INSTALLING EXCHANGE 2013

Checklist before installing Exchange 2013 (Best practice is to install Mailbox role before CAS role):

1. Firewall disabled within domain network
2. Has static IP setup and can ping DC and other servers in the domain
3. Latest windows update
4. Windows is activated
5. Is in domain
6. Account that is going to install is member of Schema Admins, Enterprise Admins and Organization Management
7. DC (writeable)
8. File share witness server (can't be Exchange server or DC)

For other requirement check: http://technet.microsoft.com/en-us/library/ff805042(v=exchg.150).aspx

1. Open Power Shell (as administrator) and run following command :

   Install-WindowsFeature RSAT-ADDS

   ```
   Windows PowerShell
   Copyright (C) 2012 Microsoft Corporation. All rights reserved.

   PS C:\Windows\system32> Install-WindowsFeature RSAT-ADDS

   Success Restart Needed Exit Code      Feature Result
   ------- -------------- ---------      --------------
   True    No             Success        {Remote Server Administration Tools, Activ...
   ```

2. Then Run the following command (for mailbox role):

   Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, RPC-over-HTTP-proxy, RSAT-Clustering, RSAT-Clustering-CmdInterface, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Basic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, Web-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Console, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server, Web-Stat-Compression, Web-Static-Content, Web-Windows-Auth, Web-WMI, Windows-Identity-Foundation

   ```
   PS C:\Windows\system32> Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, RPC-ov
   er-HTTP-proxy, RSAT-Clustering, RSAT-Clustering-CmdInterface, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Ba
   sic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, We
   b-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Consol
   e, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server, Web-Stat-Compression, Web-Static-Content, Web-Windo
   ws-Auth, Web-WMI, Windows-Identity-Foundation

   Success Restart Needed Exit Code      Feature Result
   ------- -------------- ---------      --------------
   True    Yes            SuccessRest... {Application Server, HTTP Activation, .NET...
   WARNING: You must restart this server to finish the installation process.
   ```
   Reboot
   (For CAS role)
   Install-WindowsFeature AS-HTTP-Activation, Desktop-Experience, NET-Framework-45-Features, RPC-over-HTTP-proxy, RSAT-Clustering, Web-Mgmt-Console, WAS-Process-Model, Web-Asp-Net45, Web-Basic-Auth, Web-Client-Auth, Web-Digest-Auth, Web-Dir-Browsing, Web-Dyn-Compression, Web-Http-Errors, Web-Http-Logging, Web-Http-Redirect, Web-Http-Tracing, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Lgcy-Mgmt-Console, Web-Metabase, Web-Mgmt-Console, Web-Mgmt-Service, Web-Net-Ext45, Web-Request-Monitor, Web-Server,

Web-Stat-Compression, Web-Static-Content, Web-Windows-Auth, Web-WMI, Windows-Identity-Foundation

3. Download and extract Exchange 2013 (CU3) to a folder on your local drive:
   http://www.microsoft.com/en-us/download/details.aspx?id=41175
   I extracted mine to C:/Exchange 2013/

4. Install the following software in this order.

Unified Communications Managed API 4.0 Runtime

Microsoft Office 2010 Filter Pack 64 bit

Microsoft Office 2010 Filter Pack SP1 64 bit

5. Run setup.exe as administrator from extracted folder:

MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 2 SETUP   ? ✕

Check for Updates?

You can have Setup download Exchange Server 2013 updates from the Internet before you install Exchange. If updates are available, they'll be downloaded and used by Setup. By downloading updates now, you'll have the latest security and product updates. If you don't want to check for updates right now, or if you don't have access to the Internet, skip this step. If you skip this step, be sure to download and install any available updates after you've completed Setup.

Select one of the following options:

◉ Connect to the Internet and check for updates

◯ Don't check for updates right now
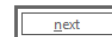
E🔳 Exchange   [next]

Click next and next again if no update found

?   X

Downloading Updates...

No updates found, click next to continue with setup.

