GREEN SCREENS
www.greenscreens.io

Installation for

Microsoft Hyper-V

Contents

Introduction

Virtualization technology allows running software products in insolated environments allowing full control over installation and preventing host system pollution. Prepared images are ready to run with preinstalled OS and other required elements.

Many companies install software in isolated environments, however, preparing and installing system takes time. Corporate IT usually installs MS Windows OS in virtual environment, and then installs SW. However, graphical OS often requires much more resources than headless systems. Thus, to get optimal configuration and performance we have pre-installation virtual disk images based on Alpine Linux 3.12. specially built for virtualization engines.

Pre-installation images contains self-install scripts that will install runtime environment and **Green Screens Terminal Service for IBM I** by downloading required files from Internet.

Benefit of pre-installation images versus ready-to-run images are in size and latest version automatic installation. Pre-installation images we provide are only 30MB zipped virtual drives in average while ready-to-run images might be between 1GB to 10GB in size depending on virtual drive format.

We distribute images in several most common formats: VMDK, VHD, VHDX

- VMDK – interchangeable format supported by QUEMU, Virtual Box, VMWare
- VHD – interchangeable format supported by QUEMU, Virtual Box, Hyper-V
- VHDX – improved VHD format supported by Microsoft Hyper-V

Supported formats can be converted in different formats for other virtualization engines.

Images can be imported into various cloud providers also. For an example:

- Amazon Cloud – VHD, VHDX, VMDK
- Google Cloud – VHD, VMDK
- IBM Cloud – VHD, VMDK
- Microsoft Azure - VHDs

1. Quick Start

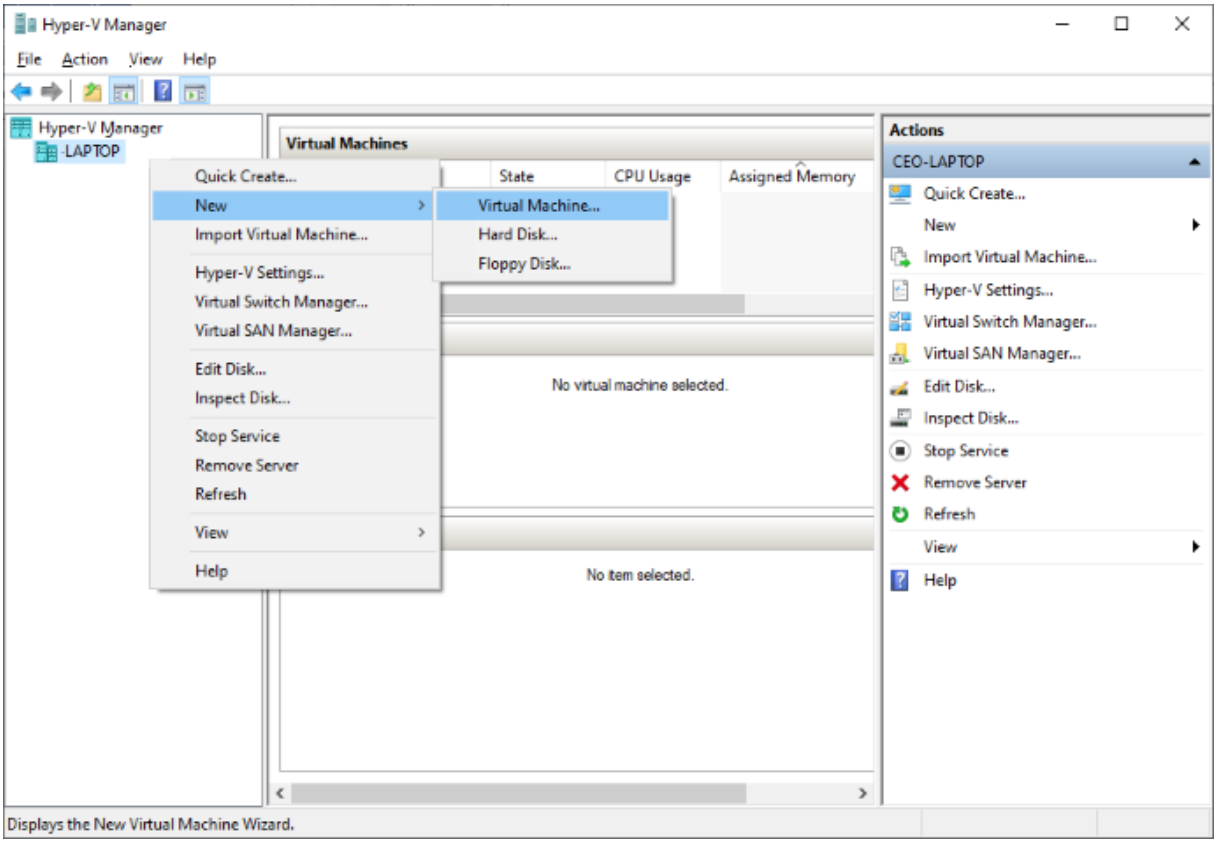
If you are already familiar with Microsoft Hyper-V, then follow these few steps to get up and running.

