

IMM VM Server: Download Instructions

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Overview

This document will guide you in obtaining your new IMM virtual server. Please read it in its entirety and ask your IMM Project Team any questions you have before starting the process.

All steps in this document are "product generic" and each IMM OVA is handled the same way in the download process.

An additional document with "product specific" steps has also been provided, which this procedure call for in the Server Creation section. Please ensure you have this supplemental document.

To complete the process you will need:

- The ability to FTP download files
- Enough drive space to receive the server's zip file
- Enough drive space to decrypt the server's OVA file (it's not compressed, just encrypted)
- A VMware host with enough resources to import the OVA and run the server

Your IMM Project Team will provide you with the following to allow you to complete this process:

- FTP URL: <ftp://immftp.exavault.com>
- User/Password
- Decryption Key
- This document (product generic Download Instructions)
- A Supplemental Instruction guide specific to the product you are installing

If your organization does not allow FTP downloading of files, you may download the file over HTTPS, using the URL below and the same user/password provided to you for FTP.

HTTPS URL: <https://swft.exavault.com/login>



If you use HTTPS download:

- 1) Do not use the file combining download that is available on the web page. Download each file separately. Choosing multiple files will create a zip of those files and due to the size of the server-OVA the zipping will fail.
- 2) Do **Unblock** all files before using them. Trying to implement the server with files that are blocked by Windows security will create issues.

Keep in mind that FTP is better suited to this process because of the very large file sizes (12 to 30GB depending on the product). FTP is more efficient and has the ability to restart interrupted transfers.

Note: IMM does not provide support for your FTP client software. If you have issues making FTP work, refer to a troubleshooting section later in this doc and work with your IT department to resolve the issue.

Downloading

The file you are going to download will be quite a few GB in size (specific size will depend on the server you are getting). The transfer could have a negative effect on business functions which rely on your internet connection. Please plan accordingly for your organization.

You can use this calculator to estimate the time to complete your transfer:

<http://www.thecloudcalculator.com/calculators/file-transfer.html>

- 1) **Select a machine** to do that transfer which:
 - a. Will not sleep during the transfer.
 - b. Has adequate drive space to store the files.
- 2) Consider the **impact of your antivirus** software. It could negatively impact the transfer of the server zip file, depending on how it works. Consult your security people and plan accordingly.
- 3) **Download** all files in the FTP folder using the FTP (or HTTPS) URL and the **User/Password** which will be provided by your IMM Project Team.
 - a. Files that will be downloaded:
 - i. ChecksumVerify.exe
 - ii. Checksums.xml
 - iii. <ProductName>.zip
- 4) **Wait** until all files have finished transferring
 - a. This step may take a number of hours to complete, depending on your Internet connection speed.
 - b. Review FTP logs to ensure the transfer was completed, if it was not, restart the transfer.

Problems connecting to or downloading the file? See the FTP troubleshooting section at the end of this document.

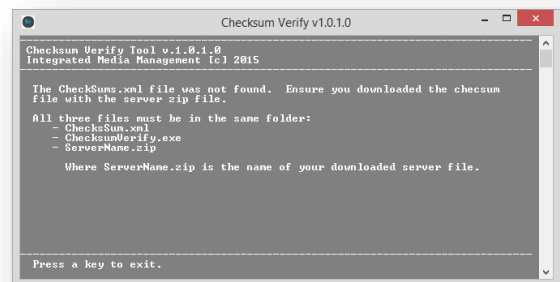
Verification

Verification of the file download is done through Checksum validation. A program "ChecksumVerify.exe" has been provided with the server download to facilitate this process.

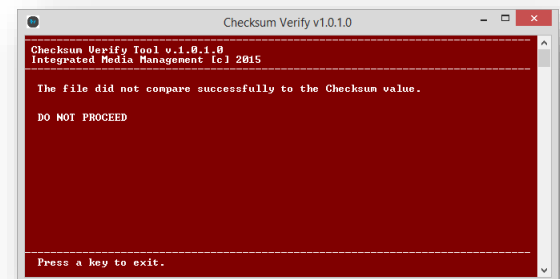
This step is critical to guaranteeing the success of your installation. Make sure you get a good **Green** result before continuing.

- 1) **Verify you have all three files** in the same folder.
 - a. CheckSums.xml
 - b. ChecksumVerify.exe
 - c. "ServerName".zip (where "ServerName" is the name of the server file you downloaded)
- 2) **Run ChecksumVerify.exe.** You can do this from a command line or in Windows Explorer.
- 3) **Wait for the results.** You will get one of the following screens:

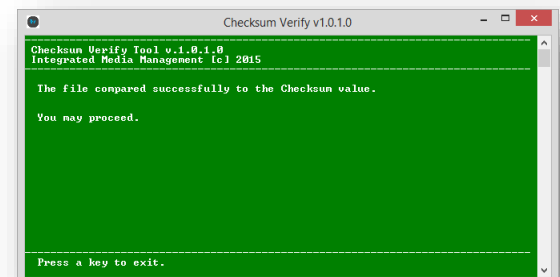
Gray = It can't find the checksum.xml file. Go back to step 1) and make sure all three files are in the same folder.