Exchange

next

Click next

Introduction

Welcome to Microsoft Exchange Server 2013!

Exchange Server is designed to help you increase user productivity, keep your data safe, and provide you with the control you need. You can tailor your solution to your unique needs with flexible deployment options, including hybrid deployments that enable you to take advantage of both on-premises and online solutions. You can use compliance management features to protect against the loss of sensitive information and help with internal and regulatory compliance efforts. And, of course, your users will be able to access their email, calendar, and voice mail on virtually any device and from any location. This wizard will guide you through the installation of Exchange Server 2013.

Plan your Exchange Server 2013 deployment:

Read about Microsoft Exchange Server 2013

Read about supported languages

Use the Exchange Server 2013 Deployment Assistant

E⬛ Exchange

[next]

Accept license agreement and click next

License Agreement

Please read and accept the Exchange Server 2013 license agreement.

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT EXCHANGE SERVER 2013 STANDARD, ENTERPRISE, TRIAL AND HYBRID

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,

- supplements,

- Internet-based services, and

- support services

for this software, unless other terms accompany those items. If so, those terms apply.

By using the software, you accept these terms. If you do not accept them, do not use the software. Instead, return it to the retailer for a refund or credit. If you cannot obtain a refund there, contact Microsoft or

◉ I accept the terms in the license agreement

◯ I do not accept the terms in the license agreement.

E⬛ Exchange

[next]

Choose use recommended settings or dont

Recommended Settings

◉ Use recommended settings

Exchange server will automatically check online for solutions when encountering errors and provide usage feedback to Microsoft to help improve future Exchange features.

◯ Don't use recommended settings

Manually configure these settings after installation is complete (see help for more information).

Read more about providing usage feedback to Microsoft

Read more about checking for error solutions online

E⯑ Exchange   [back]   [next]

Since we going to install mailbox role, we thick for that option

Server Role Selection

Select the Exchange server roles you want to install on this computer:

☑ Mailbox role

☐ Client Access role

☑ Management tools

☑ Automatically install Windows Server roles and features that are required to install Exchange Server

E⯑ Exchange   [back]   [next]

Click next

Installation Space and Location

Disk space required: 6558   MB

Disk space available: 27212,9   MB

Specify the path for the Exchange Server installation:

C:\Program Files\Microsoft\Exchange Server\V15   [browse]

E❘ Exchange

[back]   [next]

Leave default and click next

Malware Protection Settings

Malware scanning helps protect your messaging environment by detecting messages that may contain viruses or spyware. It can be turned off, replaced, or paired with other premium services for layered protection.

Malware scanning is enabled by default. However, you can disable it if you're using another product for malware scanning. If you choose to disable malware scanning now, you can enable it at any point after you've installed Exchange.

Disable malware scanning.

◯ Yes
◉ No

Internet access is required to download the latest anti-malware engine and definition updates.

E❘ Exchange

[back]   [next]

Ready to install

Readiness Checks

The computer will be checked to verify that setup can continue.

Prerequisite Analysis   100%

Warning:
Setup will prepare the organization for Exchange 2013 by using 'Setup /PrepareAD'. No Exchange 2007 server roles have been
detected in this topology. After this operation, you will not be able to install any Exchange 2007 servers.
For more information, visit: http://technet.microsoft.com/library(EXCHG.150)/ms.exch.setupreadiness.NoE12ServerWarning.aspx

E Exchange   install

And we wait…

Setup Progress

Step 3 of 13: Copy Exchange Files   90%

E Exchange

We are done!

MICROSOFT EXCHANGE SERVER 2013 CUMULATIVE UPDATE 2 SETUP   ?   ✕

Setup Completed

Congratulations! Setup has finished successfully. To complete the installation of Exchange Server 2013, reboot the computer.

You can view additional post-installation tasks online by clicking the link: http://go.microsoft.com/fwlink/p/?LinkId=255372.

Exchange

finish

Reboot.

To install 2ⁿᵈ Mailbox server, do same steps!

To install CAS role, do same steps as above but under Role selection choose CAS server role!

