

CYBER HAWK™

by RapidFireTools®



INSTALLATION GUIDE

Virtual Appliance for Cyber Hawk

Contents

Purpose of this Guide	4
<u>RapidFire Tools Server vs. Virtual Appliance</u>	4
Virtual Appliance System Requirements	6
<u>Hyper-V Installation System Requirements</u>	6
<u>VMware System Requirements</u>	7
<u>RapidFire Tools Server and Virtual Appliance Firewall Requirements</u>	8
Cyber Hawk Installation Procedure for Hyper-V	9
<u>Step 1 — Download and Run the Virtual Appliance Installer</u>	9
<u>Step 2 — Select Target</u>	11
<u>Step 3 — Verify that Installation Requirements are Met</u>	12
Overriding Disk Space Requirements	13
<u>Step 4 — Enter the Network Detective Account Credentials</u>	15
Virtual Appliance ID Requirements	15
<u>Step 5 — Select Appliance ID Screen</u>	16
Record the Appliance ID for the Virtual Appliance Installation	17
<u>Step 6 — Download VMs</u>	18
<u>Step 7 — Select Folder to Install Virtual Appliance</u>	21
<u>Step 8 — Configure Required Virtual Switches</u>	22
Using an Existing External Virtual Switch	22
Creating and Selecting a new External Virtual Switch	23
<u>Step 9 — Define Network Settings</u>	24
Network Settings using DHCP	24
Network Settings using a Static IP Address	24
<u>Step 10 — Proxy Settings</u>	25
<u>Step 11 — Verify Settings Prior to Installation</u>	27
<u>Step 12 — Monitor Installation Progress Status</u>	28

<u>Step 13 — Confirm that Appliance Meets Operational Requirements</u>	30
Cyber Hawk Installation Procedure for VMware	31
<u>Step 1 — Download and Run the Virtual Appliance Installer</u>	31
<u>Step 2 — Select Target</u>	33
<u>Step 3 — Verification that Installation Requirements are Met</u>	34
<u>Step 4 — Enter the Network Detective Account Credentials</u>	35
Virtual Appliance ID Requirements	35
<u>Step 5 — Select Appliance ID Screen</u>	35
Record the Appliance ID for the Virtual Appliance Installation	36
<u>Step 6 — Set VMware Server Credentials</u>	37
<u>Step 7 — Set VMware Server Settings</u>	38
<u>Step 8 — Set VMware Network Settings</u>	39
<u>Step 9 — Initiate the Download VM Process</u>	40
<u>Step 10 — View VM Download Progress and Install Package Status</u>	41
<u>Step 11 — Define Network Settings</u>	43
<u>Step 12 — Proxy Settings</u>	43
<u>Step 13 — Verify Settings Prior to Installation</u>	45
<u>Step 14 — Monitor Installation Progress Status</u>	46
<u>Step 15 — Confirm that Appliance Meets Operational Requirements</u>	47
<u>Manual Installation for VMware deployment</u>	48
Step 1 : Download the VMware appliance OVA	48
Step 2: Launch the VMware vSphere Client and log in	48
Step 3: Launch the VMware New Virtual Machine Wizard	48
Step 4: Creating a VMware Virtual Machine	48
Step 4: Verify successful deployment of virtual machine	51
Step 5: Log into the Virtual Machine to set up your Cyber Hawk appliance	51
Step 6: Setting up your Cyber Hawk Appliance	52
Step 7: Verify your Cyber Hawk Appliance is checking into the Rapidfire Tools servers and appears Active in the Network Detective application	56

Purpose of this Guide

This guide is intended for users of the RapidFire Tools Software Appliance for Cyber Hawk. The appliance must be installed within a Microsoft Hyper-V or VMware environment to operate one or more of the Software Appliances.

The instructions here will guide you through the installation process for both [Hyper-V](#) and [VMware](#).

Additional guides are available for Cyber Hawk. This guide is designed to be used in conjunction with other supplementary guides available at www.rapidfiretools.com/nd.

RapidFire Tools Server vs. Virtual Appliance

Cyber Hawk requires that you install either the A) **RapidFire Tools Server** or B) **Virtual Appliance** on the target network to be assessed. This guide covers how to install the **Virtual Appliance**.

- The **RapidFire Tools Server** is a Windows service installed on a PC on the target network. It is quick and simple to install, *but it cannot perform an internal vulnerability scan* on the target network. Nonetheless, the RapidFire Tools Server can still identify a great number of security issues within the assessment environment.
- The RapidFire Tools **Virtual Appliance** is a virtual machine that must be installed on a PC on the target network using Hyper-V or VMWare. It takes slightly more time to install, but it can perform an internal vulnerability scan on the target network.

Tip: In general, we recommend deploying the **RapidFire Tools Server** for its ease of use. However, if you require an *Internal Vulnerability Scan* of the target network, you should use the Virtual Appliance. Refer to the table below for a quick breakdown of the RapidFire Tools Server's pros and cons (as compared to the Virtual Appliance).

