HORUS VIEW & EXPLORE

TECHNICAL DOCUMENTATION

Horus Web Player Installation Manual

Horus View & Explore
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Contents

1 Introduction

The Horus Web Player is a web server application that publishes your street-level imagery on the internet. Recordings can be uploaded to a cloud server and shared with project members in or outside your organization. Access to the recordings is managed through specified account permissions. The Web Player facilitates its users to work on the go with multiple users at the same time.

This document describes the installation process of the Horus Web Player.

For further assistance contact Horus support.

2 Installation of the Horus Web Player

2.1 Installation Process

For the installation of the Horus Web Player the files below are required.

- *wpdockerV 8.0.zip* - Virtual Machine

- *docker-compose.zip* - Docker compose files

- *Docker for Windows Installer.exe* - Docker installer.

- *Horus.Web.MoviePlayer.Installer.msi* - Media Server installer

- *config.json* - Settings fils for Media Server

- *add_firewall_exception.vbs* - Adds firewall exception

The system should meet the following criteria:

- Windows 10 2016/2019 server

- Nvidia GTX 1080 or better

- Hyper-V enabled

- Firewall disabled

Start Installation

1. Copy all the required files for the installation in the folder: **C\:horus**. Unzip the contents of the *Wpdocker V8.0.zip file*.

2. Enable Hyper-V
   Open a CMD as administrator and enter the following command:

   Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V -All

3. Open Hyper-V Manager and click on *'Import Virtual Machine'* to import the wpdocker image.
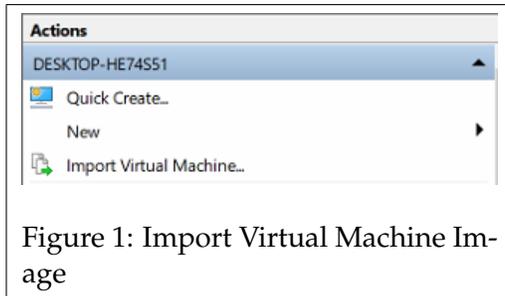
Figure 1: Import Virtual Machine Image

Browse and select the unzipped wpdocker folder.

pick the wpdocker virtual machine.

Select 'Register the virtual machine in-place'.

The Virtual machine should now be added to the 'Virtual Machines' section in the manager.
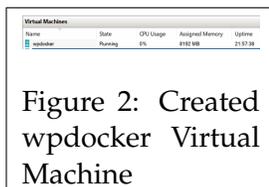
Figure 2: Created wpdocker Virtual Machine

4. Create an internal switch in Hyper-V.
   Open the 'Virtual Switch Manager' and click on 'Create Virtual Switch'. Give the switch a name and set the connection type to 'Internal network'. Click on 'OK' to create the switch.
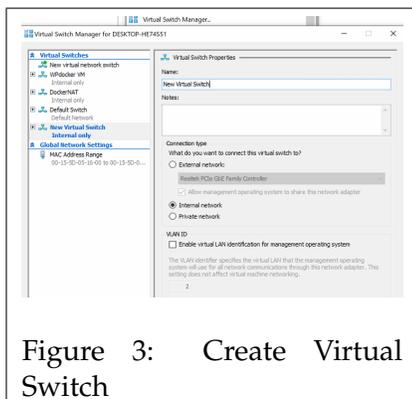
Figure 3: Create Virtual Switch

5. Start the Wpdocker image. The 'State' of the VM should be 'Running'.

6. In windows, open the 'Network Connections' window with the available adapters. Open the properties of the switch that you just created. Open the IPv4 properties and enter the following IP address:

192.168.31.11

Figure 4: Static IP for Switch
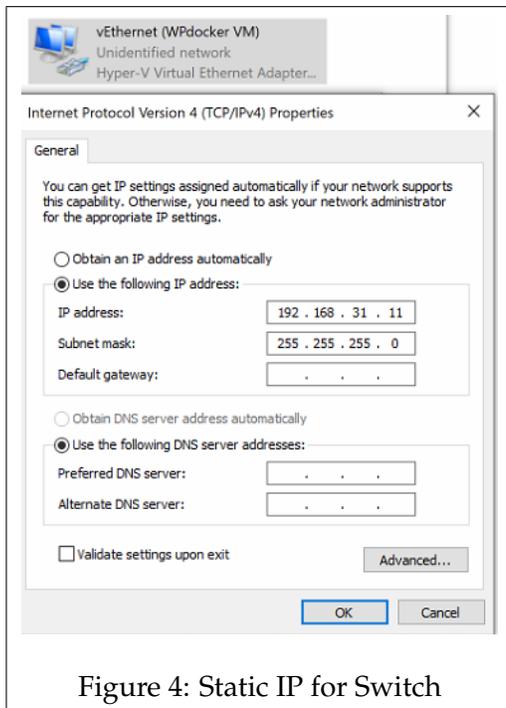
In windows, give the internet connection that is connected to the internal network the following IP address: **192.168.31.11**

7. Test the connection by pinging the following IP address:

192.168.31.12

If you get a reply then your docker environment is functioning correctly.