Configuring Exchange 2013

For us to be able to login to ECP on Exchange 2013, we need to create account on the new server(no need if the account used to install didn't have any mailbox, cause then mailbox will be created by default).

On any of Exchange 2013 server, start Exchange management shell and run following command:

"Get-mailboxdatabase" so we can see the name of the new databases.

```
[PS] C:\Windows\system32>get-mailboxdatabase

Name                            Server      Recovery    ReplicationType
----                            ------      --------    ---------------
Mailbox Database 0662977193     DAG03       False       None
Mailbox Database 0064668652     DAG04       False       None
```

Then run the following command to create new mailbox in the new database:

"New-Mailbox –name Newadmin –userPrincipalName Newadmin@itlab.as –Database "Mailbox Database 0662977193"

```
[PS] C:\Windows\system32>New-Mailbox -name Newadmin -userPrincipalName Newadmin@itlab.as -Database "Mailbox Database 066
2977193"
WARNING: A script or application on the EXCHANGE02.ITLAB.AS remote computer is sending a prompt request. When prompted,
 enter sensitive information such as credentials or password only if you trust the remote computer and the application
or script requesting it.

cmdlet New-Mailbox at command pipeline position 1
Supply values for the following parameters:
Password: *********
```

Give new account a password add new account to following member groups:

Domain Admins
Schema Admins
Enterprise Admins
Organization Management

Login to ecp with the following link: https://localhost/ecp (works only on CAS server)
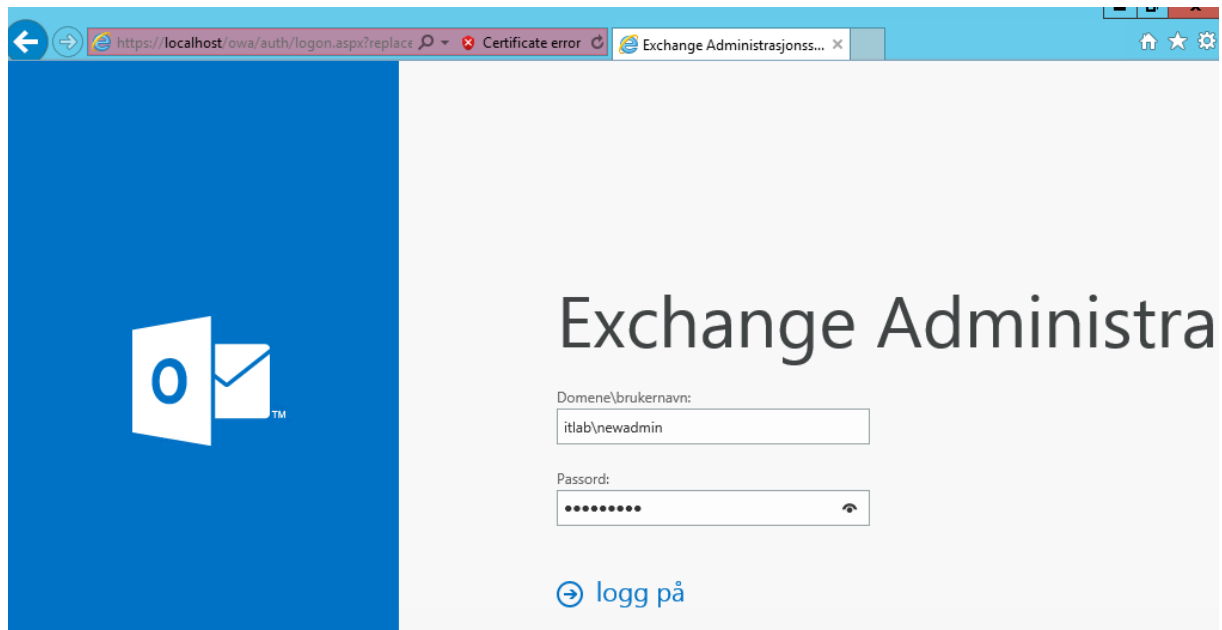
Login to OWA with the new account and test mail workflow. Send e-mail to another user (they must have mailbox first)
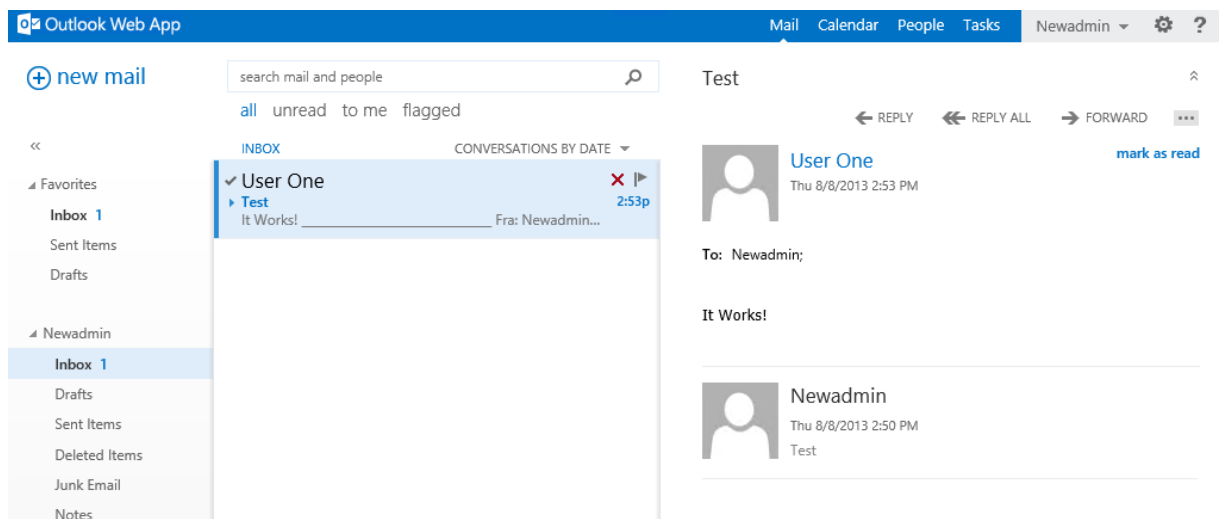
Create new Databases

