VM Server: Clone & Rename

IMM eSign

Contents

Read This First

It is important to read this entire document before proceeding. Issues with this process could leave your system inoperable.

The process of cloning our application servers only contains 1 product specific task which is listed in the "Product Specific Configuration Steps" section. All of the surrounding processes are system generic.

This documentation is not a substitute for VMware, Hyper-V, Windows Server or Domain Administration knowledge. Ensure that this process is being performed by someone who has the correct skillsets.

This document may not exactly match what you have to do in your environment. There are significant differences between infrastructures and it is important that you understand how these steps will work in your environment and apply them appropriately.

Some of the steps in this document are specifically written for VMware vSphere hosts. If you use Microsoft Hyper-V, you'll need to substitute the appropriate Hyper-V steps.

Please note that assistance with system cloning is professional services not product support.

Licensing Compliance

Our application servers require licensing for each copy that is running. Verify that you have the appropriate number of licenses to cover the additional server this process will generate.

If you are unsure of your licensing or need additional licensing, please contact us for assistance.

Microsoft Server

We do not sell or provide Microsoft licenses. Contact your Microsoft License Provider if you need assistance with Microsoft Windows Server licensing.

Preparation

This document covers four major activities:

1) Clone the Server
2) Rename the Server
3) Perform Product Specific post-renaming steps
4) Change the SID (optional)

Requirements

This document applies to all versions of our servers which were distributed as OVA files.

Performing these processes on a server which **was not distributed as an OVA file** will render an inoperable server. If you are unsure, do not proceed until you have verified the server was an OVA.

Local Administrator Logon

Part of this process requires that you log on as the Local Administrator. Ensure you know the Local Administrator's password before proceeding.

Restart / Shutdown Process

Some application servers have specific reboot or shutdown processes which must be followed. Ensure you know the correct processes and follow them at each step where the server is to be restarted or shutdown.

Changing the SID

If your process of cloning a virtual server, changes the SID (*Sysprep /Generalize or the equivalent)*, you must take extra preparatory steps to allow the server to function after the cloning. If those actions are not taken, you will have to discard and re-clone the server.

See the Sysprep section for more information.

Cloning

This section makes a copy of a server, for the purpose of creating an additional server instance.

1. Shut down the server, **using the correct shutdown process for this server**.

⚠️ Because this process will create a duplicate server, it is necessary to make certain both servers are not online at the same time, until after you have completed the renaming.

2. Locate the server within VMWare
3. Right click and select **Clone**…
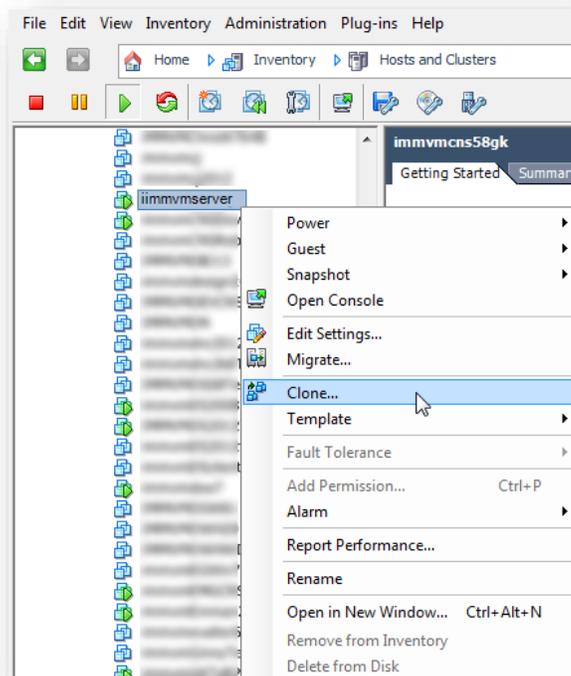
⚠️ Do not proceed until the cloning task is complete with no errors or warnings.

Renaming

If you are going to use this server at the same time as the server that it was cloned from (in the same network as your existing server) you will need to follow the Rename steps to give it a unique name.