1. Extract downloaded image
2. Create new Virtual Machine
3. Attach extracted image as main disk drive
4. Add networking and enable static MAC address
5. Open Hyper-v connection – click Start button.
6. Login with user **server** and password **server**
7. If DHCP is available in your network, skip to step 8.
    a. Follow chapter 3. Setup Networking
    b. After restart, login as noted in step 6.
    c. Then jump to step 9.
8. From Linux command line call **gssetup** – system will restart.
   Upon restart, system will start downloading and installing required modules.
   Once finished, Green Screens server should be up and running.
9. You should be able to connect to Green Screens Server through web browser from any computer inside your network to standard port 80 for HTTP or 443 for HTTPS.

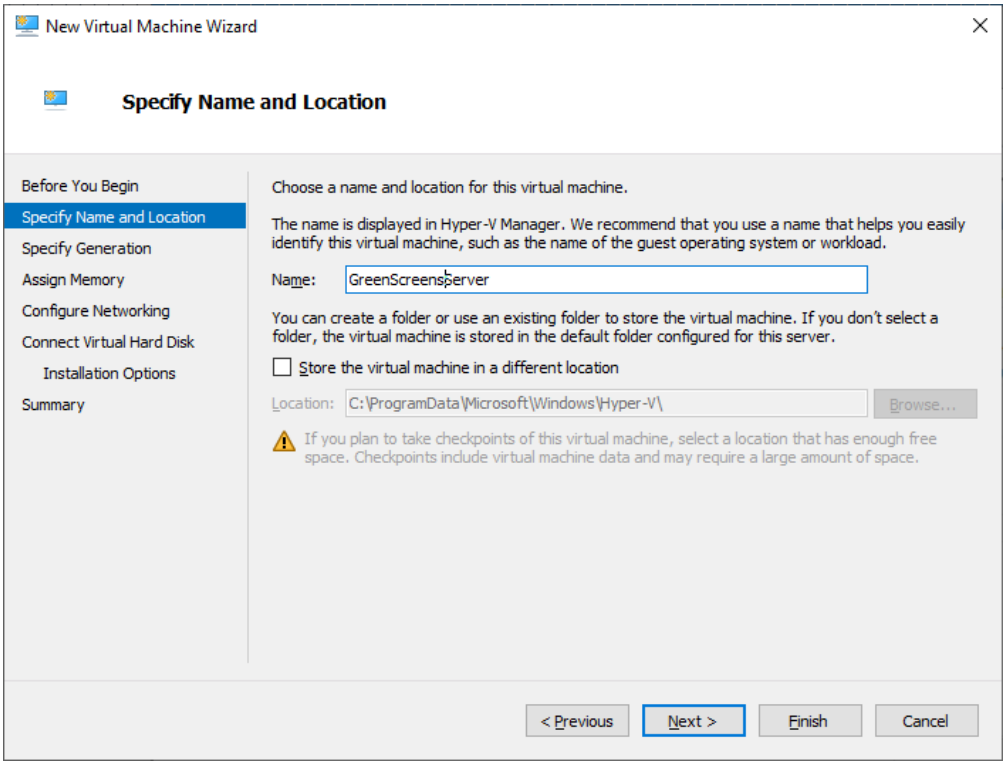
2. Creating Virtual Machine

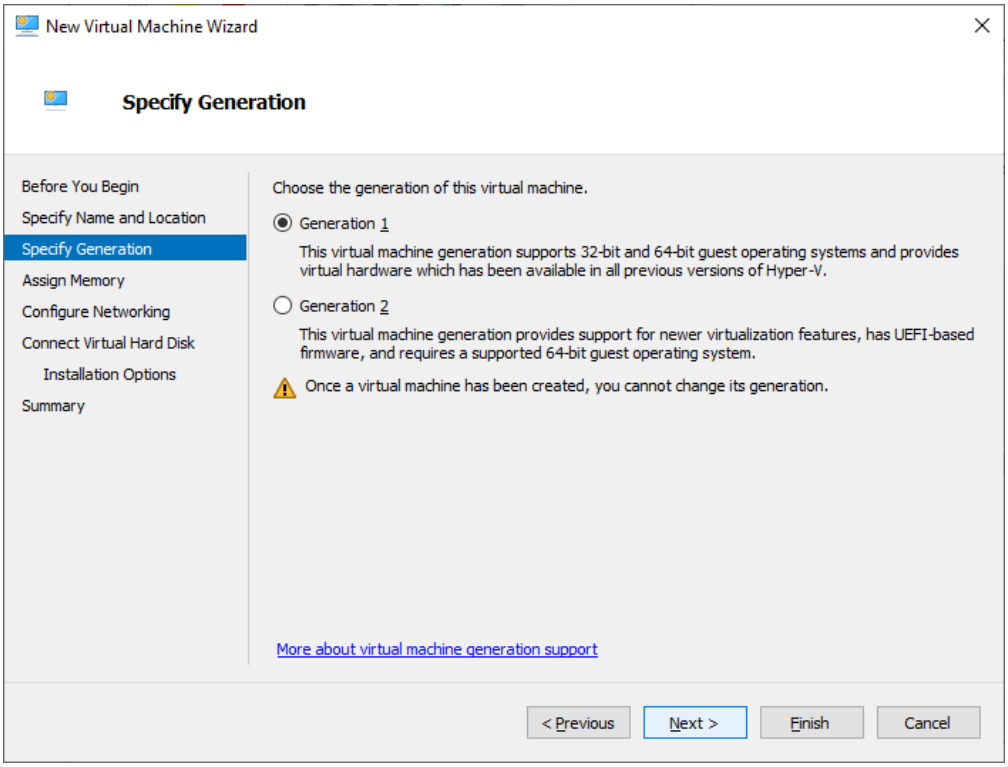
Start Hyper-V Manager. It is located in **Windows Administrative Tools**. Please note, Hyper-V must be enabled through **Turn Windows Features On / Off** option.

Right click on local computer (LAPTOP on image below) and select New -> Virtual Machine

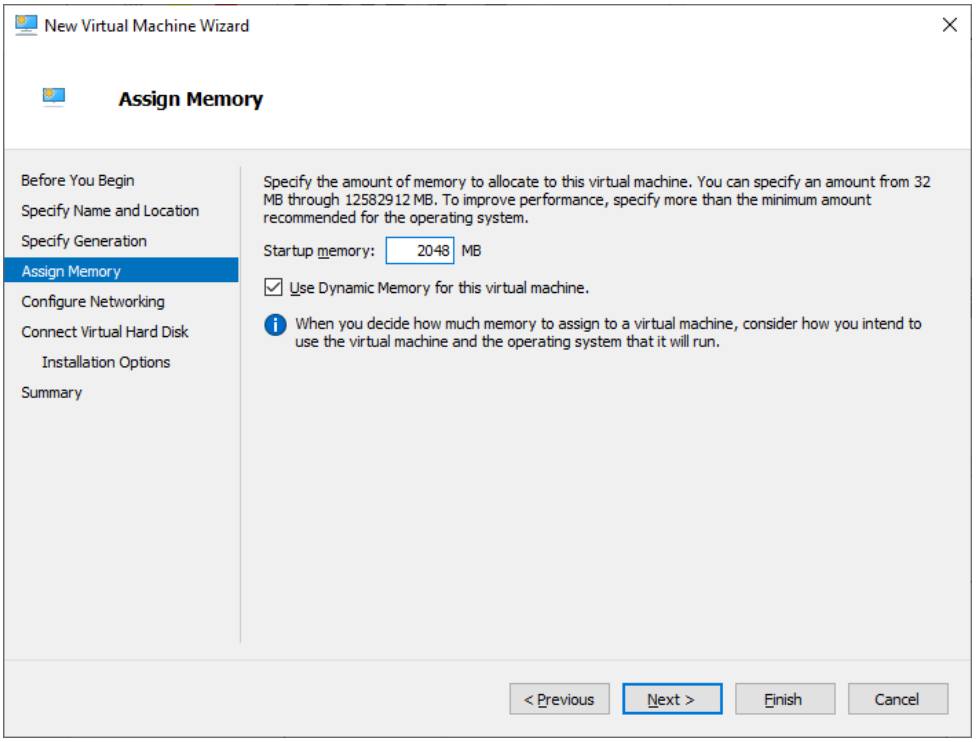


Then follow wizard to create new Virtual Machine.