Now we are going to create new database for each of the Mailbox servers

In ECP navigate to Servers – Databases and click on + sign

Exchange admin center

recipients

permissions

compliance management

organization

protection

mail flow

mobile

public folders

unified messaging

servers

hybrid

servers databases database availability groups virtual directories certificates

NAME	ACTIVE ON...	SERVERS WITH COPIES	STA...	BAD COPY C...
DB01	DAG02	DAG01,DAG02	Mo...	0
DB02	DAG02	DAG02,DAG01	Mo...	0
Mailbox Datab...	DAG04	DAG04	Mo...	0
Mailbox Datab...	DAG03	DAG03	Mo...	0

*(DB01 and DB02 is database on my old Exchange server, so don't mind those)

Before doing this, make sure you have created disk on both Mailbox servers and their drive letter have to be the same.

Give Mailbox database a name – Choose which mailbox server it will be stored at and location for Log folder, then click save.

new database

*Mailbox database

DB03

*Server

DAG03   ✕   browse...

Database file path:

E:\DB03\DB03.edb

Log folder path:

G:\Log03\   ✕

This field displays the default path to the log folder. You can change the location by entering a new path.

☑ Mount this database

save   cancel

Klikk OK and restart Microsoft Exchange Information Store service

*Mailbox database

DB03

*Server

DAG03

Databa:

Log fol

☑ Mo

warning

Please restart the Microsoft Exchange Information Store service on server DAG03 after adding new mailbox databases.

ok

Do the same for 2nd database, but this time choose 2nd Mailbox server as default storage

Save – OK and restart Microsoft Exchange Information Store service

Move arbitration mailboxes and remove default mailbox databases

After creating new mailbox databases we are going to remove default ones. This is how our mailbox databases look like: We are going to remove those with name **Mailbox Database..**

In EMC run the following command:

Get-mailbox –arbitration

As we can see there are total of 5 arbitration mailboxes, 2 are in the new Mailbox server. Its these two we want to move to the new database we just created.