8. Run *Docker for Windows Installer.exe* to install the software.

9. In windows, search for 'Environment Variables' and open that window. Add a new variable under 'System Variables' and enter the following values:

> **Name**: DOCKER_HOST
> **Value**: tcp://192.168.31.12:2375

press 'OK' to save the created variable.
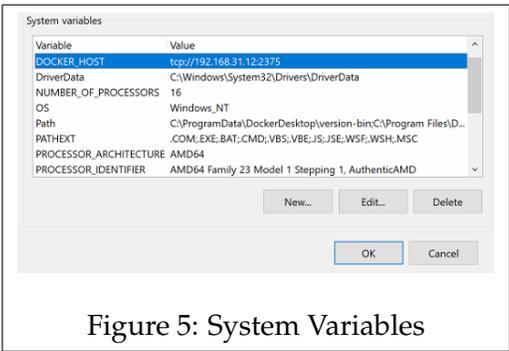
Figure 5: System Variables

10. Open a command prompt and enter the following command:

docker container list

An overview of the docker containers should appear.

Figure 6: Docker Containter List

11. Run the 'Horus.Web.MoviePlayer.Installer.msi' to install the Horus software.
    In the installer enable the 'Services' to be installed as well.

12. copy the *config.json* and the 'Docker-Compose' folder of the *docker-compose.zip* to the following directory:

> C:\programdata\Horus View and Explore\HorusWebPlayer

13. Open the *config.json* and specify the recording location between the quotation marks.

```
"Recordings": {
"Directory": "D:\\directory_location"
},
```

Depending on your setup, you may want to edit the *allowed hosts* with the IP addresses of systems or hostnames that the Web Player reacts to.
An example of adding allowed hosts is shown below.

```
"Django": {
"ALLOWED_HOSTS": [
"192.168.31.12",
"192.168.31.11",
"wpdocker",
"localhost"
]
}
```

Save the file after making any changes.

14. open a Command Prompt and enter the following command:

```
cd C:\Program Files\Horus View and Explore\HorusWebPlayer\Service
Horus.Web.MoviePlayer.exe --config
```

This will load the settings from the .env and config.json files to the Web Player.

```
C:\Program Files\Horus View and Explore\HorusWebPlayer\Service>Horus.Web.MoviePlayer.exe --config
docker volume create postgresql
postgresql

docker-compose build

docker-compose up -d
```
Figure 7: Loading the Config Files

15. Run the 'add_firewall_exception.vbs' file.

16. Place the recordings into the folder specified in step 10.

17. Run the Recordings Manager, The database will be updated with the current recordings.

18. Run the Media Server. This starts the Web Player, you should be able to find the Web Player in a web browser after starting it.

Port Proxy
To make the Web Player respond to localhost or other external addresses, the port 80 /or 443 of the windows machine will have to be forwarded to the Docker VM.
You can do this by entering the following command into the Command Prompt:

netsh interface portproxy add v4tov4 listenaddress=127.0.0.1 listenport=80 connectaddress=192.168.31.12 connectport=80

Adding New Recordings
To add new recordings to the Web Player simply follow step 14 and 15. Then in the admin panel of the Web Player, assign the new recordings to a group, which can then be assigned to a user.

Portainer
To access portainer enter the following address

192.168.31.12:9000

The login details are:

Name: admin
Password: horusweb

Select 'Containers' on the left bar to view the containers.
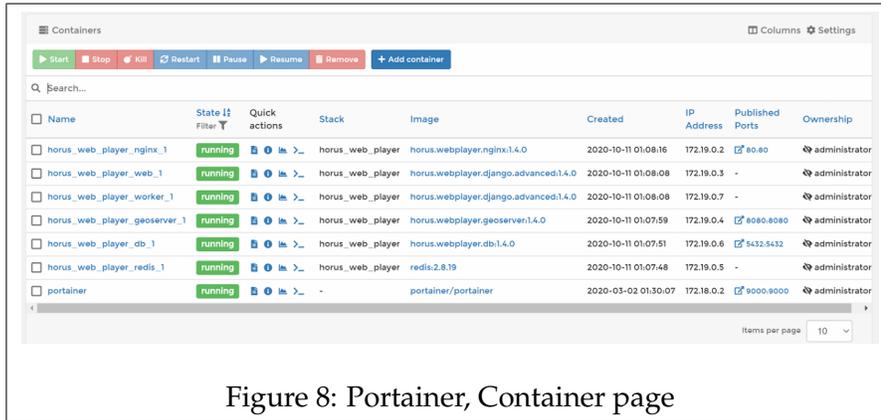
Figure 8: Portainer, Container page

Power Plan Settings
The Media Server needs to run at all times, this requires Windows to be active. We thus want to avoid the system to go into sleep.

Open 'Edit Power Plan' and change the settings so the system will not automatically turn off or go to sleep.

Troubleshooting

- No projects visible in the 'projects' menu in the web frontend.

  Firewall blocks connection of the frontend to the database.

- No images showing on front end.

  Media Server is not running.

  Verify that system has permissions to the recording directories.

- Web Player page not loading

  Nginx error, Restart the nginx container in Portainer.

  Horus Service not running, verify that the HorusWebPlayerService is running.

3 Appendixes

3.1 Adding Additional Disks to Recordings Manager

3.1.1 Add Additional Disks

The Recordings Manager finds recordings from a specific directory. To add recordings from other disks to the Recordings Manager, you have to create a symbolic link.

The process for doing so is described below.

1. Open a Command Prompt with admin privileges in the original recordings folder.

> **Example**
> The original recordings folder for this example is: **D:\recordings**
> The additional folder that we want to add to the original folder is: **H:\extra_recordings**
>
> We thus want to open a Command Prompt in: **D:\recordings**

2. Enter the following command.

> **MKLINK /D name_of_folder "H:\extra_recordings"**

   Enter the name to give to the symbolic link.
   Enter the new directory location between the quotation marks.

3. A symbolic link should have been created in the original folder.

4. Run the Recordings Manager.

The recordings from the added disks should now be added to the database.