Features	RapidFire Tools Server	Virtual Appliance
Easier/ faster to install	✓	-
Less configuration to collect consistent scan data	✓	-

Features	RapidFire Tools Server	Virtual Appliance
Lower system requirements	✓	-
Requires scan hosts on the target network	-	✓
Can perform internal vulnerability scan	-	✓

Virtual Appliance System Requirements

The following is a list of computer and software system requirements that are necessary to INSTALL the **Virtual Appliance**:

Hyper-V Installation System Requirements

1. Microsoft Hyper-V Enabled Server or Workstation Requirements:

- a. Microsoft Hyper-V enabled Windows Server 2012 or higher server operating system

OR

- b. Microsoft Hyper-V enabled Windows 10 Pro or higher server operating system

Note: Hyper-V Management Tools must be included when installing Hyper-V using the Windows Programs and Features option, or via the PowerShell on a Hyper-V Server Core installation.

2. **Recommended Virtual Memory Availability Requirement:** 8 GB of free and available Virtual Memory in the Hyper-V environment*

3. **Recommended Disk Space Requirement:** 20 GB of free disk space

4. Recommended Processor for Dedicated and Non-Dedicated Systems Hyper-V Installations

- a. *Dedicated Microsoft Hyper-V System to run the Virtual Appliance*

Recommendation: Intel i5 or faster processor for dedicated deployments

- b. *Non-Dedicated Microsoft Hyper-V System used to run other guest instances and run the Virtual Appliance*

Recommendation: Intel Xeon class server processors capable for hosts running multiple instances

Note: These memory requirements are over and above the host machine's current memory requirements for Windows, Hyper-V, and any other application memory requirements that must be met by the host machine.

5. Access to the Internet.

VMware System Requirements

VMware Version: ESXi 5.5 or higher

Virtual Machine Memory: 8 GB available

Virtual Disk Size: 20 GB

Additional requirements include: PowerCLI 6.3 and access to the Internet.

In order to be able to use the Virtual Appliance, the appliance must be licensed from RapidFire Tools for installation and use.

RapidFire Tools Server and Virtual Appliance Firewall Requirements

MSP Partners and end customers using RapidFire Tools appliances (Server or Virtual Appliance) should configure the firewall rules on their networks to enable access to the following RapidFire Tools URLs. This list applies to all Servers and Virtual Appliances (Audit Guru, Cyber Hawk, Reporter, and Inspector).

- gatekeeper.rapidfiretools.com
- go.rapidfiretools.com
- au.rapidfiretools.com
- go-eu.rapidfiretools.com
- go-au.rapidfiretools.com
- wcf1b.rapidfiretools.com
- wcf1b-eu.rapidfiretools.com
- wcf1b-au.rapidfiretools.com
- api.ndglue.com
- networkdetective.s3.amazonaws.com
- download.rapidfiretools.com

The RapidFire Tools Server requires access to **port 443**.

The Virtual Appliance requires access to the Greenbone Community Feed at feed.community.greenbone.net using **port 873**.

Cyber Hawk Installation Procedure for Hyper-V

To perform the installation of the **Virtual Appliance for Hyper-V**, follow the instructions below.

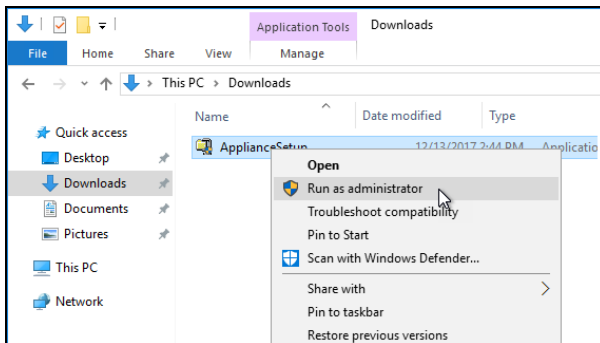
Step 1 — Download and Run the Virtual Appliance Installer

The **Installer** file is a self-extracting ZIP file that is used to initiate the installation of the **Virtual Appliance** on the host system. To begin the installation procedure:

1. Download and run the **Cyber Hawk Virtual Appliance Installer** file at <https://www.rapidfiretools.com/nd>. The Installer file is named **RapidFireToolsApplianceSetup.exe**.

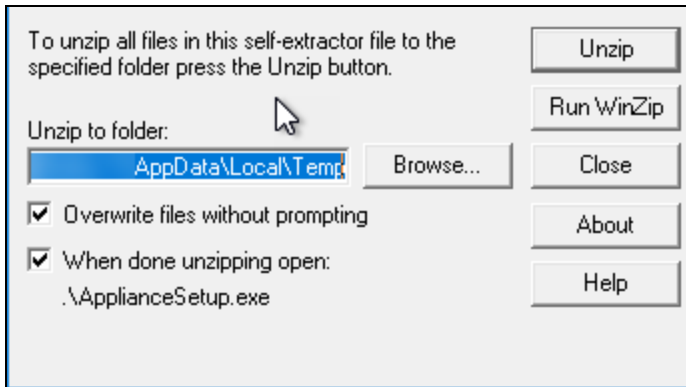
Important: Be sure to download the "Virtual Appliance Installer", and NOT the RapidFire Tools Server installer.

2. After downloading the installer, right click on **RapidFireToolsApplianceSetup.exe** and click **Run as Administrator**.



