

Server administration in Exchange 2007 using Powershell

In this article, I will show you the database and the problem of managing storage groups using the commands in Powershell.

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In this article we will show you more about Powershell's features, especially on databases and the problem of managing storage groups with Powershell Cmdlet, which is really a of the best server administration tasks for administrators performing today's mail management tasks. Mail systems are the most 'live' servers in your network environment with a continuous development process in the number of databases. This means that administrators must change the database 'locations' and the physical or logical structures of the database for the duration of the server.

Manage groups of friends

A storage group can be defined as a logical item for the database and linked to the system itself and their transaction log files. If you need a new set of log files or want to configure something special for them (such as activating a loop recording process or re-writing internally), you need to configure a group new database.

Syntax of the command to create a new storage group as shown in the following image:

```

Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>help new-storagegroup
NAME
    New-StorageGroup

SYNOPSIS
    Use the New-StorageGroup cmdlet to create a storage group on the specified
    server.

SYNTAX
    New-StorageGroup -Name <String> [-CircularLoggingEnabled <$true | $false>]
    [-Confirm <SwitchParameter>] [-CopyLogFolderPath <NonRootLocalLongFullPat
    h>] [-CopySystemFolderPath <NonRootLocalLongFullPath>] [-DomainController <
    Fqdn>] [-HasLocalCopy <$true | $false>] [-LogFolderPath <NonRootLocalLongFu
    llPath>] [-ReplayLagTime <Nullable>] [-Server <ServerIdParameter>] [-Standb
    yMachine <String>] [-SystemFolderPath <NonRootLocalLongFullPath>] [-Templat
    eInstance <PSObject>] [-TruncationLagTime <Nullable>] [-WhatIf <SwitchPara
    meter>] [-ZeroDatabasePages <$true | $false>] [-CommonParameters]

    New-StorageGroup [-Name <String>] [-Recovery <SwitchParameter>] [-Confirm <S
    witchParameter>] [-DomainController <Fqdn>] [-LogFolderPath <NonRootLocalL
    ongFullPath>] [-Server <ServerIdParameter>] [-SystemFolderPath <NonRootLoca
    lLongFullPath>] [-TemplateInstance <PSObject>] [-WhatIf <SwitchParameter>]
    [-CommonParameters]
  
```

Figure 1: Syntax of the New-StorageGroup command

For example, create a new storage group called MyNewGroup on a folder, you need to have the following syntax:

```
Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>new-storagegroup nyneugroup -logfolderpath c:\nyneugroup

Name                Server            Replicated         Recovery
-----            -
nyneugroup          EX01              None               False

[PS] C:\>_
```

Figure 2: Create a new Storage Group

We have seen that it is quite simple to create a new storage group. To remove existing groups, you can be done using the remove-storagegroup command, as shown in the figure below:

```
Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>help remove-storagegroup

NAME
    Remove-StorageGroup

SYNOPSIS
    Use the Remove-StorageGroup cmdlet to delete a storage group.

SYNTAX
    Remove-StorageGroup -Identity <StorageGroupIdParameter> [-Confirm [<SwitchParameter>]] [-DomainController <Fqdn>] [-WhatIf [<SwitchParameter>]] [-Con
onParameters>]

DETAILED DESCRIPTION
    To run the Remove-StorageGroup cmdlet, the account you use must be delegate
d the following:
    * Exchange Server Administrator role and local administrators group for the
target server
    For more information about permissions, delegating roles, and the rights th
at are required to administer Exchange Server 2007, see Permission Consider
ations.
```

