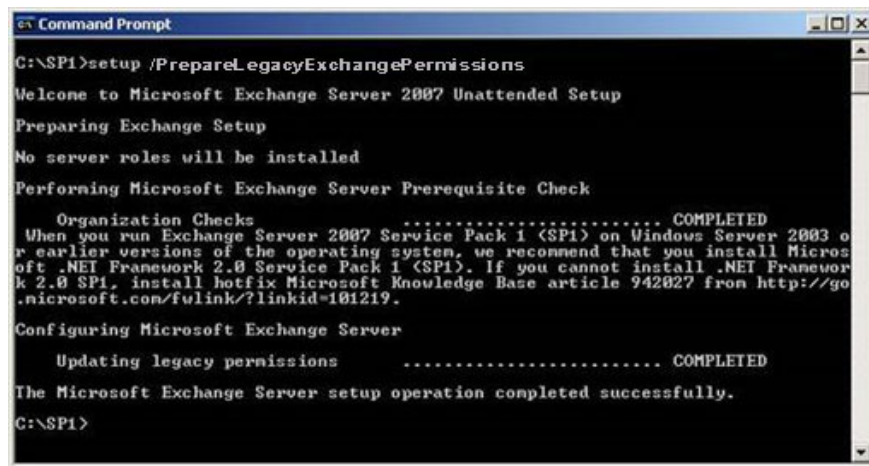
The Exchange Server Setup operation did not complete. For more information, visi
t http://support.microsoft.com and enter the Error ID.

Exchange Server setup encountered an error.

C:\SP1>
```

Figure 3: Error still exists in Exchange 2003 SP2.

Finally, you will be able to run the `setup /PrepareLegacyExchangePermissions` command successfully as shown in Figure 4. However, you should be aware of the warning that the .NET Framework 2.0 SP1 still exists and this warning is not true. obstructing the process.



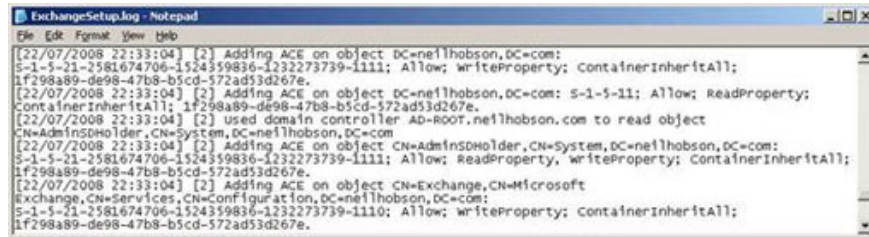
```
Command Prompt
C:\SP1>setup /PrepareLegacyExchangePermissions
Welcome to Microsoft Exchange Server 2007 Unattended Setup
Preparing Exchange Setup
No server roles will be installed
Performing Microsoft Exchange Server Prerequisite Check
  Organization Checks ..... COMPLETED
  When you run Exchange Server 2007 Service Pack 1 (SP1) on Windows Server 2003 or
  earlier versions of the operating system, we recommend that you install Microsoft
  .NET Framework 2.0 Service Pack 1 (SP1). If you cannot install .NET Framework
  2.0 SP1, install hotfix Microsoft Knowledge Base article 942027 from http://go
  .microsoft.com/fwlink/?linkid=101219.
Configuring Microsoft Exchange Server
  Updating legacy permissions ..... COMPLETED
The Microsoft Exchange Server setup operation completed successfully.
C:\SP1>
```

Figure 4: Heritage licensing process successfully completed.

Check out groups Permissions

Although we received a notice of successful implementation at the order window, how can we confirm that the process for preparing a legacy license has been successful? Remember that Log files are very useful in these cases as we mentioned in part one. First, go to the ExchangeSetup.log file and check for completed processes without errors.

Next, note that Microsoft provided detailed information on the Access Control Entries (ACE) that was added when doing this process. The other problem is how we can determine that these ACEs have been added. Please check the ExchangeSetup.log file created during the installation of legacy Exchange permissions. An excerpt of this file is shown in Figure 5. You need to install Notepad with the Word Wrap option to check all items in this Log file.