3. Use the **Unzip** option to unzip the files into a folder location of your choice and start

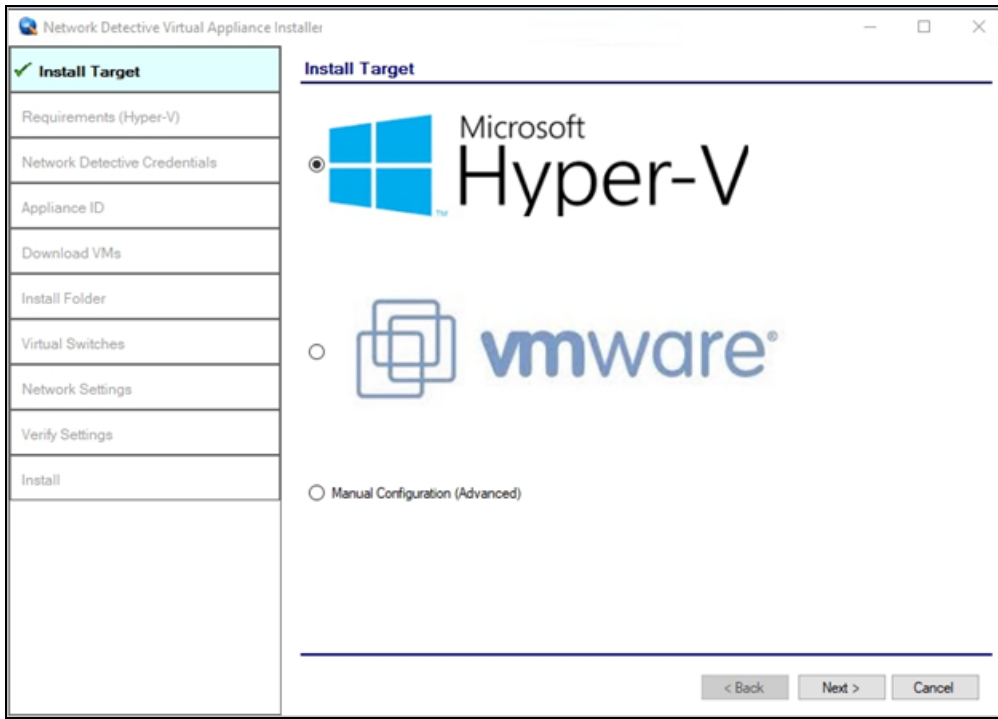
the installation program.



Important: You must have Administrator privileges and access rights in order to complete the installation process successfully.