Figure 3: Syntax of Remove-StorageGroup command

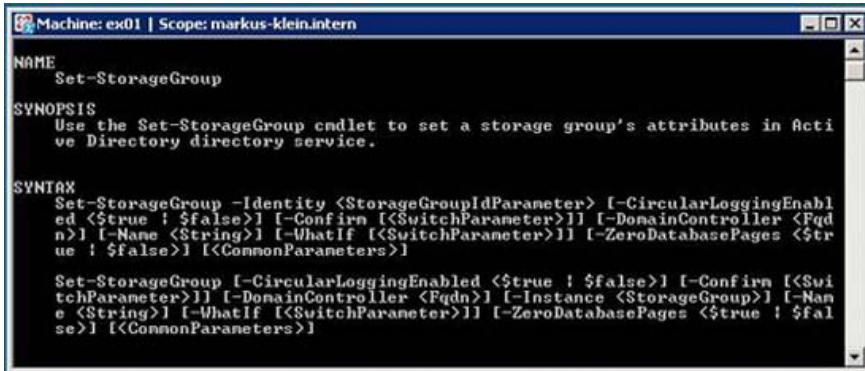
If you look at some of the parameters of this command, you will see the syntax of the command quite simple. If you want to remove an existing storage group called MyNewGroup, you must use the code below:

```
Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>remove-storagegroup MyNewGroup

Confirm
Are you sure you want to perform this action?
Removing Storage Group "ex01.markus-klein.intern\MyNewGroup".
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help
(default is "Y"):
WARNING: The specified storage group has been removed. You must remove the log
file located in c:\nyneugroup from your computer manually if it exists.
Specified storage group: ex01.markus-klein.intern\MyNewGroup.
[PS] C:\>_
```

Figure 4: Remove MyNewGroup Storage Group

If you created a new storage group and now need to change some of its settings (such as enabling logging mode) then you need to use the Set-StorageGroup command with the following syntax:

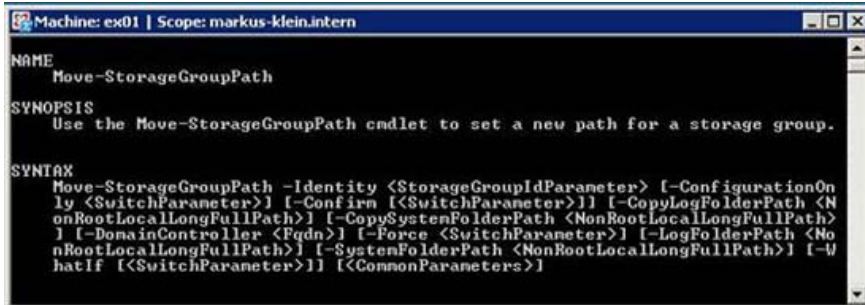


```
Machine: ex01 | Scope: markus-klein.intern
NAME
    Set-StorageGroup
SYNOPSIS
    Use the Set-StorageGroup cmdlet to set a storage group's attributes in Active Directory service.
SYNTAX
    Set-StorageGroup -Identity <StorageGroupIdParameter> [-CircularLoggingEnabled <$true | $false>] [-Confirm <SwitchParameter>] [-DomainController <Fqdn>] [-Name <String>] [-WhatIf <SwitchParameter>] [-ZeroDatabasePages <$true | $false>] [<CommonParameters>]

    Set-StorageGroup [-CircularLoggingEnabled <$true | $false>] [-Confirm <SwitchParameter>] [-DomainController <Fqdn>] [-Instance <StorageGroup>] [-Name <String>] [-WhatIf <SwitchParameter>] [-ZeroDatabasePages <$true | $false>] [<CommonParameters>]
```

Figure 5: Syntax of the Set-StorageGroup command

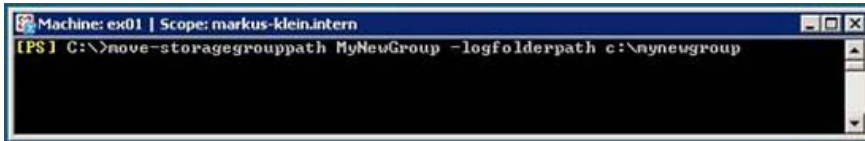
For storage group tasks, we'll look at how to change the path of the StorageGroupPath group with the command. You may need this task when configuring a new storage for the server and then want to transfer this entire storage group to another server.



```
Machine: ex01 | Scope: markus-klein.intern
NAME
    Move-StorageGroupPath
SYNOPSIS
    Use the Move-StorageGroupPath cmdlet to set a new path for a storage group.
SYNTAX
    Move-StorageGroupPath -Identity <StorageGroupIdParameter> [-ConfigurationOnly <SwitchParameter>] [-Confirm <SwitchParameter>] [-CopyLogFolderPath <NonRootLocalLongFullPath>] [-CopySystemFolderPath <NonRootLocalLongFullPath>] [-DomainController <Fqdn>] [-Force <SwitchParameter>] [-LogFolderPath <NonRootLocalLongFullPath>] [-SystemFolderPath <NonRootLocalLongFullPath>] [-WhatIf <SwitchParameter>] [<CommonParameters>]
```

