Transferring FSMO roles

You usually transfer FSMO roles when you have multiple domain controllers and you don't want them all to sit on one box (safety precautions) or when you are upgrading your domain controllers using a swing migration. Best practices dictate that the forest roles should be put on one DC and the domain roles on another one.
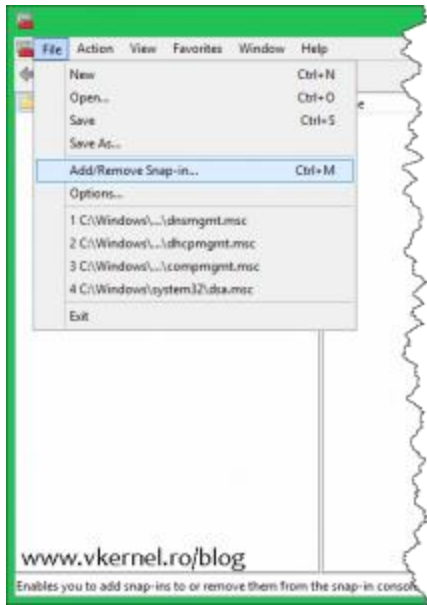
Transferring the schema master

Transferring the schema master is a little bit different than the other roles because the **Active Directory Schema snap-in** must be connected to the schema master in order to perform this procedure.

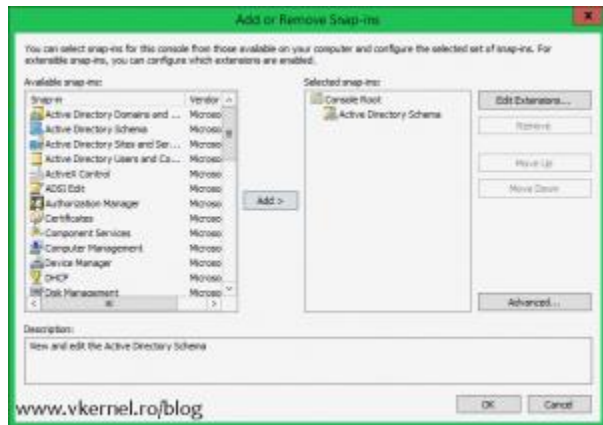To be able to transfer the schema master role you must be a member of the **Schema Admins** group.

To start, open a **Run** command and type **regsvr32 schmmgmt.dll** then press **Enter**.
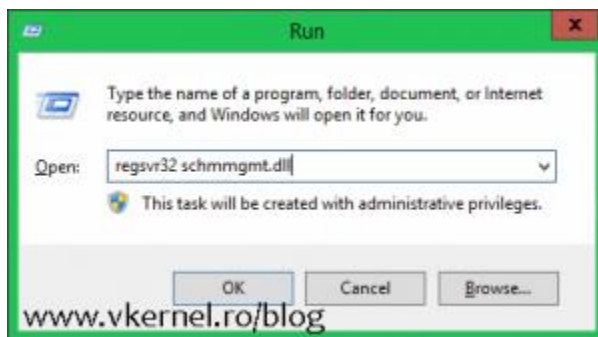
Once the span-in was successfully registered open a **Run** command again and type **mmc**. From the **File** menu go to **Add/Remove Snap-in**.
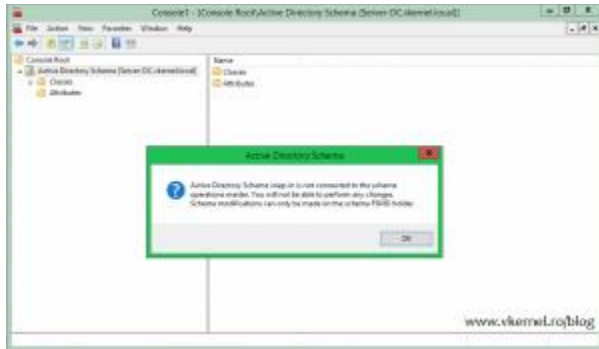
Select the **Active Directory Schema** snap-in then click **Add** and **OK**.