Run the following command in EMC:

Get-mailboxdatabase

As we can see arbitration mailboxes are on Mailbox Database 0662977193.Run the following command in EMC to move arbitration mailboxes:

Get-mailbox –database "Mailbox Database 0662977193" –arbitration | new-moverequest –targetdatabase "DB03"

Get-moverequest to get status

```
[PS] C:\Windows\system32>Get-MoveRequest

DisplayName                            Status          TargetDatabase
-----------                            ------          --------------
Microsoft Exchange                     Completed       DB03
Microsoft Exchange Migration           Completed       DB03
```

When status is Completed then moverequest is done. Run following command to remove completed moverequest:

Get-MoveRequest -MoveStatus Completed | Remove-MoveRequest

```
[PS] C:\Windows\system32>Get-MoveRequest -movestatus completed |Remove-MoveRequest

Confirm
Are you sure you want to perform this action?
Removing completed move request "Newadmin".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [?] Help (default is "Y"):
```

Press A to confirm

To be sure that mailbox database is empty, run the following command in EMC

Get-mailbox –database "Mailbox Database 0662977193"

```
[PS] C:\Windows\system32>get-mailbox -database "Mailbox Database 0662977193"

Name            Alias           ServerName      ProhibitSendQuota
----            -----           ----------      -----------------
Newadmin        Newadmin        dag03           Unlimited
```

As we can see, we still have 1 mailbox left. Now we do another move request with the following command:

Get-mailbox –database "Mailbox Database 0662977193" | new-moverequest –targetdatabase "DB03"

```
[PS] C:\Windows\system32>get-mailbox -database "Mailbox Database 0662977193" | new-moverequest -targetdatabase "DB03"
DisplayName         StatusDetail        TotalMailboxSize        TotalArchiveSize        PercentComplete
-----------         ------------        ----------------        ----------------        ---------------
Newadmin            Queued              62.11 KB (63,597 bytes)                         0
```

Get-moverequest to get status, when status is completed, run Get-MoveRequest -MoveStatus Completed | Remove-MoveRequest

Now we are ready to delete default databases. Login to ECP – servers – Databases

Mark on those you want to delete and click on trash can icon. Click yes to confirm

Error error!

warning

Failed to remove monitoring mailbox object of database "Mailbox Database 0064668652". Exception: Active Directory operation failed on DC01.ITLab.as. This error is not retriable. Additional information: Access is denied. Active directory response: 00000005: SecErr: DSID-031520C3, problem 4003 (INSUFF_ACCESS_RIGHTS), data 0 .

The specified database has been removed. You must remove the database file located in C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\Mailbox Database 0064668652\Mailbox Database 0064668652.edb from your computer manually if it exists. Specified database: Mailbox Database 0064668652

ok

Don't worry, error message says it was able to remove database, but we have to manually remove files and folders. Log in to mailbox server and delete all files in that folder:

Normally its under C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\Mailbox Database name

Do the same for the remaining database.