Figure 6: Syntax of Move-StorageGroupPath command

For example, to move the log directory to another path, you must follow the command below:

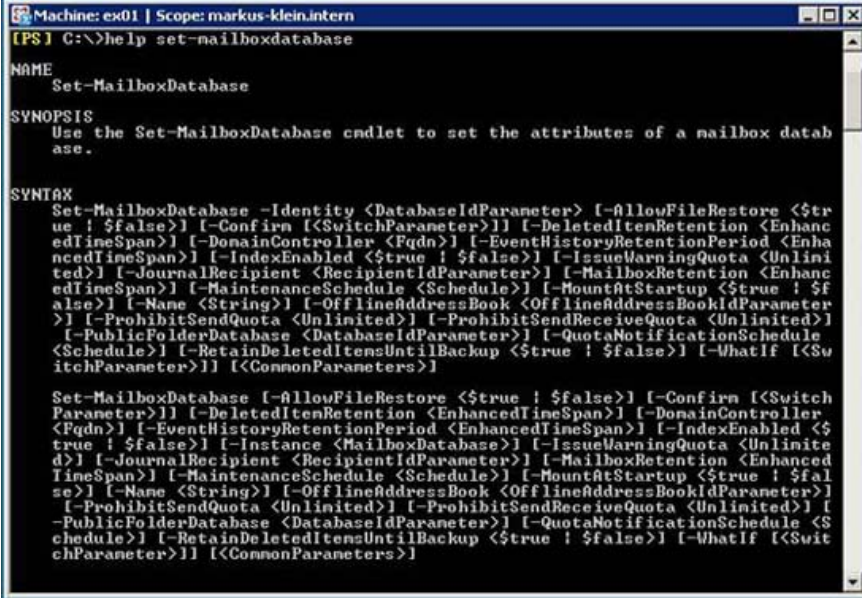


```
Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>move-storagegroup path MyNewGroup -logfolderpath c:\nynewgroup
```

Figure 7: Move the path of the log file directory with Move-StorageGroupPath command

As you can see in the picture, working with storage groups with the command is quite simple and you don't have to know much about parameters and other syntax. If you work with more powerful tools in the near future, you may find them easier to use than the Exchange management interface.

If you have created a mailbox database, then want to change some of its properties, then you need to use the Set-MailboxDatabase command as shown below:



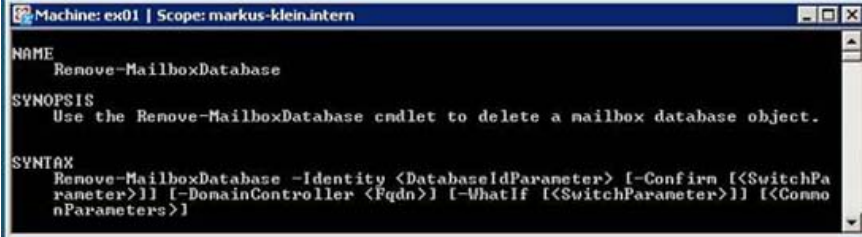
```
Machine: ex01 | Scope: markus-klein.intern
[PS] C:\>help set-mailboxdatabase
NAME
    Set-MailboxDatabase
SYNOPSIS
    Use the Set-MailboxDatabase cmdlet to set the attributes of a mailbox database.
SYNTAX
    Set-MailboxDatabase -Identity <DatabaseIdParameter> [-AllowFileRestore <$true | $false>] [-Confirm <SwitchParameter>] [-DeletedItemRetention <EnhancedTimeSpan>] [-DomainController <Fqdn>] [-EventHistoryRetentionPeriod <EnhancedTimeSpan>] [-IndexEnabled <$true | $false>] [-IssueWarningQuota <Unlimited>] [-JournalRecipient <RecipientIdParameter>] [-MailboxRetention <EnhancedTimeSpan>] [-MaintenanceSchedule <Schedule>] [-MountAtStartup <$true | $false>] [-Name <String>] [-OfflineAddressBook <OfflineAddressBookIdParameter>] [-ProhibitSendQuota <Unlimited>] [-ProhibitSendReceiveQuota <Unlimited>] [-PublicFolderDatabase <DatabaseIdParameter>] [-QuotaNotificationSchedule <Schedule>] [-RetainDeletedItemsUntilBackup <$true | $false>] [-WhatIf <SwitchParameter>] [<CommonParameters>]

    Set-MailboxDatabase [-AllowFileRestore <$true | $false>] [-Confirm <SwitchParameter>] [-DeletedItemRetention <EnhancedTimeSpan>] [-DomainController <Fqdn>] [-EventHistoryRetentionPeriod <EnhancedTimeSpan>] [-IndexEnabled <$true | $false>] [-Instance <MailboxDatabase>] [-IssueWarningQuota <Unlimited>] [-JournalRecipient <RecipientIdParameter>] [-MailboxRetention <EnhancedTimeSpan>] [-MaintenanceSchedule <Schedule>] [-MountAtStartup <$true | $false>] [-Name <String>] [-OfflineAddressBook <OfflineAddressBookIdParameter>] [-ProhibitSendQuota <Unlimited>] [-ProhibitSendReceiveQuota <Unlimited>] [-PublicFolderDatabase <DatabaseIdParameter>] [-QuotaNotificationSchedule <Schedule>] [-RetainDeletedItemsUntilBackup <$true | $false>] [-WhatIf <SwitchParameter>] [<CommonParameters>]
```