It is **important** that the newly cloned server is NOT connected to the network and powered on, before it has been renamed. Failure to disconnect the cloned server from the network *before* powering it on may result in application and data issues on the original server, which require significant time and resources to resolve.

Disconnect the Network Adapter

1. Select the cloned machine and select **Edit Settings**
2. On the Hardware tab
   a. Select **Network Adapter**
   b. **Uncheck** the option to Connect at power on
   c. Click **OK**
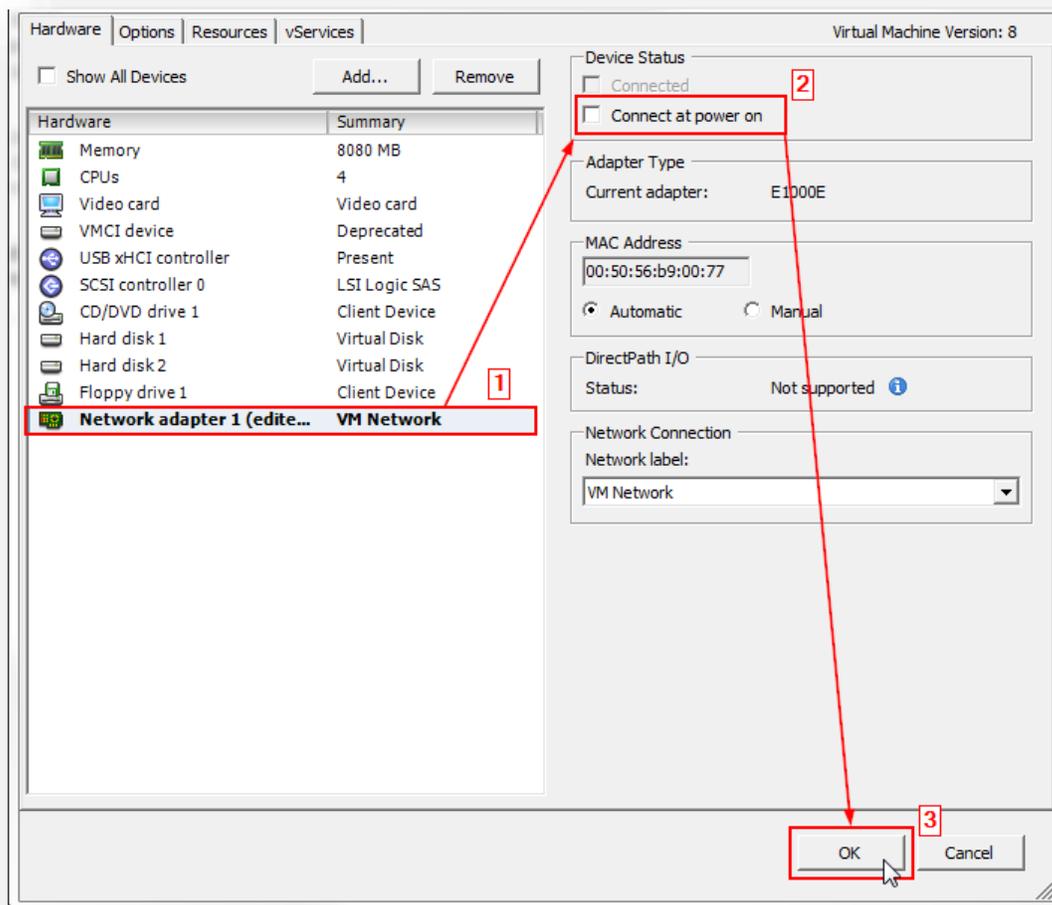
Start the Server