Step 2 — Select Target

1. Select the **Microsoft Hyper-V** option to install on a Hyper-V enabled system.

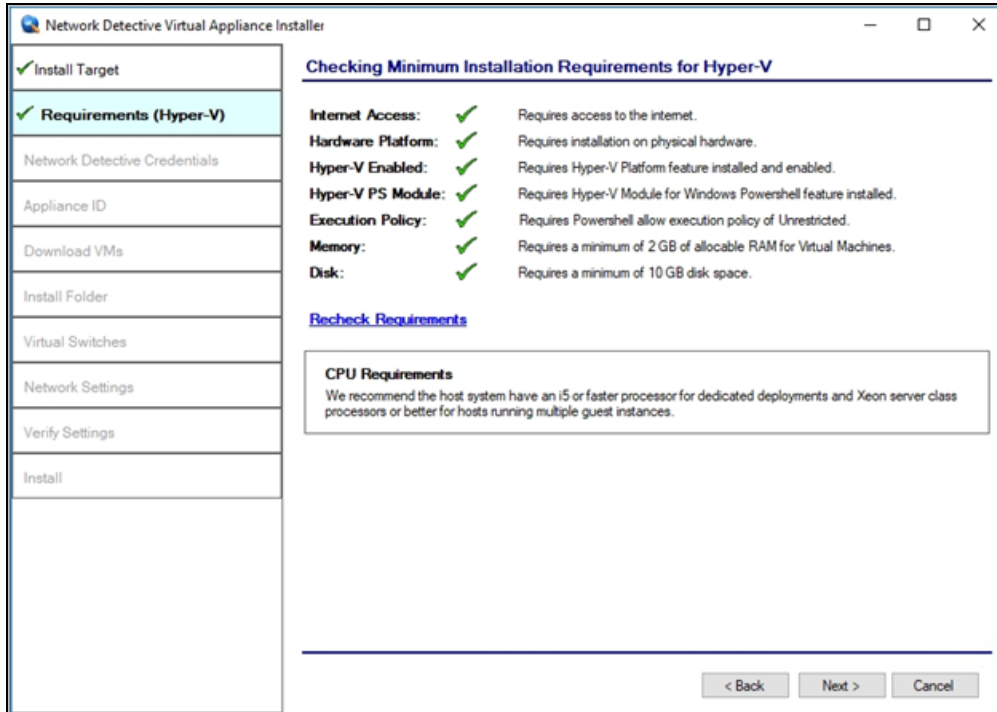


2. Click **Next**.

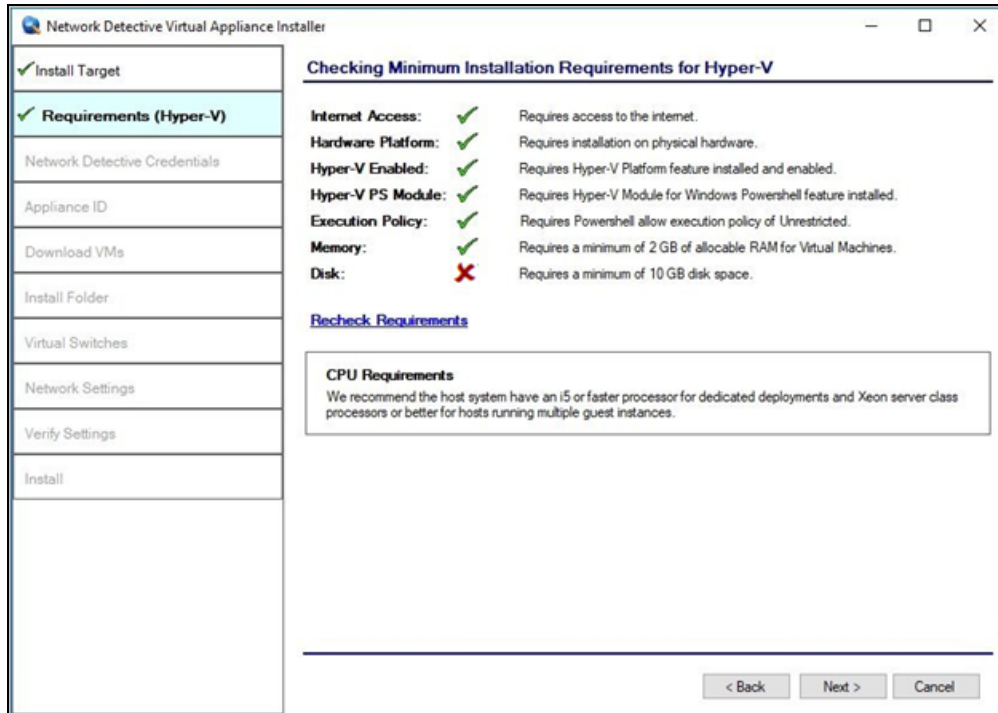
Step 3 — Verify that Installation Requirements are Met

In this step, the installer checks to see if the host system meets the system requirements. These requirements include:

- Hyper-V enablement status
- minimum memory requirements necessary for installation
- amount of available disk space



If a particular requirement is not met, the installer will present an error status:

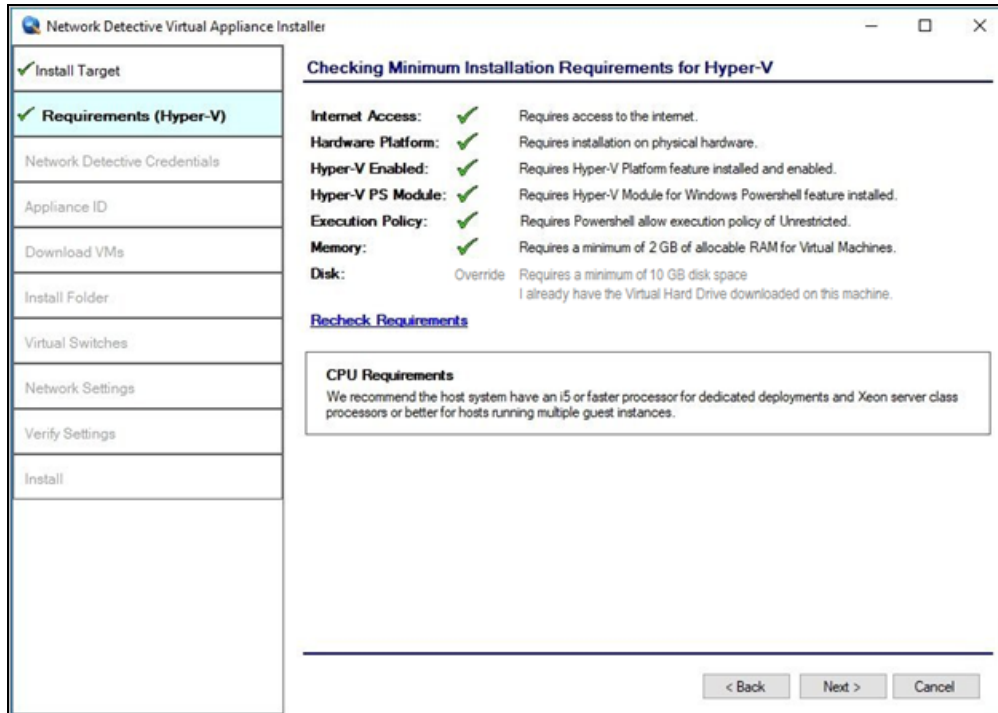


When all requirements are checked successfully, click **Next**.