Creating Database availability group

In ECP navigate to servers – database availability group and click on + sign
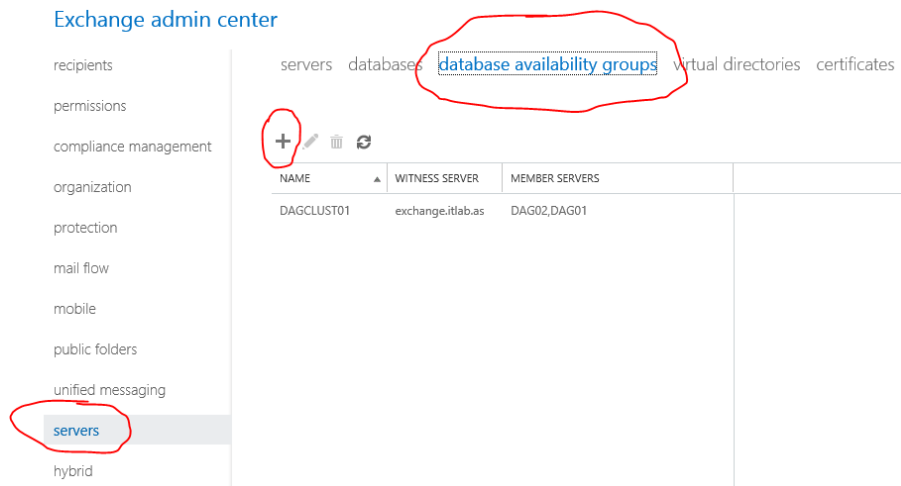
Enter the following details for the new Database Availability Group:

- **DAG name** – this should match the CNO you pre-staged earlier
- **Witness server** – this is required for all DAGs, even those that have an odd number of members and hence run in node majority quorum mode
- **Witness directory** – this is optional. If you do not specify a directory Exchange will choose one for you.
- **IP address** – the DAG requires an IP address on each IP subnet that is part of the MAPI network. If you do not specify IP addresses the DAG will use DHCP instead.

Go to Active Directory users and computers.
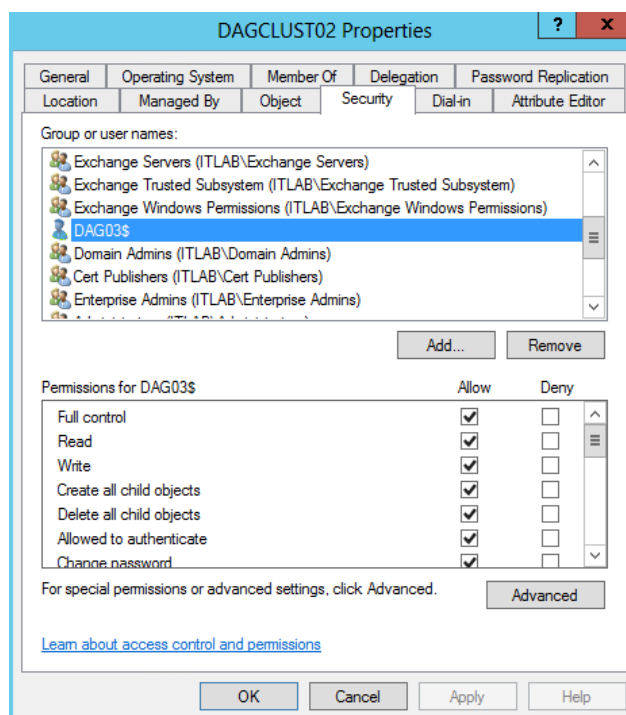
Click view – advanced features