```
ExchangeSetup.log - Notepad
File Edit Format View Help
[22/07/2008 22:33:04] [2] Adding ACE on object DC=neilhobson,DC=com:
S-1-5-21-2581674706-1524359836-1232273739-1111; Allow; writeProperty; ContainerInheritAll;
1f298a89-de98-47b8-b5cd-572ad53d267e.
[22/07/2008 22:33:04] [2] Adding ACE on object DC=neilhobson,DC=com: S-1-5-11; Allow; ReadProperty;
ContainerInheritAll; 1f298a89-de98-47b8-b5cd-572ad53d267e.
[22/07/2008 22:33:04] [2] used domain controller ad-root.neilhobson.com to read object
CN=AdminSDHolder,CN=System,DC=neilhobson,DC=com
[22/07/2008 22:33:04] [2] Adding ACE on object CN=AdminSDHolder,CN=System,DC=neilhobson,DC=com:
S-1-5-21-2581674706-1524359836-1232273739-1111; Allow; ReadProperty; writeProperty; ContainerInheritAll;
1f298a89-de98-47b8-b5cd-572ad53d267e.
[22/07/2008 22:33:04] [2] Adding ACE on object CN=Exchange,CN=Microsoft
Exchange,CN=Services,CN=Configuration,DC=neilhobson,DC=com:
S-1-5-21-2581674706-1524359836-1232273739-1110; Allow; writeProperty; ContainerInheritAll;
1f298a89-de98-47b8-b5cd-572ad53d267e.
```

Figure 5: ACE items in ExchangeSetup.log.

What you see in Figure 5 is the different types of ACE applied. Checking the first item listed will show that the WriteProperty ACE has been added to the domain (DC = neilhobson, DC = com). Also examine the Globally Unique Identifier (GUID) you can see at the end of this section as you will see later in this article. This GUID is 1f298a89-de98-47b8-b5cd-572ad53d267e. If you check the end of this Log file, you can see that the ReadProperty and WriteProperty ACE has been applied to the AdminSDHolder object.

You can use LDP in the Windows Support Tools to check the ACEs complemented by the legacy license preparation process. In this article we will not go into the details of all additional ACEs, but focus on two of these ACEs including WriteProperty on the object domain and the ReadProperty / WriteProperty group on the AdminSDHolder object. First we will look at the ACE added to the object domain.

1. Run **LDP.EXE** .
2. At the **LDP** window, click on the **Connection** button and then click **Connect** .
3. In the **Connect** window, enter the name of the original **Domain Controller** and click **OK** as shown in Figure 6.



Figure 6: Connect window of LDP.

1. When returning to the main LDP window, click **Connection** and then click on **Bind** .
1. In the Bind window, enter the user name, password, and domain of a licensed user account, such as the administrator account of the root domain as shown in Figure 7.

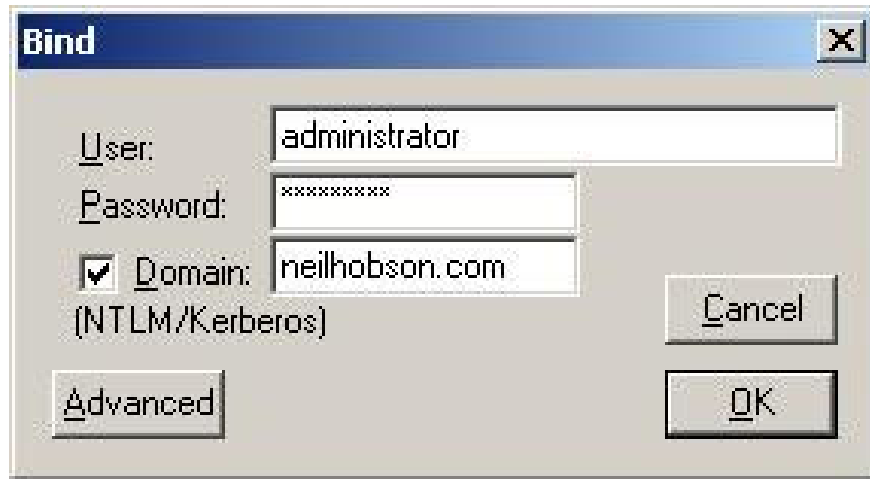


Figure 7: Bind window of LDP.