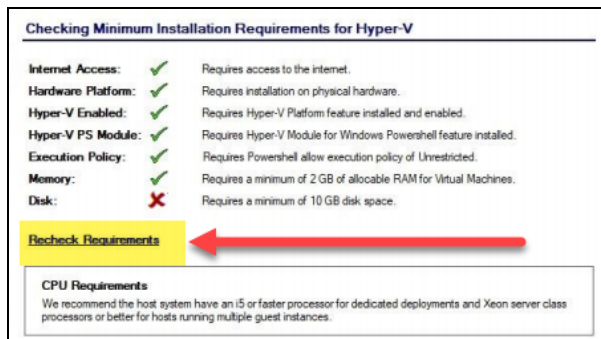
Overriding Disk Space Requirements

If the installer detects that there is not enough disk space to meet the minimum installation requirements, a red **X** will appear next to the disk space requirement.

The Installer will present an option for you “**override**” the disk space requirement. Click **I already have the Virtual Hard Drives downloaded on this machine** to override the requirement.



Alternatively, if you choose to free up some disk space, click **Recheck Requirements** to attempt to continue the installation process.

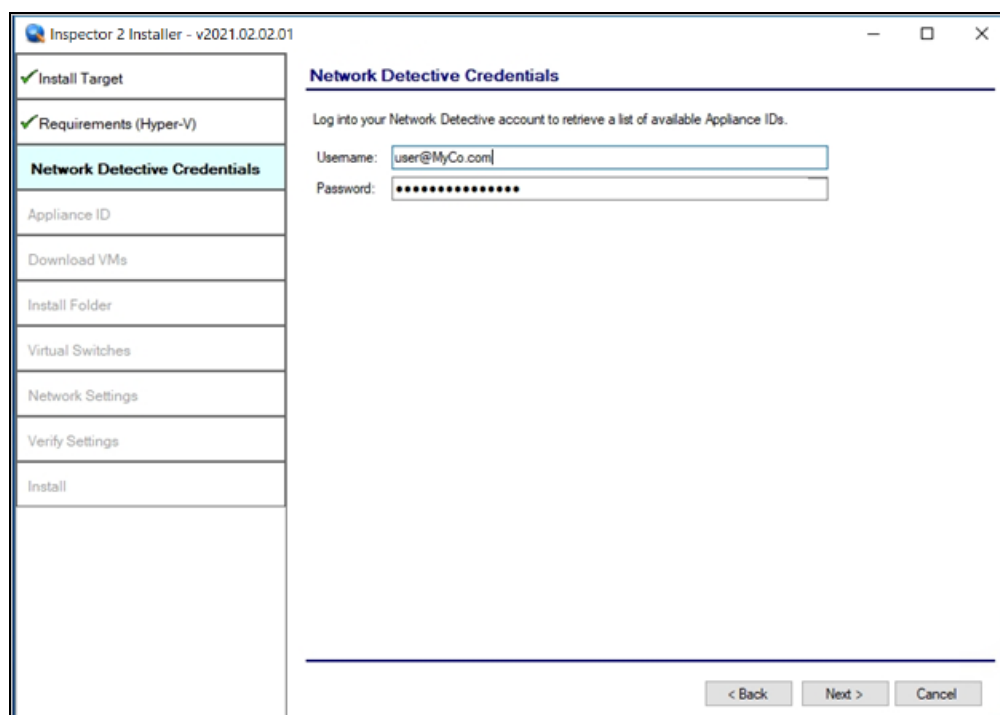


Once the system has been configured to meet the disk space requirement, or the disk space requirement has been overridden, click **Next**.

Step 4 — Enter the Network Detective Account Credentials

In this step, enter your Network Detective account credentials in order to retrieve the list of Appliance IDs available for your account. To do this:

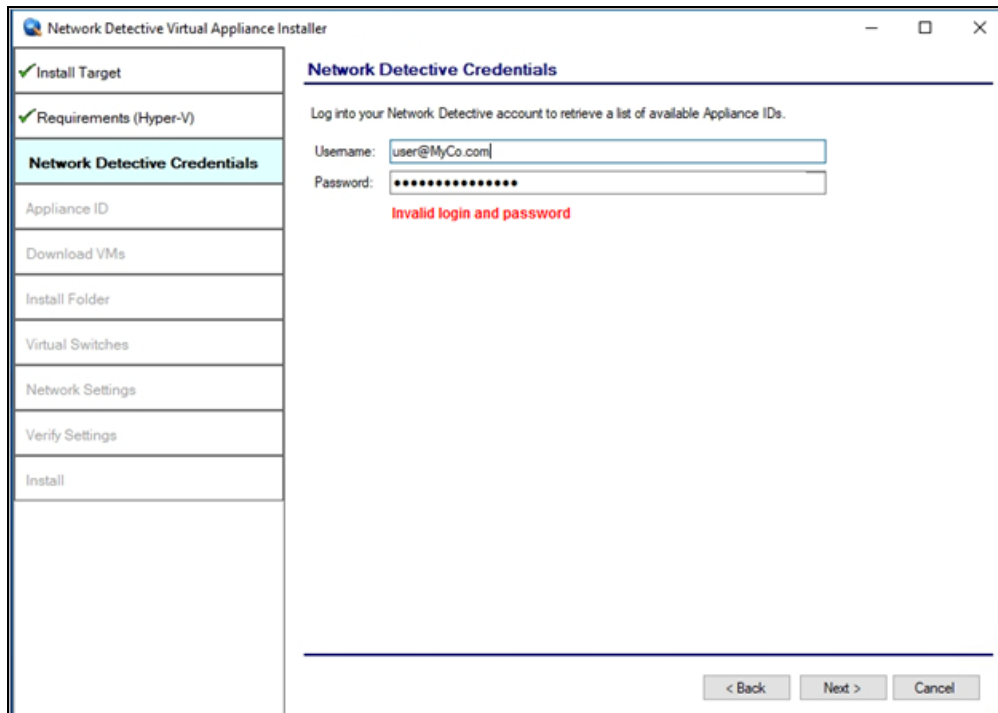
1. Enter valid **Network Detective** account login credentials.
2. Click **Next**.