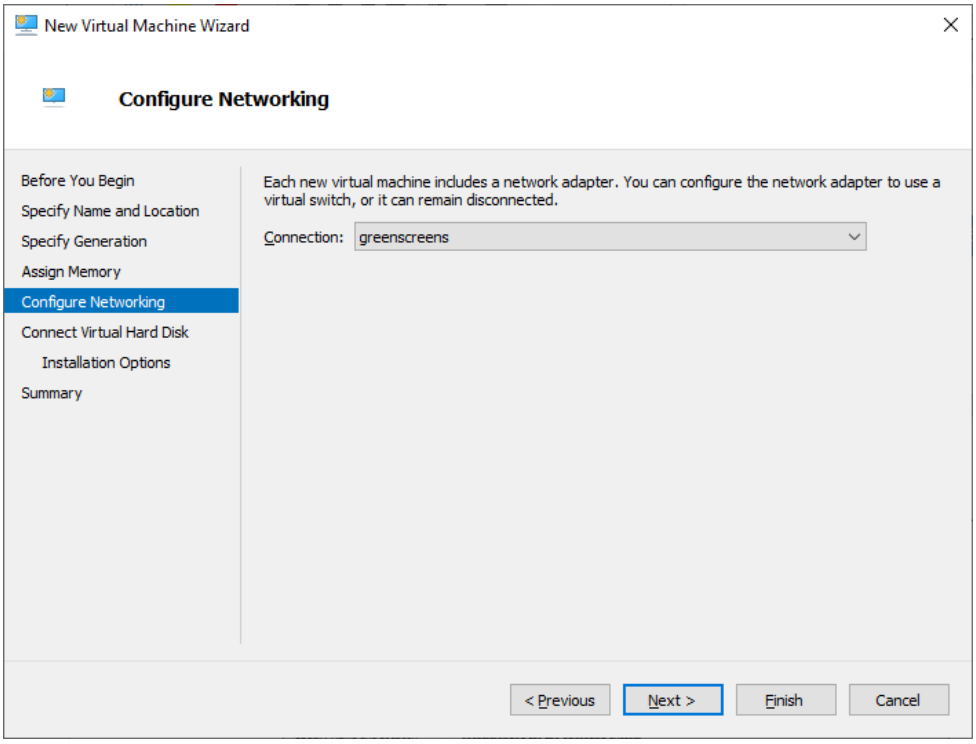




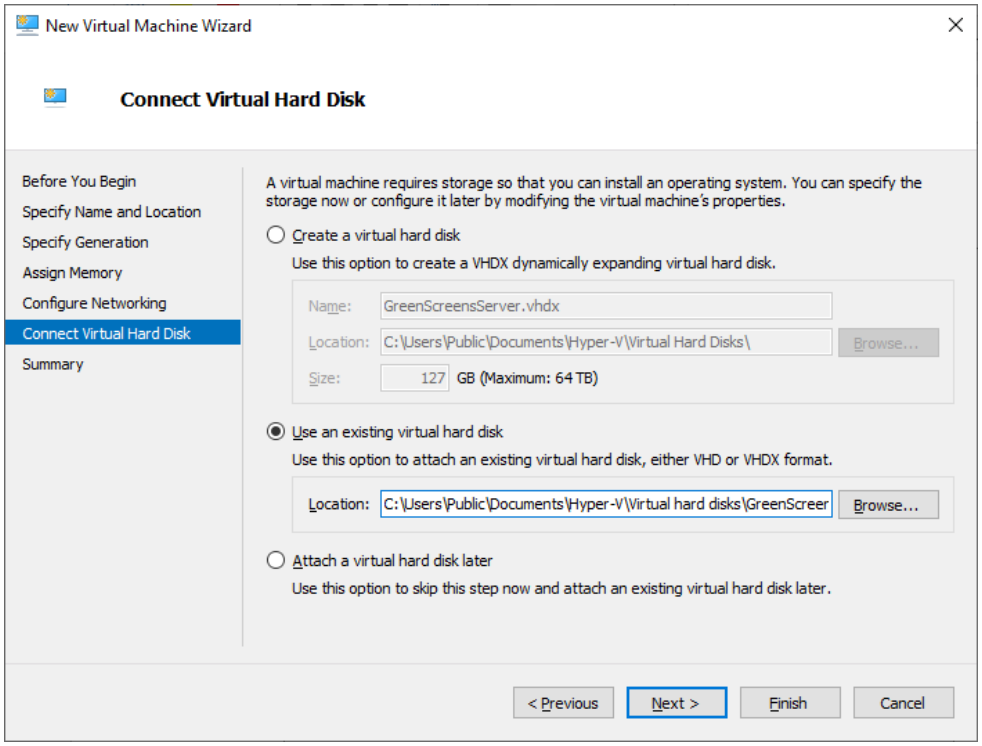
Select amount of memory as minimum 1GB, optionally, leave Dynamic memory usage.