1. The table on the right will inform you that you have been authenticated. Click View then Tree, and in the **Tree View** window, leave the **BaseDN** field and click **OK**.
1. Back to the LDP main window you will see the root domain listed at the top of the left panel as shown in Figure 8.

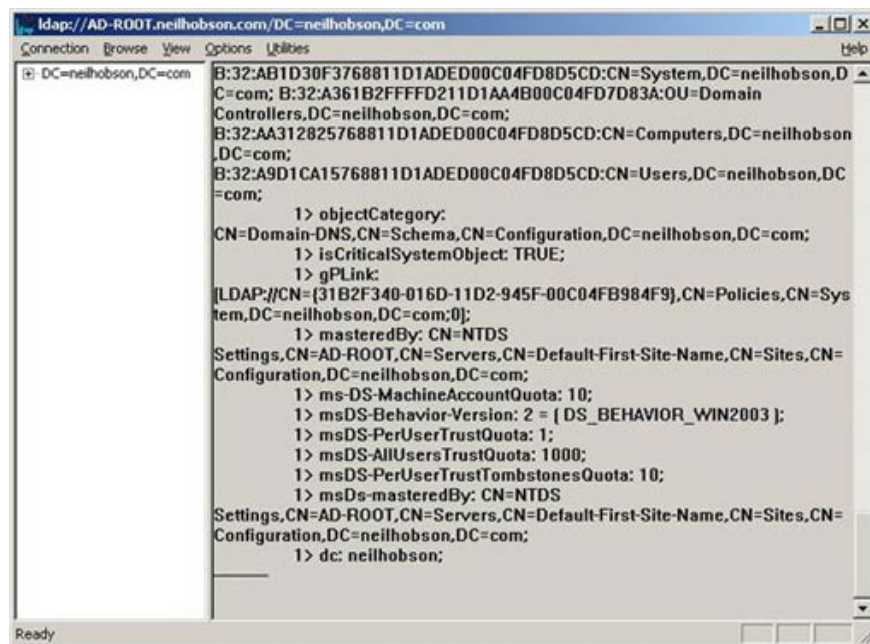


Figure 8: Tree View of LDP.

Before taking the next steps, you need to delete the information in the right panel by clicking **Connection** select **New** . Doing this makes it easier to read information in the next step.

1. Right-click on the top domain of the right panel and select **Advanced** , then **Security Descriptor** from the context menu will appear as shown in Figure 9.

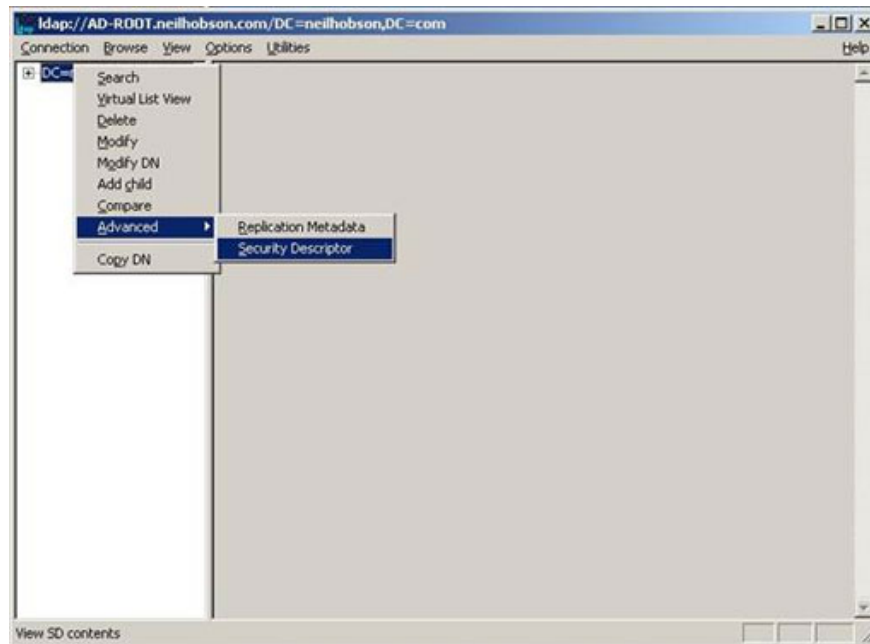


Figure 9: Options Security Descriptor.