Click on computer container and get properties of the new Database availability group we just created:
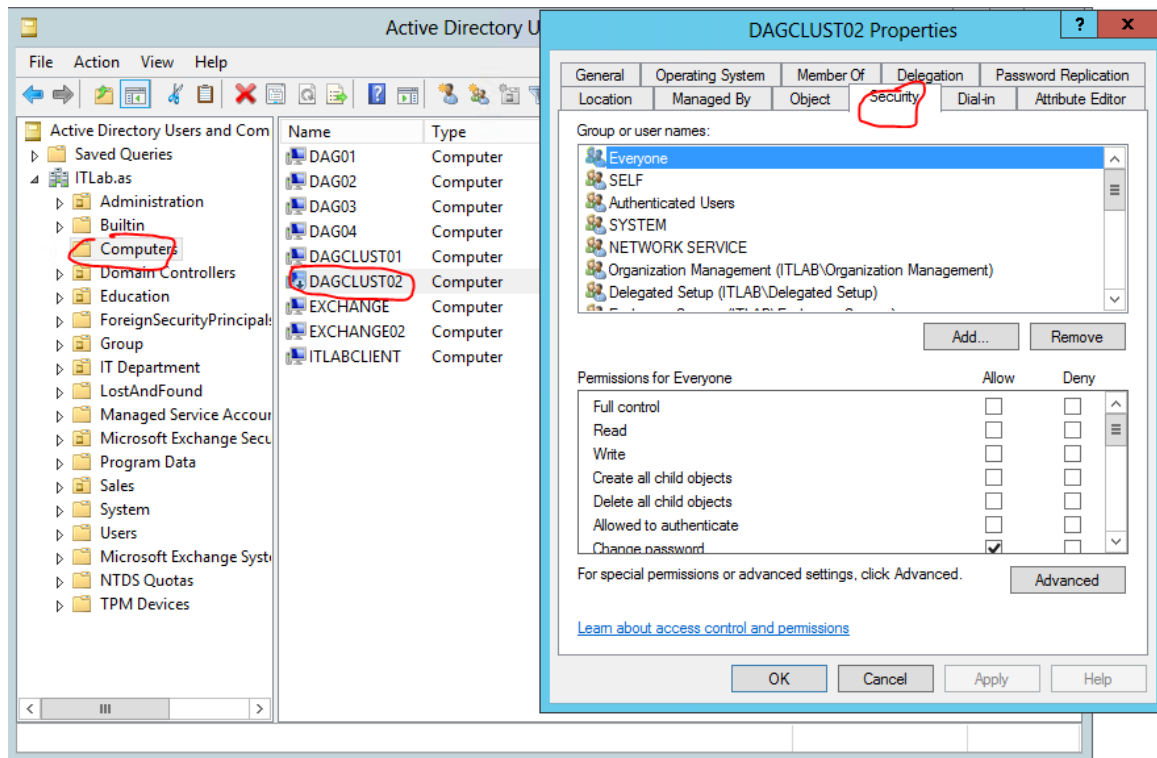
Next, grant the computer account for the first DAG member Full Control permissions for the CNO computer account.In my case DAG03,but first click object types and thick for computers:
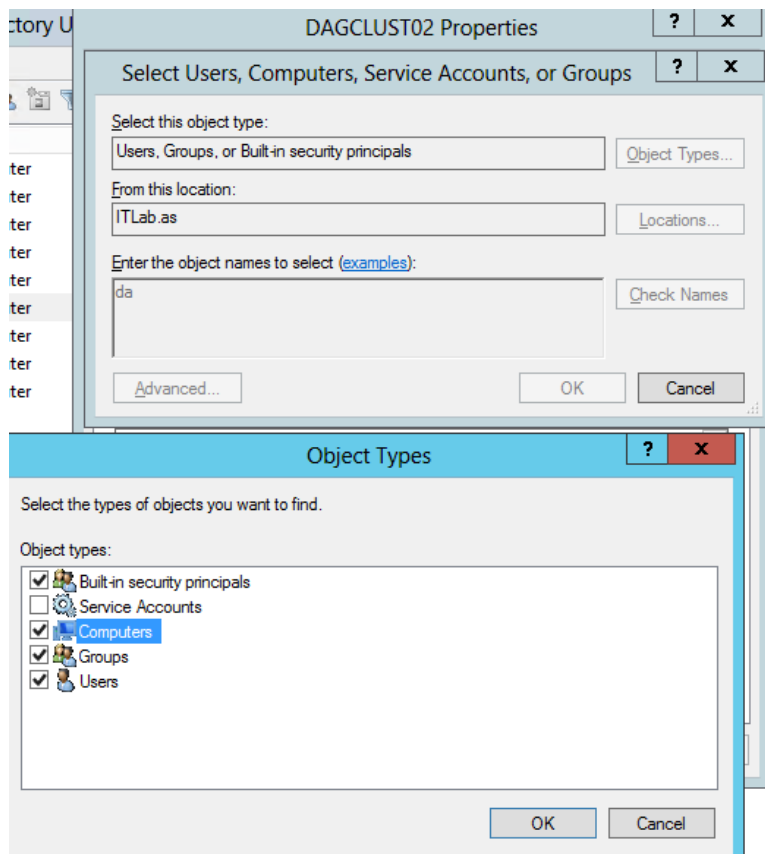
Then add computer and grant it full control.