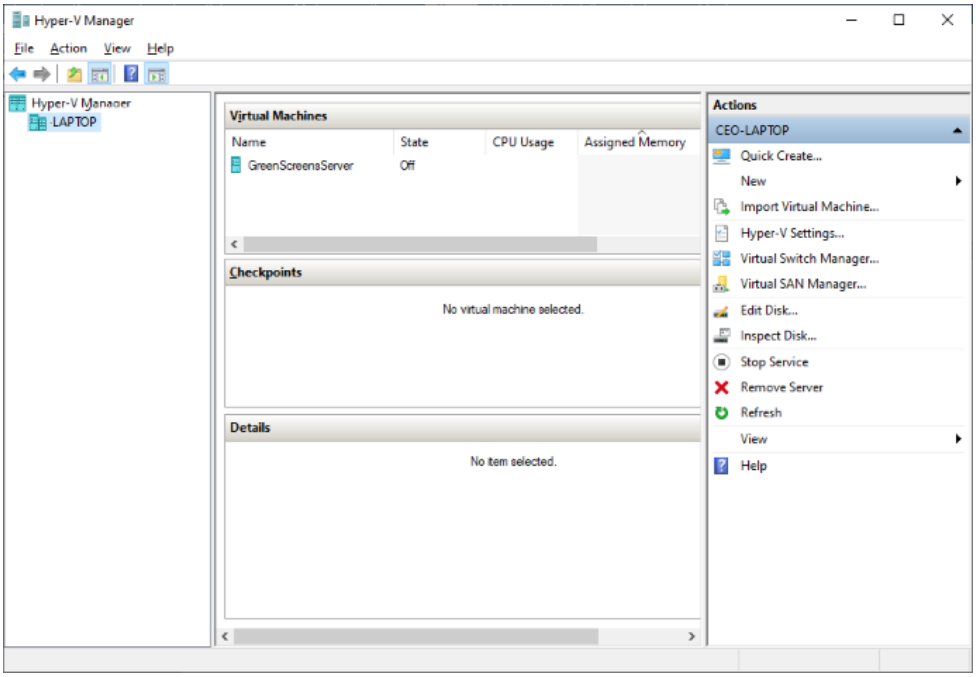
Select previously configured virtual network.



Select “Use existing virtual hard disk” option and select Green Screens downloaded image and click Finish button to create Virtual Machine configuration.

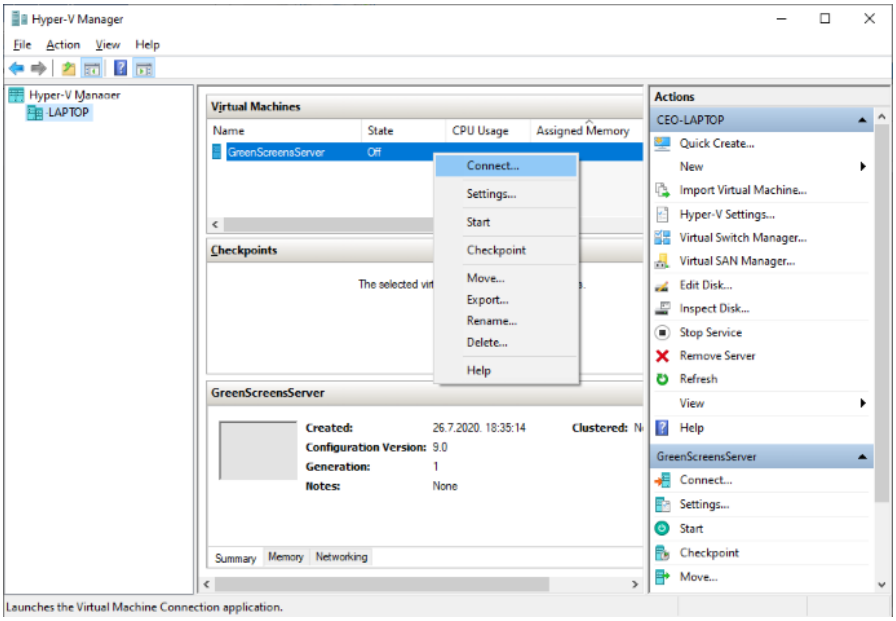


Final result should look as on image below.