1. In the results window of **Security Descriptor** , leave the **Dn** field **blank** and click **OK** .
1. The right panel will then contain more detailed information describing the ACE. In our example, there are a total of 40 ACE defined.

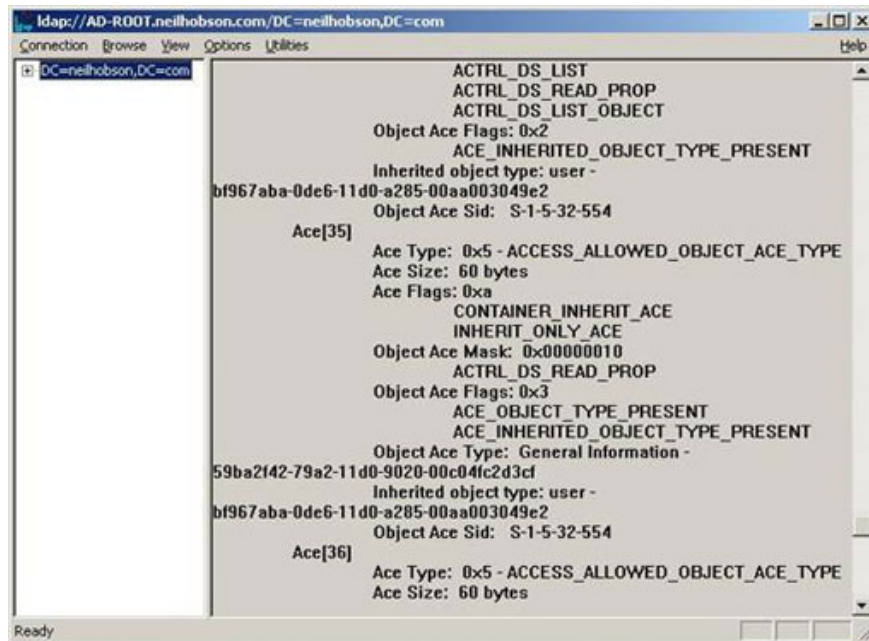


Figure 10: The ACE is displayed.

If you check the entire ACE list, you will see an item displaying the *Write WriteProperty* group on the object domain as shown in Figure 11. This is actually an *WriteProperty* ACE (via the *ACTRL_DS_WRITE_PROP* line) and that is the **Security Identifier** that accepts this item as the *Exchange* group . *Enterprise Servers* . Note that the GUID listed earlier is also displayed.