Figure 10: Syntax of the Set-MailboxDatabase command

With this command, you can create restrictions for databases, indexing, keeping deleted items and lots of other properties.

If you need to delete a mailbox database on Exchange Server 2007, follow these commands:



```
Machine: ex01 | Scope: markus-klein.intern
NAME
    Remove-MailboxDatabase
SYNOPSIS
    Use the Remove-MailboxDatabase cmdlet to delete a mailbox database object.
SYNTAX
    Remove-MailboxDatabase -Identity <DatabaseIdParameter> [-Confirm <SwitchParameter>] [-DomainController <Fqdn>] [-WhatIf <SwitchParameter>] [<CommonParameters>]
```

Figure 11: Syntax of Remove-MailboxDatabase command

If you need to remove an existing Mailbox database called 'MyMailboxDB' you need to follow the following syntax:

```
Machine: ex01 | Scope: markus-klein.intern
[PS] G:\>remove-mailboxdatabase MyMailboxDB

Confirm
Are you sure you want to perform this action?
Removing Mailbox Database "ex01.markus-klein.intern\MyMailboxDB".
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help
(default is "Y")>y
WARNING: The specified database has been removed. You must remove the database
file located in C:\Program Files\Microsoft\Exchange
Server\Mailbox\MyNewGroup\MyMailboxDB.edb from your computer manually if it
exists. Specified database: MyMailboxDB
[PS] G:\>_
```

Figure 12: Remove the mailbox database using the Remove-MailboxDatabase command

If you want to move the mailbox database files to a new location on the server storage drive, you need to use Move-DatabasePath using the following command:

```
Machine: ex01 | Scope: markus-klein.intern
[PS] G:\>help move-databasepath

NAME
    Move-DatabasePath

SYNOPSIS
    Use the Move-DatabasePath cmdlet to set a new path to the location of a dat
    abase on the specified Mailbox server and to move the related files to that
    location.

SYNTAX
    Move-DatabasePath -Identity <DatabaseIdParameter> [-ConfigurationOnly <Swit
    chParameter>] [-Confirm [SwitchParameter]] [-CopyEdbFilePath <EdbFilePath
    >] [-DomainController <Fqdn>] [-EdbFilePath <EdbFilePath>] [-Force <SwitchP
    arameter>] [-WhatIf [SwitchParameter]] [CommonParameters]
```

Figure 13: Syntax of Move-DatabasePath command

As you can see from this first part, perhaps managing databases using Powershell is quite simple.

Lastly

In this article, I have shown you how to manage Exchange Server 2007 using commands to perform everyday tasks more efficiently. If you need to perform some of these tasks multiple times, you can save these commands into a .ps1 file and run them as needed. If you are an advisor or have to set up many Exchange servers with the same basic configuration, these scripts will help you significantly reduce the amount of work and time.

You finished reading the article "[Server administration in Exchange 2007 using Powershell](#)" 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.