The screenshot shows the 'Inspector 2 Installer - v2021.02.02.01' window. On the left is a vertical navigation pane with the following items: 'Install Target' (checked), 'Requirements (Hyper-V)' (checked), 'Network Detective Credentials' (highlighted), 'Appliance ID', 'Download VMs', 'Install Folder', 'Virtual Switches', 'Network Settings', 'Verify Settings', and 'Install'. The main area is titled 'Network Detective Credentials' and contains the text: 'Log into your Network Detective account to retrieve a list of available Appliance IDs.' Below this are two input fields: 'Username:' with the text 'user@MyCo.com' and 'Password:' with a masked password of ten asterisks. At the bottom right of the main area are three buttons: '< Back', 'Next >', and 'Cancel'.

Virtual Appliance ID Requirements

If during the login process you receive the “No available Appliance IDs are associated with this account” message, contact the Technical Support Team at RapidFire Tools to verify that at least one valid Virtual Appliance ID has been assigned to the user’s Network Detective account.

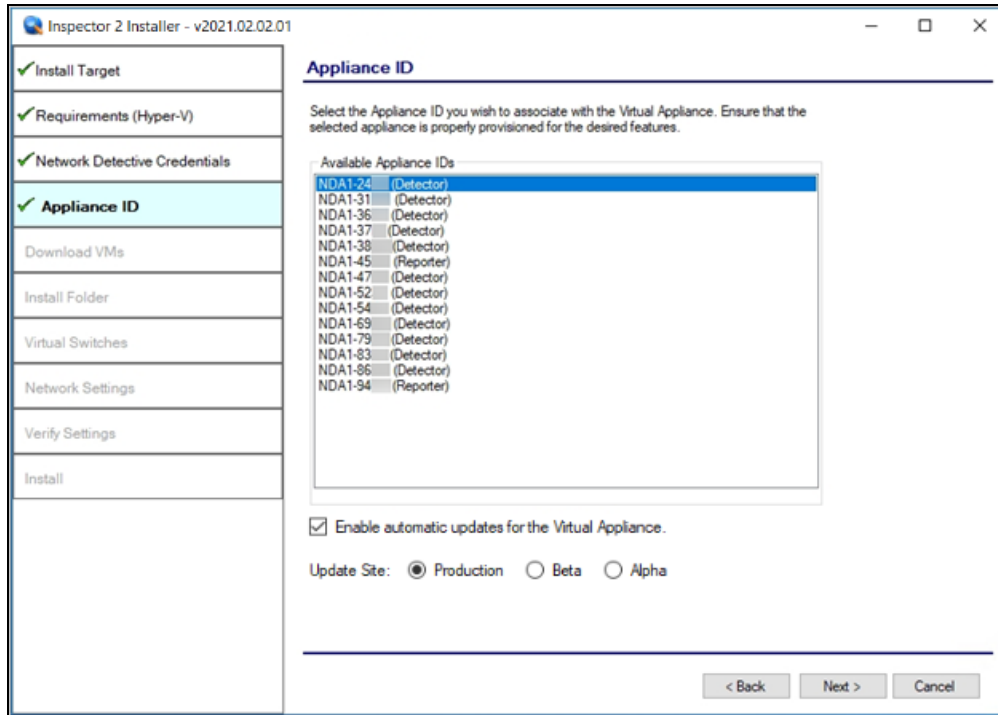


Step 5 — Select Appliance ID Screen

After the Network Detective login credentials have been authenticated, you must assign an available Appliance ID that has been allocated to the user's Network Detective account to the Virtual Appliance that is being installed.

The Appliance ID Window will display all of the Appliance IDs assigned to the user's account.

To the right of each Appliance ID value is a list of the Software Appliances (i.e. Cyber Hawk, Reporter, and/or Inspector) that are provisioned to operate with each Appliance ID.



Select the Appliance ID that is to be assigned to the Virtual Appliance that is being installed.

Then, choose how to update the appliance. Select whether to update to the **Production**, **Beta**, or **Alpha** version when such updates become available.

Record the Appliance ID for the Virtual Appliance Installation

Upon selection of the Appliance ID, the Appliance ID should be recorded so that the user knows which Appliance ID has been associated with the Virtual Appliance's installation.