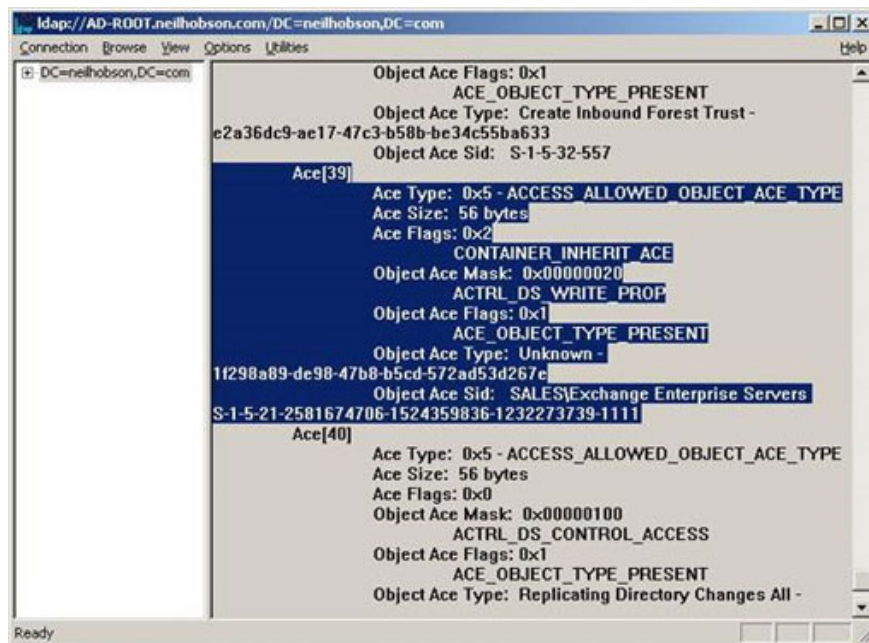


Figure 11: Domain ACE for the Exchange Enterprise Servers group.

Next, confirm whether you can see the ACE group on the AdminSDHolder object. Open LDP and then do the following:

1. Click **Connection** to select **New** to delete the right panel.
2. In the left panel, expand the object domain and then double-click the **System** object. Just inside the **System** object you will see the **AdminSDHolder** object.
3. Click **Connection** to select **New** to delete the right panel.
4. Right-click on the **AdminSDHolder** object, select **Advanced** and then select the **Security Identifier**.
5. At the **Security Identifier** window, leave the **Dn** field blank and click **OK**.
6. You will then see a lot of ACE information displayed in the right panel. You can check the entire list to find out which items to install ReadProperty and WriteProperty for the Exchange Enterprise Servers group as shown in Figure 12.

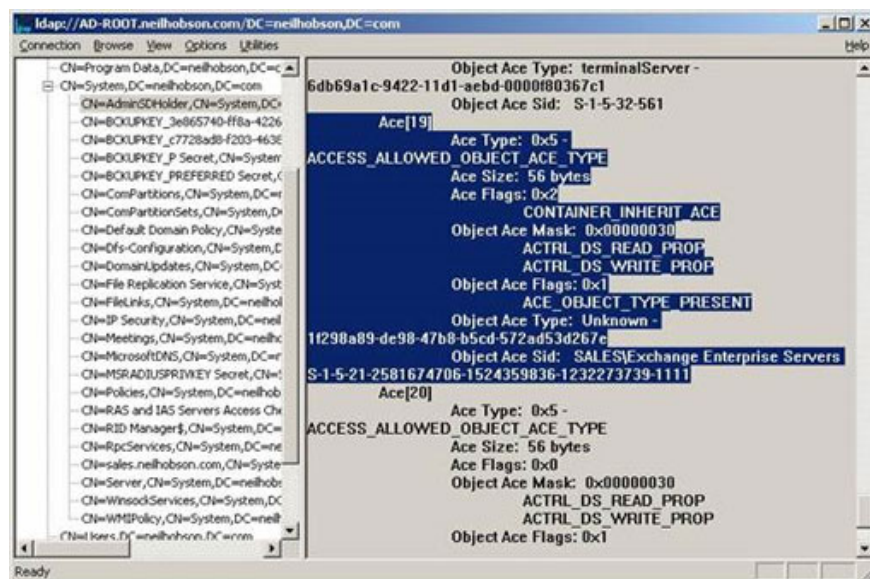


Figure 12: ACE AdminSDHolder for the Exchange Enterprise Server group.

So far we have completed testing legacy Exchange licensing settings.

Conclude

In this second part we have completed the preparation of legacy Exchange licenses, finding out how to determine the process of success. In the next section, we will take a few steps to prepare the Active Directory schema and check if this and the Active Directory replication process are successfully performed.

You finished reading the article "**Prepare Active Directory for Exchange 2007 (Part 2)**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.