Now, if the console was opened on a different domain controller than the one you want transfer the schema master role on, you will have to right click the **Active Directory Schema** snap-in and choose **Change Active Directory Domain Controller**. From the list of domain controllers, select the target domain controller and click **OK**.
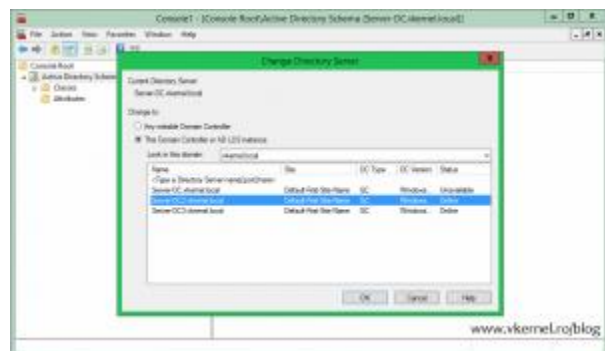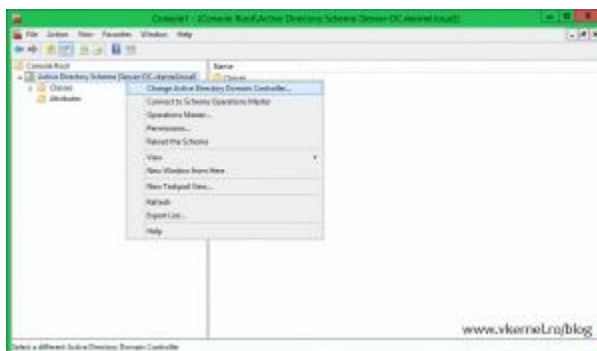
You will get an information message. Just click **OK** because we don't want to modify the schema, we just want to transfer it to another domain controller.

You should now be connected to the target domain controller. Right-click the **Active Directory Schema** snap-in and choose **Operations Master**.
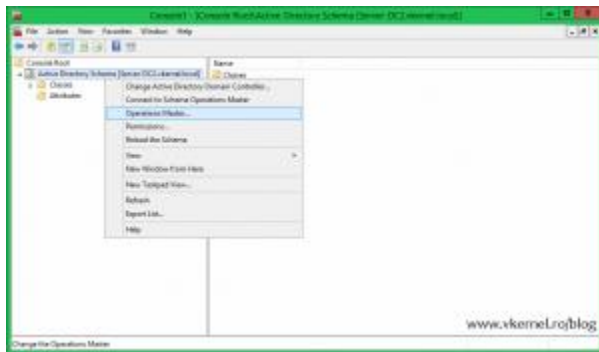
In the **Change Schema Master** window take another look to make sure the right domain controller is listed in the **targeted schema FSMO holder** box. If everything looks good, click the **Change** button then hit **Yes** on the warning message.
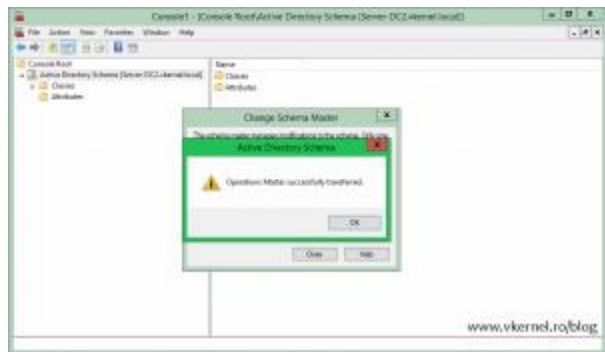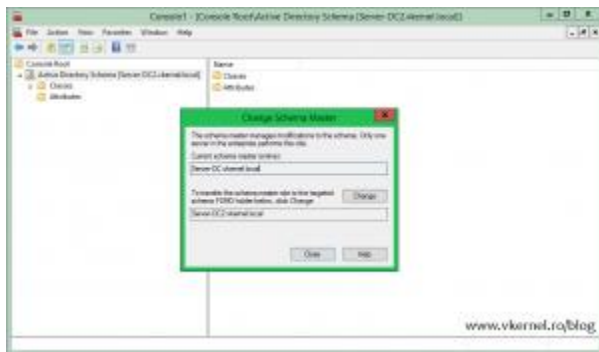
And the schema master role was transferred successfully.