Red = The checksum didn't verify correctly. Either the file didn't finish transferring or it was changed. Do Not Continue. Re-download your files and try again.



Green = The checksum did verify and you may continue.



Server Creation

You will need enough working disk space to extract the server OVA file which is zip stored/encrypted, as well as enough datastore space to import the new VM server. Please ensure both of these are in place before continuing with the below steps.

- 1) **Extract** the zipped OVA file
 - a. Use 7-zip to ensure compatibility with the decryption algorithms. 7-zip is open source and free for commercial use. <http://www.7-zip.org/>
 - i. If you use a different zip program, you may have decryption issues. You will have to support those and work directly with the software publisher to resolve them.
 - b. Decryption key is provided by your IMM Project Team
- 2) **Import** the VMware Template (OVA file).
 - a. Use your preferred method to deploy a virtual server template (see Appendix A for Importing Examples).

NOTE: You will only import the server **one time**, even if you have a Test environment. The second server will be generated from a clone after the first server is fully configured and tested. Your IMM installer will direct you when to make the clone.

NOTE: If you make the first server the “test” server (e.g. name it as the test server) then you will have to ALSO test and certify the copy you make to use as the “live” server. Please consider this before deciding to not create the initial copy as the (to be) live server.

- 3) **Power on** the VMware server
- 4) **Follow the on screen instructions** to activate the sysprep'd Microsoft Server
 - a. Input your Microsoft license key
 - b. Input the new Local Administrator password (make sure you record this as it is needed in our installation process)

NOTE: IMM does not sell or support Windows or Windows Licensing. If you need assistance with licensing the server, please contact your Microsoft Support provider.

- 5) **Create a VMware Snapshot** named "Before Rename"
 - a. Shut down the server
 - b. Create the snapshot (do not create this with the server powered on)
 - c. Retain this snapshot until the server is fully configured and tested.
- 6) **Rename** the server
 - a. Give it a unique name that appropriately reflects how you want the “Live” server named. (the “Test” instance will be cloned from this one later)
 - b. Add it to your domain

Supplemental Instructions

Please refer to the supplemental instructions document provided for additional product-specific install steps and perform these steps at this time.

Create a Snapshot

To protect your progress and to provide for diagnostics, create a snapshot of the server before any other changes occur.

- 1) **Shutdown** the server
- 2) **Create a Snapshot** named "After Rename"

Retain this snapshot until the server is fully configured and tested.

Retain the OVA File

The source OVA is your backup in case you need to re-import the baseline server as part of this process. It can also be important to have this file for testing when diagnosing issues in the installation process, which are rare but could occur.

The source OVA file should be retained until such time you have a fully installed, tested and operational server.

Once you are live on the server, it is recommended that you power down the server, export it to OVA and then retain that copy as your failsafe.

FTP Issues

It is common that the edge security of Financial Institutions blocks FTP access for most internal workstations. Please talk to your internal security staff to enable FTP access so you can complete this task. We have provided connections for both FTP and SFTP in case one is preferable to your security policies.

Before continuing, verify that the ports used for FTP are open/allowed. Depending on which protocol you are going to use, the ports are as follows.

FTP = 21
SFTP = 22

Testing the FTP Server

You can verify the server is up and functional by using one of the numerous online FTP test sites. This eliminates your own security setup (for now) in the process.

1. Go to: https://www.wormly.com/test_ftp_server
2. Enter the fields in as follows:

Test an FTP Server

FTP Test Tool

FTP Server

immftp.exavault.com

Enter an IP address or a fully qualified hostname

Use SSL?

Yes No

Username

ImmTest

Optional - will attempt to login with this username

Password

ImmTest

Optional.

Test this FTP server »

3. Select the **Test this FTP server >>** button

It will return a number of FTP messages ending in something like below (may not be exactly what you get) showing the final success status:

```
Resolving hostname...
Starting FTP Test...
* Rebuilt URL to: ftp://immftp.exavault.com/
* Trying 67.208.93.227...
* Connected to immftp.exavault.com (67.208.93.227) port 21 (#0)
< 220 ProFTPD 1.3.5 Server (EV) [67.208.93.227]
> USER ImmTest
< 331 Password required for ImmTest
> PASS ImmTest
< 230 User ImmTest logged in
> PWD
< 257 "/" is the current directory
* Entry path is '/'
> EPSV
* Connect data stream passively
* ftp_perform ends with SECONDARY: 0
< 229 Entering Extended Passive Mode (|||62813|)
* Trying 67.208.93.227...
* Connecting to 67.208.93.227 (67.208.93.227) port 62813
* Connected to immftp.exavault.com (67.208.93.227) port 21 (#0)
> TYPE A
< 200 Type set to A
> LIST
< 150 Opening ASCII mode data connection for file list
* Maxdownload = -1
* Remembering we are in dir ""
< 226 Transfer complete
* Connection #0 to host immftp.exavault.com left intact
FTP Test completed.
```

In case that testing service is down, there are many others, for example:

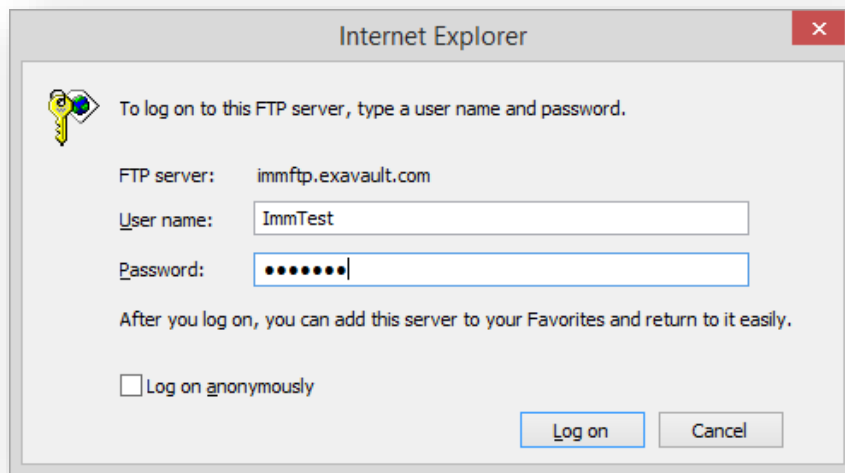
<http://www.infobyip.com/ftptest.php>

Test your own Access

After showing that the server is up in the previous sections test, you can test your own connectivity directly in a browser window (IE is shown here).

1. Open your browser and type in the URL: <ftp://immftp.exavault.com>

If your security allows the connection out of your network, you will see a prompt something like below (depending on your browser):



2. Enter the user: ImmTest
3. Enter the pw: ImmTest
4. Select the **Log In** button

You will receive a directory listing something like below if you can complete the connection. There is one file in the folder called "Success.txt".



Still not working?

If you still feel that there is a problem with the server or password, your Project Manager can quickly test this from their own PC, using the previously detailed process.

Virtually 100% of reported FTP issues come from CU security and can only be resolved on your end. The tests in the previous section should delineate where the issue is.

[We do not provide FTP technical support beyond this.](#)

I can't make FTP work, what now?

Alternative #1

Use the HTTPS URL to download the files.

If you do this ensure that the files are “unblocked” before using them. Check each files “properties” to ensure they are not blocked by windows.

Alternative #2

Use the FTP method from a different location that is not blocking FTP. Please note the security warning below.



You are restricted from decrypting the server's zip file outside of your institution's secure environment. Ensure that you bring the file inside your secured network prior to decrypting it and that it never exists outside your FI as an unencrypted file, either on a computer or any type of media.

Appendix A: Importing Examples

Our OVA files (OVA is a tar of OVF files) are exported from a VMware ESXi system, which makes it a simpler process to get them into ESXi. However, Microsoft provides a method to take these files and use them in their Hyper-V product. Examples for importing into both systems are included here.

Note: IMM does not provide support for either VMware ESXi or Microsoft Hyper-V. These examples are provided for illustration purposes to show ways in which we have tested using our OVA files. For assistance with ESXi and Hyper-V, contact whoever supports you on those products (e.g. Microsoft and VMware).

VMware ESXi

Example, when using the vSphere v6 client:

1. Select the **File** menu
2. Choose **Deploy OVF Template**
3. Browse for the OVA file
4. Follow the wizard directions. Use the options that are correct for your environment but do not change the server resources to be under the required specs for the product.

Microsoft Hyper-V

Example, when using the Microsoft VM Converter v3

<https://www.microsoft.com/en-us/download/details.aspx?id=42497>

Requires that you have imported the Powershell module MvmcCmdlet.psd1. Read the Microsoft documentation for the Converter for help.

1. **Extract** the OVA file to OVF files, using whichever zip or tar tool you decide (7-zip works).
2. **Convert** the VMDK disk files to VHDX files. Disk1 is C: and Disk2 is E:
 - a. Here are a couple PowerShell examples:

```
ConvertTo-MvmcVirtualHardDisk -SourceLiteralPath "C:\Temp\OVF\TIC-CNS-58-OVA-2012R2-disk1.vmdk" -VhdType DynamicHardDisk -VhdFormat vhdx -destination "C:\Temp\VHDX\TIC-CNS-58-OVA-2012R2-disk1_DriveC.vhdx"
```

```
ConvertTo-MvmcVirtualHardDisk -SourceLiteralPath "C:\Temp\OVF\TIC-CNS-58-OVA-2012R2-disk2.vmdk" -VhdType DynamicHardDisk -VhdFormat vhdx -destination "C:\Temp\VHDX\TIC-CNS-58-OVA-2012R2-disk2_DriveE.vhdx"
```

3. **Move** the VHDX files to the DataStore where you will house the new Hyper-V machine.
4. **Create** the new Hyper-V machine via your normal process. See the documentation provided with our OVA to know the required system resources (RAM/CPU).
5. **Attach** the VHDX files to the new virtual machine. Ensure drive letter assignments are correct or the system will not function.

Support

If you have trouble completing this procedure, contact your IMM Project Team.

Please do not contact IMM Support for installation assistance.