1. Power on the server
2. Log into the server as the **local administrator**

Remove from Domain

1. Make the machine a Member of **Workgroup** and click OK
   a. If the new server is connected to the network during this step it will affect the original server.
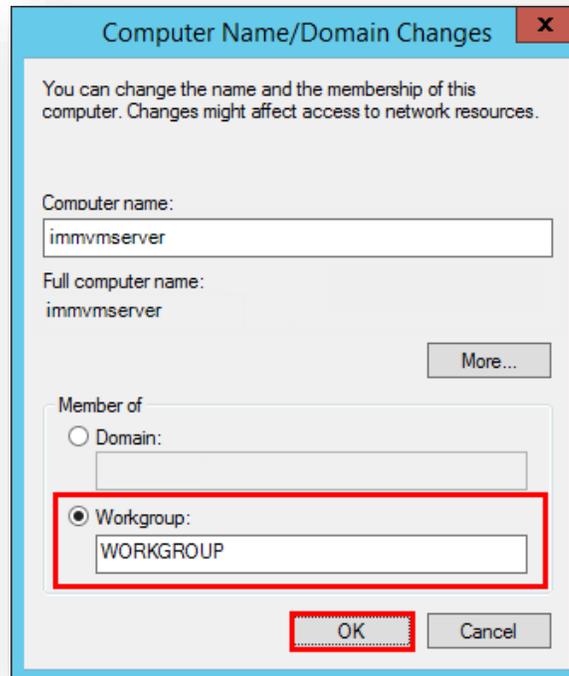
2. Click **OK**
3. Select **Restart Later**

4. Restart the server, **using the correct reboot process for this server**.

Rename the Server

1. Rename the server to a new unique name on your network.
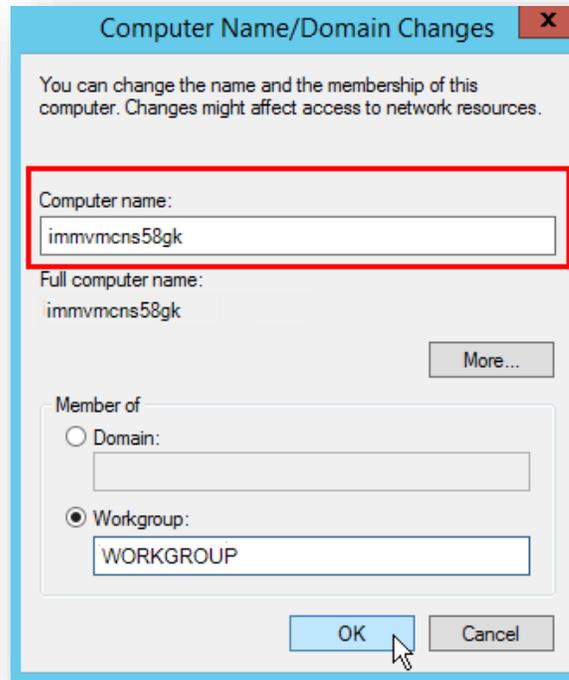
2. Shutdown the server, **using the correct shutdown process for this server**.