Transferring the domain naming master

In order to transfer the domain naming master role you must be a member of the **Enterprise Admins** group.

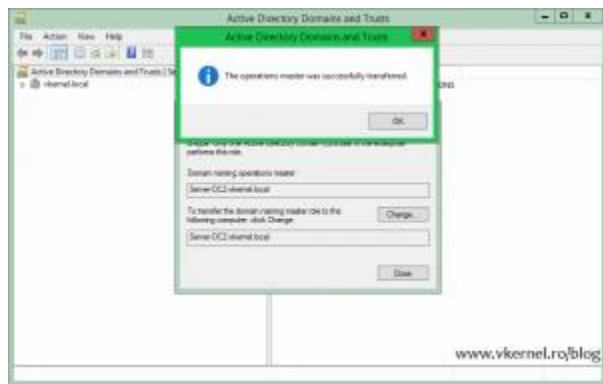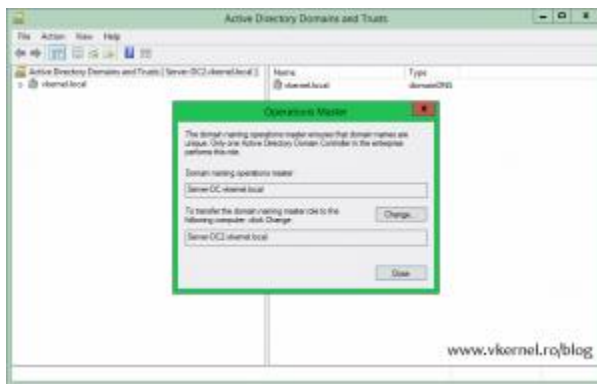To transfer this role open **Active Directory Domains and Trusts**,

right-click the server name and choose **Change Active Directory Domain Controller**. Select the domain controller on which you want to transfer the role on and click **OK**. You need to do this only if you opened the console on a different domain controller than the target server.
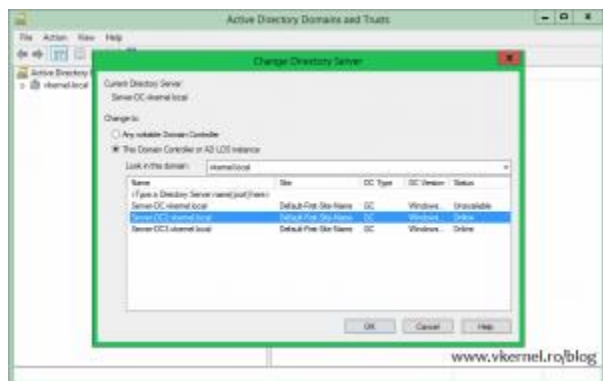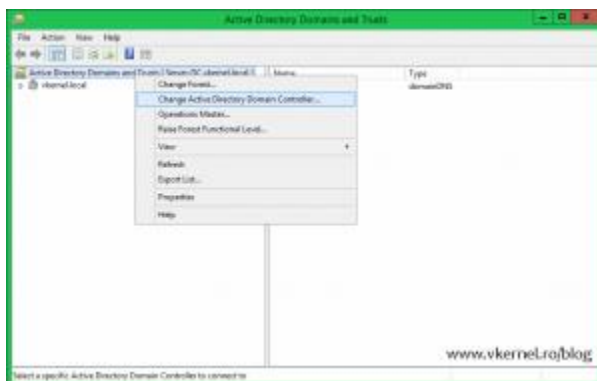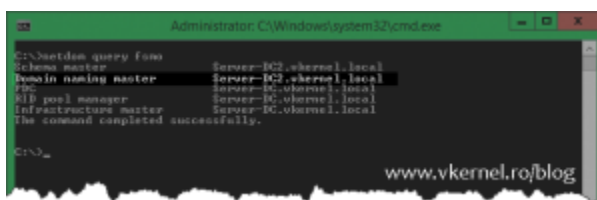