Now disable the new Database availability group we just created
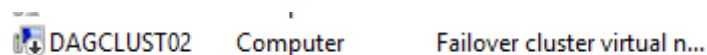
Adding Database Availability Group Members

After the DAG has been created it still does not contain any actual members. These need to be added next.

Highlight the new Database Availability Group and click the icon to manage DAG membership.

Click ok and save

Result will look like this

*Dagclust01 is DAG of my Exchange 2010 environment, so don't mind it ☺

Configuring database copies

In ECP navigate to servers – databases mark database you want to create copy then … icon and choose add database copy:

Click browse then mark the database and click ok then save

add mailbox database copy

Help

Mailbox database name:
DB03

*Specify Mailbox server:

browse...

Use this field to select the DAG member on which you want to add the new database copy. Click browse..., select the server that will host the copy from list, and click OK.
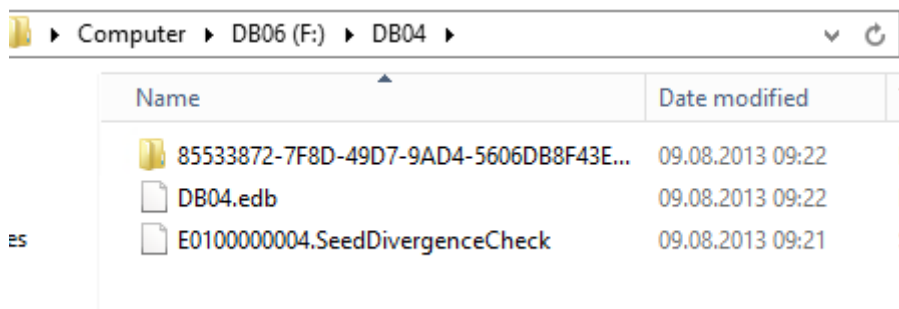
Activation preference number:
2

Servers hosting a copy of this database:

DAG03

Select Server - Windows Internet Explorer

NAME	▲	VERSION	DATABASE...
DAG04		Version 15.0 (Build 712.24)	DAGCLUS...

ok   cancel

save   cancel

Do the same for the second database and result will look like this.

servers **databases** database availability groups virtual dir

+ ✏ 🗑 🔍 ♻ ...

NAME	▲	ACTIVE...	SERVERS WITH COPIES	STA...	BAD COPY C...
DB01		DAG02	DAG01,DAG02	Mo...	0
DB02		DAG02	DAG02,DAG01	Mo...	0
DB03		DAG03	DAG03,DAG04	Mo...	0
DB04		**DAG04**	**DAG04,DAG03**	**Mo...**	**0**

To confirm that copy was successful go first to DAG03 (in this case name of my first DAG server).Browse computer

▶ Computer ▶ DB06 (F:) ▶ DB04 ▶

Name	Date modified
85533872-7F8D-49D7-9AD4-5606DB8F43E...	09.08.2013 09:22
DB04.edb	09.08.2013 09:22
E0100000004.SeedDivergenceCheck	09.08.2013 09:21

In my case the copy is in drive F: and DB04 folder

To see that all is well, in ECP navigate to Servers – Databases – mark on one of databases and on the right side you should see status for Passive and Active :

Passive Healthy
Copy queue length: 0
Content index state: Healthy

Suspend | Activate | Remove

Active Mounted
Copy queue length: 0
Content index state: Healthy

We are done!

Hope this doc was helpful!

Other info you might need to check:

Create send connector (for sending e-mails to the internet):

http://technet.microsoft.com/en-us/library/jj657457(v=exchg.150).aspx

http://exchangeserverpro.com/configuring-outbound-mail-flow-in-exchange-server-2013/

Create Certificate:

http://exchangeserverpro.com/create-ssl-certificate-request-exchange-2013/