Re-enable Network Adapter

1. **Edit virtual machine settings**
    a. Select **Network adapter**
    b. **Check** to connect at power on
    c. Click **OK**
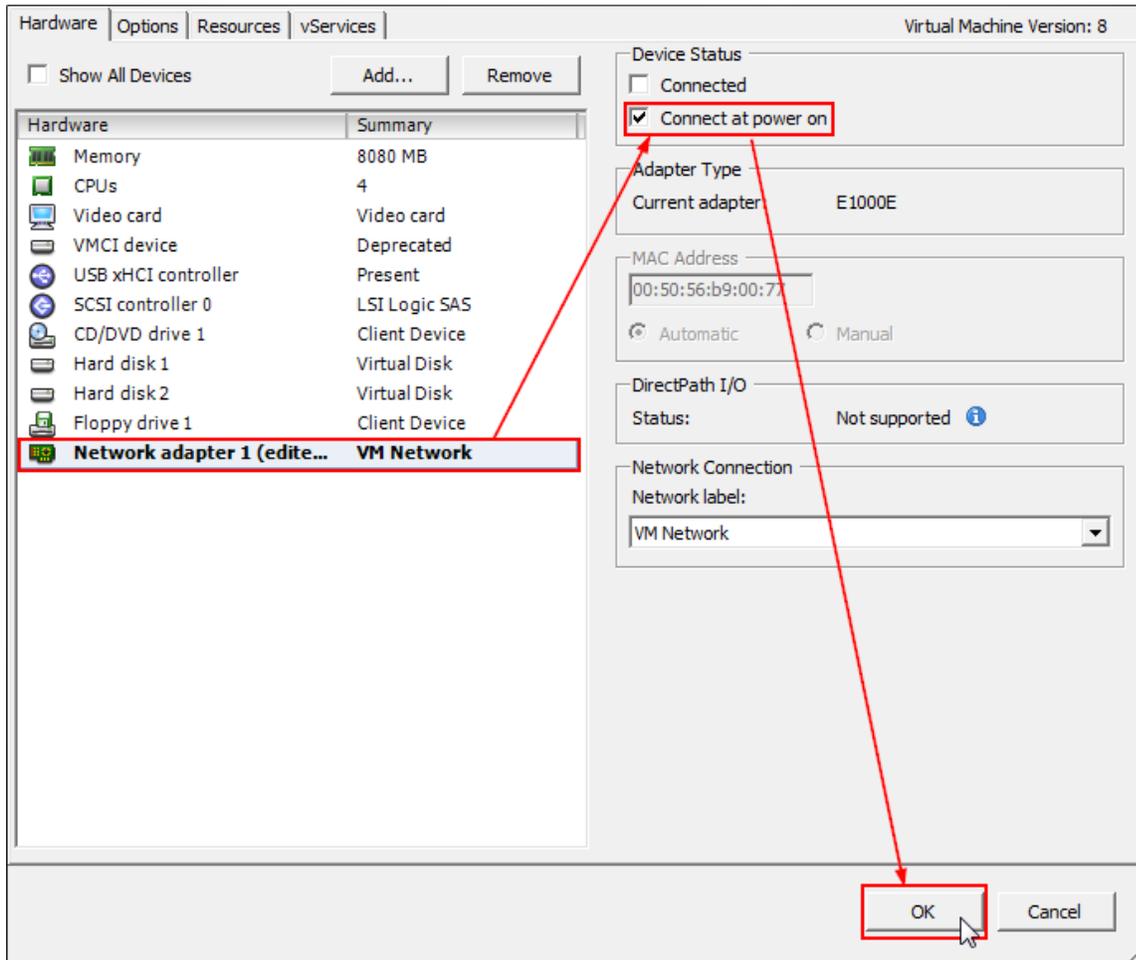
2. **Start** the server.

Add Server to Domain

1. **Add** the server to your domain
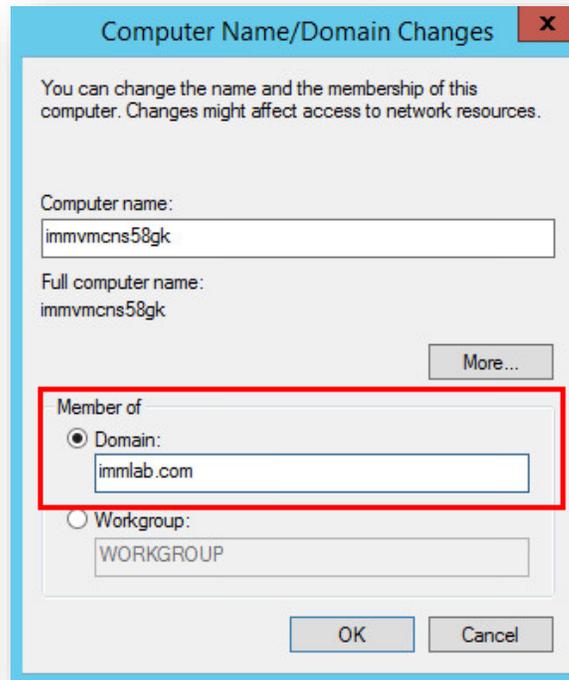
2. Click **OK**
3. Select **Restart Later**
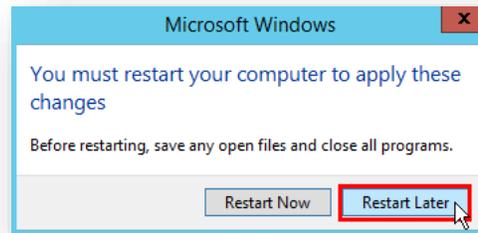
4. Restart the server, **using the correct reboot process for this server**.