Now right-click the server again and choose **Operations Master**.
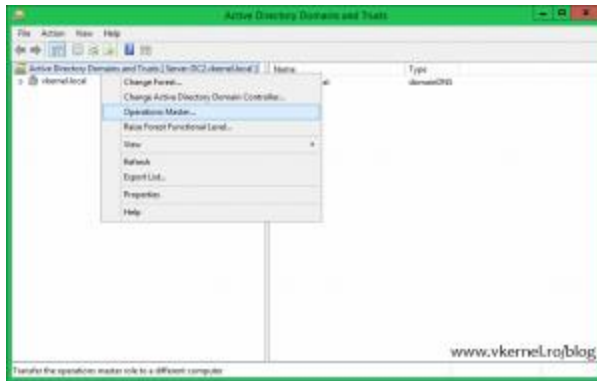
To transfer the role just hit the **Change** button and click **Yes** on the warning message

and the role should transfer.

Transferring the PDC, RID and Infrastructure master

To be able to transfer the domain roles you must be a member of the **Domain Admins** group.

Now it's time to migrate the three domain roles, and this can be done using the **Active Directory Users and Computers** console. And yes, all three roles can be migrated from this one console. Just like before, if you are not doing this from the target domain controller you will need to
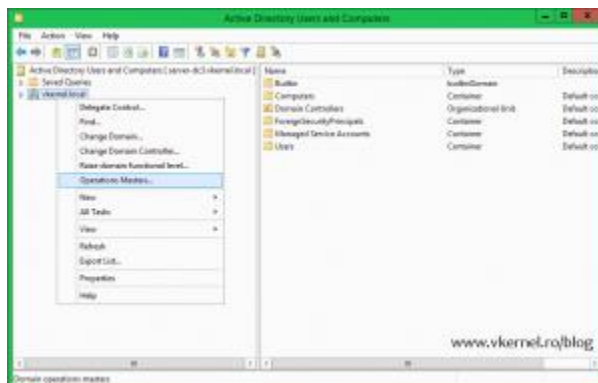
change it in the console by right-clicking the server name and choose **Change Domain Controller**.
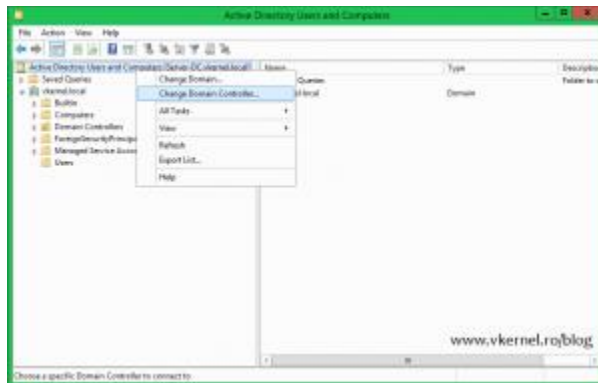
On the **Change Directory Server** window select the domain controller on which you want to transfer the domain FSMO roles and click **OK**.
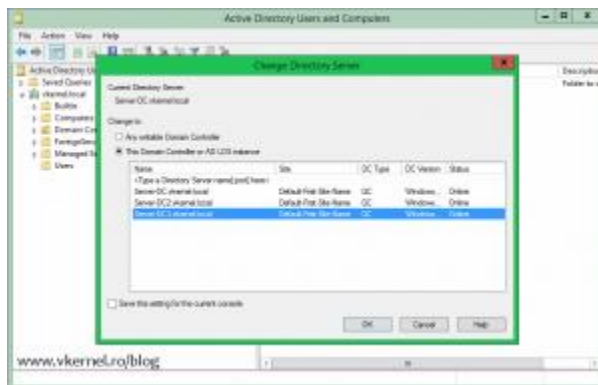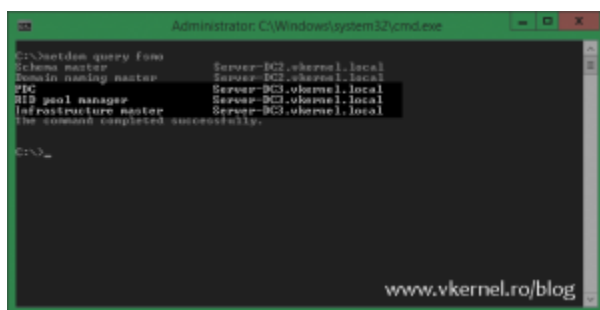