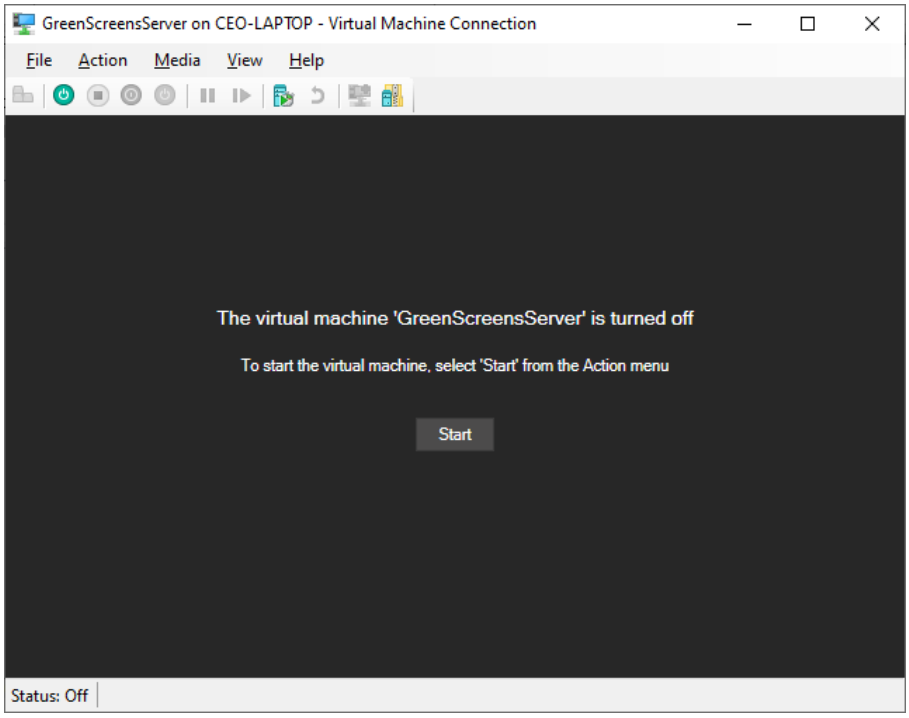


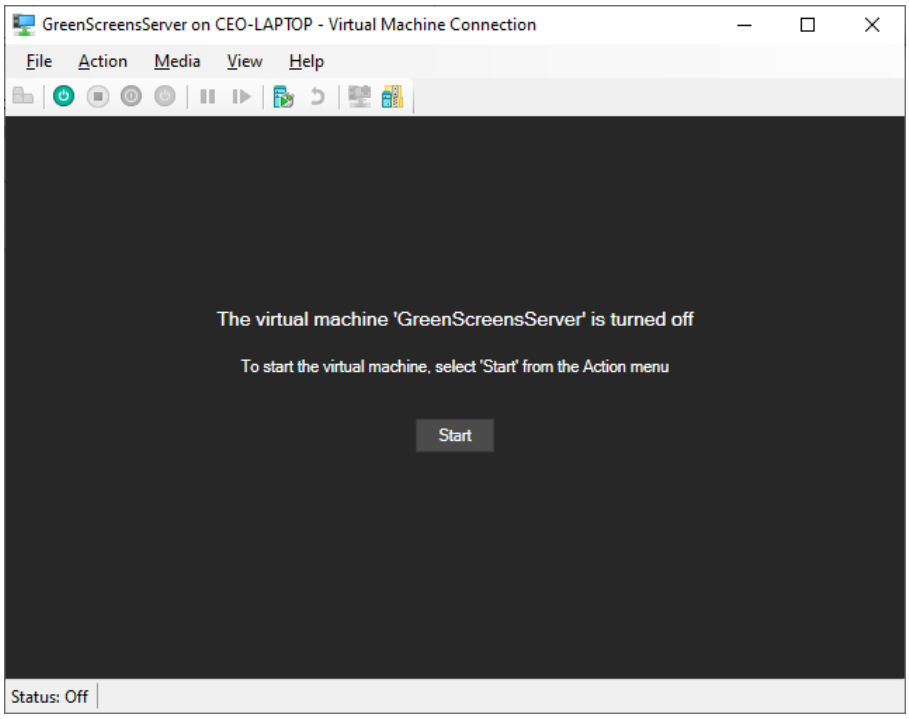
3. First start

Right click on newly created virtual image and select Connect.