Product Specific Configuration Steps

Some application servers have product specific steps, which must be completed before the new server is ready for use.

⚠ Ensure you have the ***<product_name> VM Server: Clone & Rename - Supplemental Instructions*** document for performing these steps.

If you do not have the Supplemental instructions, contact your project team or support for a copy.

If this application server requires supplemental steps they must be performed now.

Changing the SID

When changing the SID of the server, you must perform the process documented in the **"Server Repair - Sysprep or Generalize"** document before you change the SID. If you don't have this document, please ask your project manager for a copy.

Other processes may provide functionality similar to Microsoft's Sysprep /Generalize utility and change the SID. Ensure you understand your processes and mechanisms so you know if the additional repair (preparation) steps are needed.

If you do not use the steps in "**Server Repair - Sysprep or Generalize**" prior to changing the SID, your server will not function and you will have to re-clone it.

If your process changes the SID of the server this is the point to perform that process.

Post Renaming Administrative Processes

You will need to do everything you normally have to do with a new server in your environment. For example:

1. Apply a valid Windows license key
2. Put the server in the correct Active Directory OU
3. Ensure the server is in the backup plan
4. Modify virtual server settings to be correct for your environment (e.g. storage adapter and NIC type, etc.)

The above is not an exhaustive list of tasks that you need to take with the server. It is simply a prompt for you to think through what needs to be done in your environment.

Time & Time Zone

Remember to set the server to be the correct time zone. For some application servers the correct time is critical and has a significant impact on functionality.

Snapshot the Server

You should make a snapshot of the server to ensure you have a backup (if you don't use Snapshots, then use whatever backup means is correct for you).

1. Shut down the server, **using the correct shutdown process for this server**.
2. **Take** a Snapshot the Server
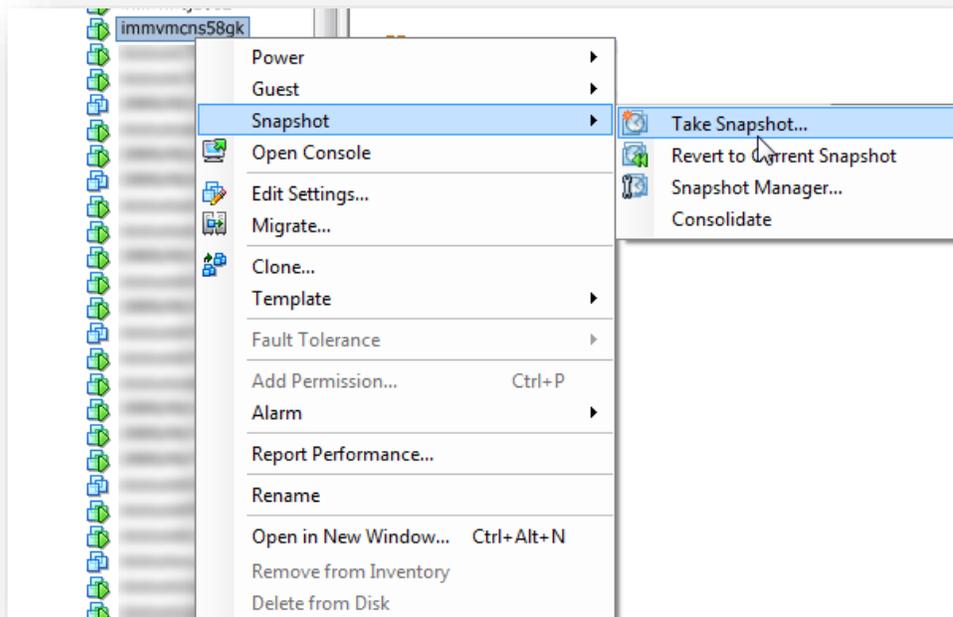
Support & Troubleshooting

We don't repair clones which are dysfunctional. If your cloning process did not produce a viable server, you will need to re-clone the server.

We suggest reading the full documentation and considering your specific environment to see if you need to alter some aspect of the process to work for you.

If there is something in your environment which continues to prevent a viable clone from being produced and you want us to assist with the process, let us know. We will get you a work order for Professional Services.