Once connected on the target domain controller, right-click the domain name and choose **Operations Masters**.

And as before, all you have to do is click the **Change** button then **Yes** on the warning message to transfer the role. Repeat this operation for the other two roles.
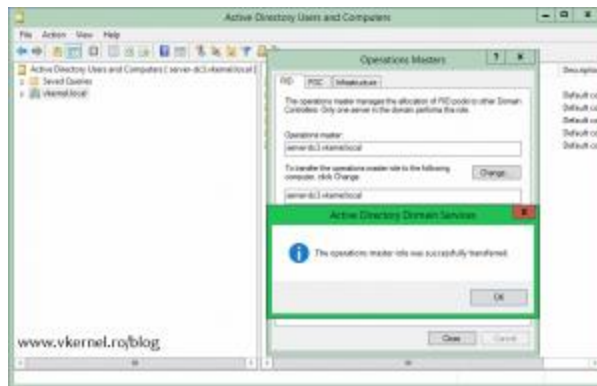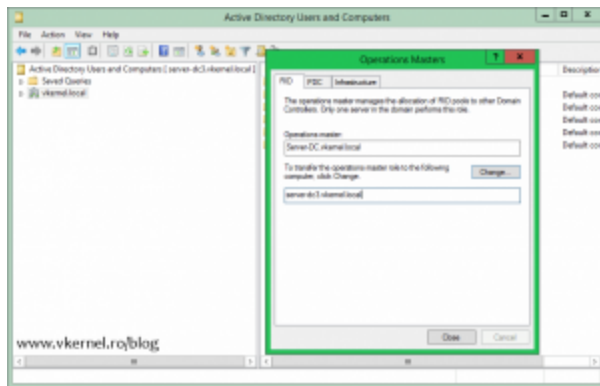
And at the end they should show as transferred.

Transferring FSMO roles using the command line

All of the above worked out just great, but what if you don't like clicking around and open all those different windows? Or maybe your domain controllers are running the Server Core edition. FSMO roles can all be transferred from the command line too using the **ntdsutil** command:

Type **ntdsutil** and press **Enter**.

```
1 C:\>ntdsutil
```

Type **roles** and **Enter** again.

```
1 ntdsutil: roles
2 fsmo maintenance:
```

Now type **connections** and press **Enter**.

```
1 fsmo maintenance: connections
2 server connections:
```

This is the part where you need to put in the command the target domain controller. Type **connect to server <server name>** and press **Enter.** Where <server name> is the name of your target domain controller.

```
1 server connections: connect to server Server-DC2
2 Binding to Server-DC2 ...
3 Connected to Server-DC2 using credentials of locally logged on user.
4 server connections:
```

Once you get connected to the domain controller type **q** to quit and go up a level, in the **fsmo maintenance** section.

```
1 server connections: q
2 fsmo maintenance:
```

Now, depending on what role you want to transfer, type **transfer <role>**. For example, to transfer the schema master role, you would type **transfer schema master**.

```
1 Transfer naming master
2 Transfer infrastructure master
3 Transfer PDC
4 Transfer RID master
5 Transfer schema master
```