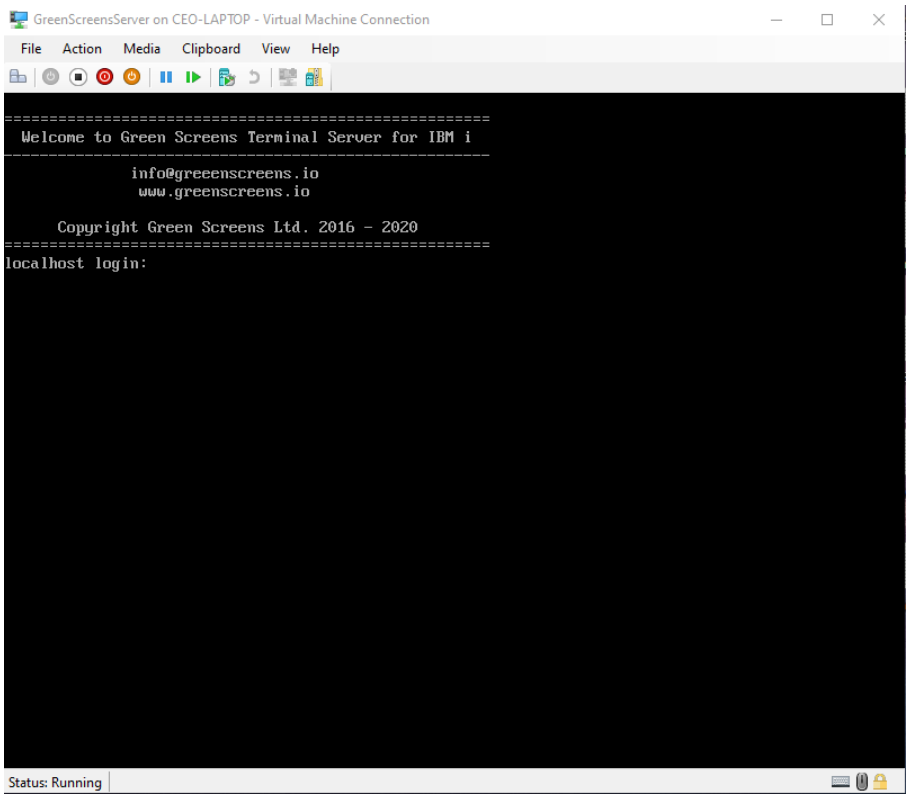


New window will open, Virtual Machine Connection – select Start button to start virtual machine.





Following image should show with login screen. Enter **server** as user and **server** as password to login. System will let you in and position to /home/server directory.



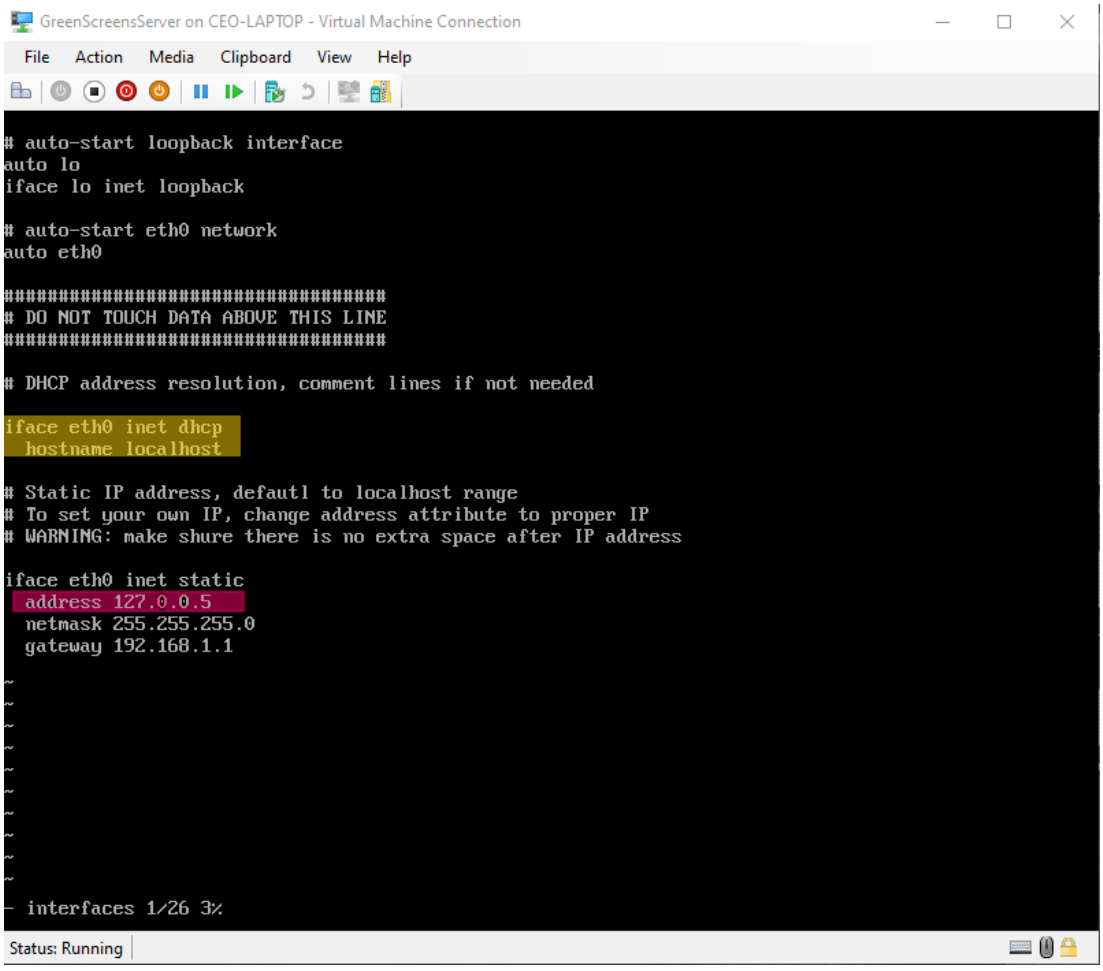
4. Setup networking

Networking inside virtualized OS is configured by default to localhost and DHCP IP address retrieval. For real usage, static IP address must be set according to company preference before auto-installation procedure.

After login, follow steps below:

a. Type **cd /home/server**
b. Type **vi interfaces** to open network config file
c. Change static IP address to be used from local network (pink on image below)
d. Optionally, disable DHCP by commenting line (yellow on image below)
e. Save file by pressing **ESC**, **column w, enter**, **column q**, **enter**
f. Type **gsnet** to apply changes. System will restart.

After restart, new IP should be visible under networking tab on Hyper-V manager.



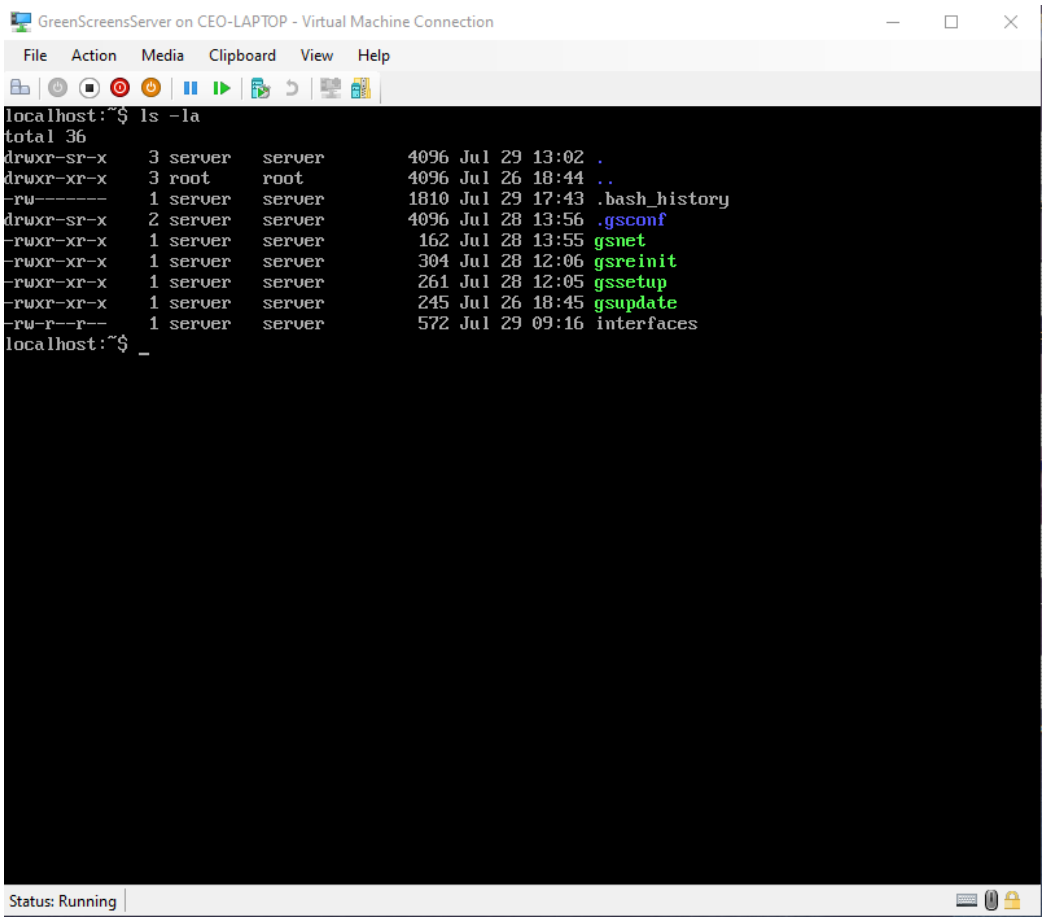
5. Activate Self-Install

Provided image is in pre-install state meaning runtime engine and Green Screens Terminal Service for IBM I must be installed from Internet. Few reasons exist why we choose that approach. To reduce initial OS image download size, to enable latest version installation and simply because we do not know about user networking settings requirements.

NOTE: Do not start with this step if networking is not setup.

After login, simply call **gssetup** from command line. System will restart and begin installing required files from the Internet. Once finished, instance might restart once more before Greens Screens Server become available for usage.

In a case installation was unsuccessful due to the network error or intentionally terminated installation procedure, try to repeat with **gsinstall** or use **gsreinit** which is similar to **gssetup** except it will delete some of installed modules trying to do clean reinstall. If that does not help either, try to remove broken disk image and re-apply new one from initial download.



6. Update Application

Update function is to update Green Screen Terminal Service modules only.

NOTE: Function might stop Green Screens Server if it is running during the update.

After login, call **gsupdate** function. Function will download update pack and replace existing ones on Green Screen Server. After finish, please restart server.

NOTE: If **gsupdate** does not work, script might have expired download keys. Download latest version with commands below then try **gsupdate** again.

curl -L -o /home/server/update.sh -O https://www.greenscreens.io/updates/alpine/update.sh

chmod +x /home/server/update.sh

chown server:server /home/server/update.sh