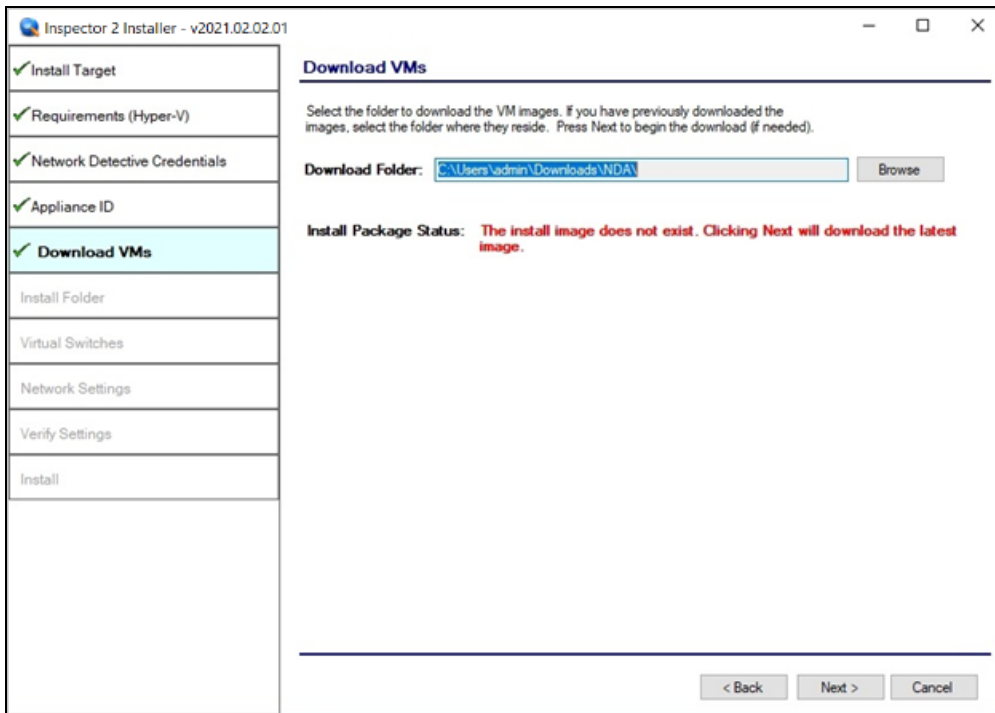
After selecting and recording the Appliance ID to be assigned to the Virtual Appliance installation, select the Next button to proceed to the next step of downloading the Virtual Machines that are required to complete the Virtual Appliance's installation.

Step 6 — Download VMs

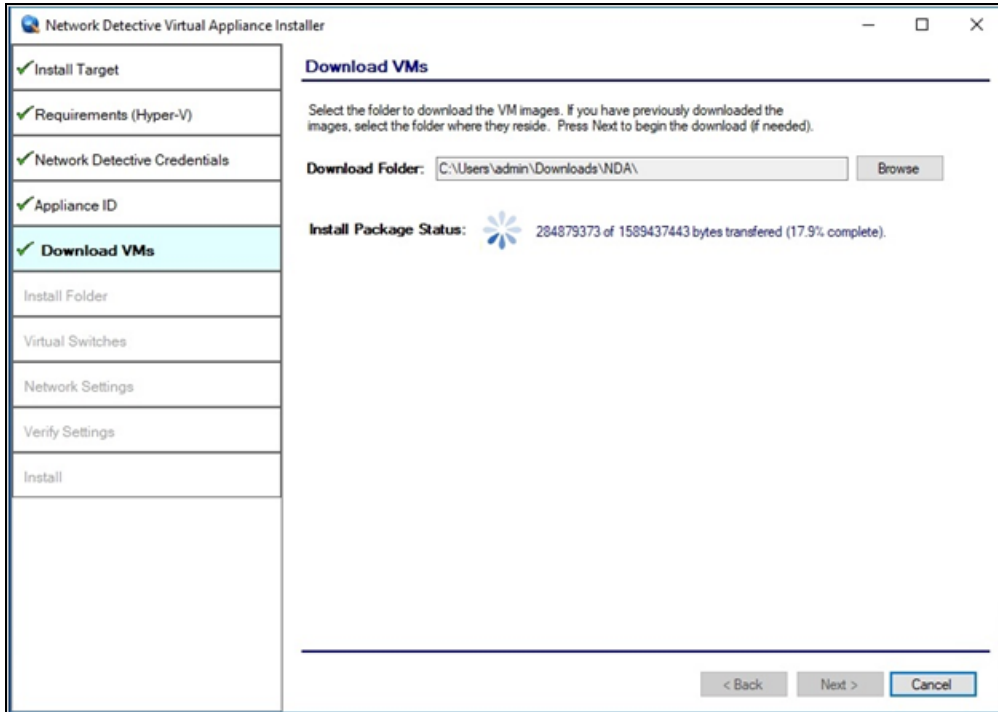
In this step, download the VM image required to install the virtual appliance:

1. Click **Browse** and select a Download Folder for the VM image.

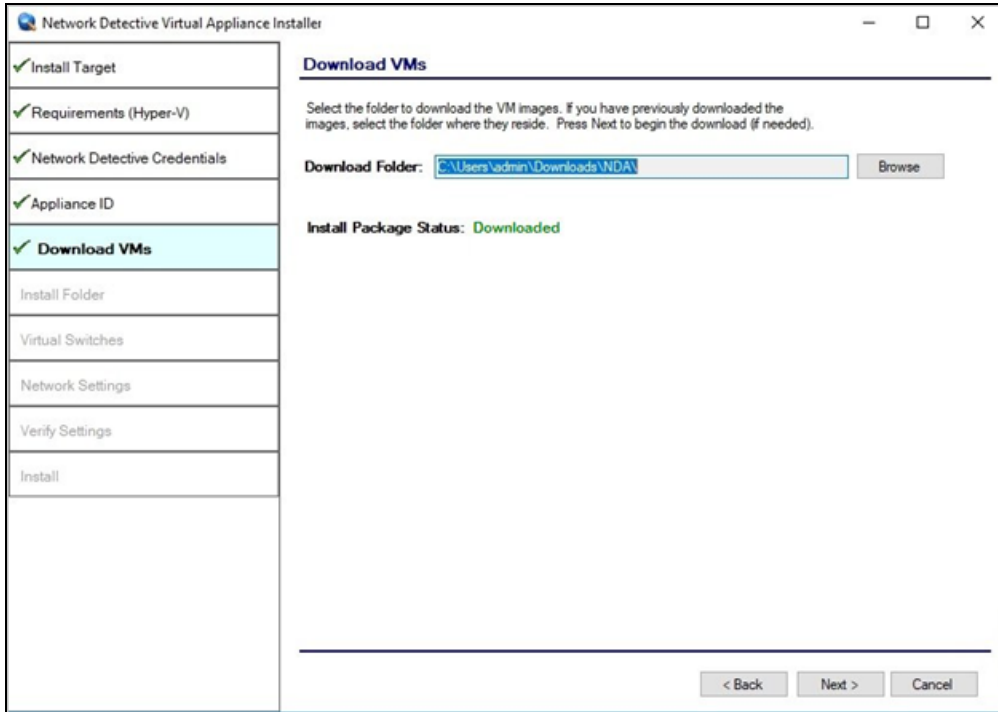
Note: If you have already downloaded the VM, select its folder.



2. Click **Next** button to initiate the download process. A window will be displayed to present the progress of the VM download process. The Install Package Status bar will display the progress of the VM download.



Once the VM has been downloaded (or you select a folder with a previously downloaded VM), the **Install Package Status** will be updated.

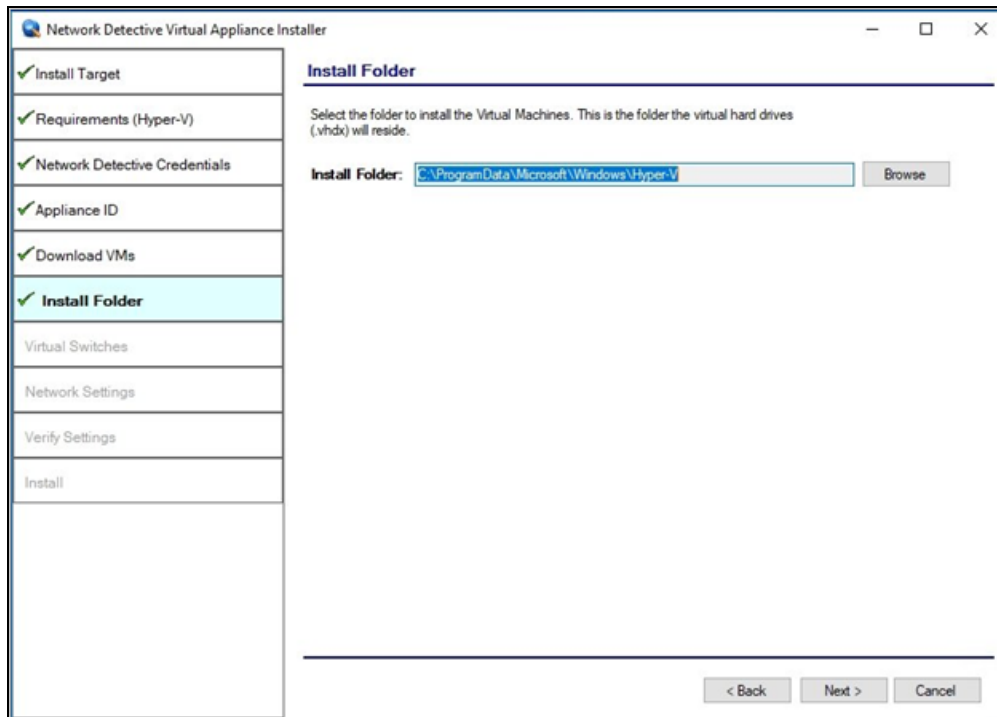


3. Once the VMs have been downloaded or made available for installation, click **Next**.

Step 7 — Select Folder to Install Virtual Appliance

1. Click **Browse** and select an install folder for the appliance program files.

Note: The default installation folder is the system's Hyper-V location folder.



2. Click **Next** to continue the installation process and configure the required Virtual Switches.

Step 8 — Configure Required Virtual Switches

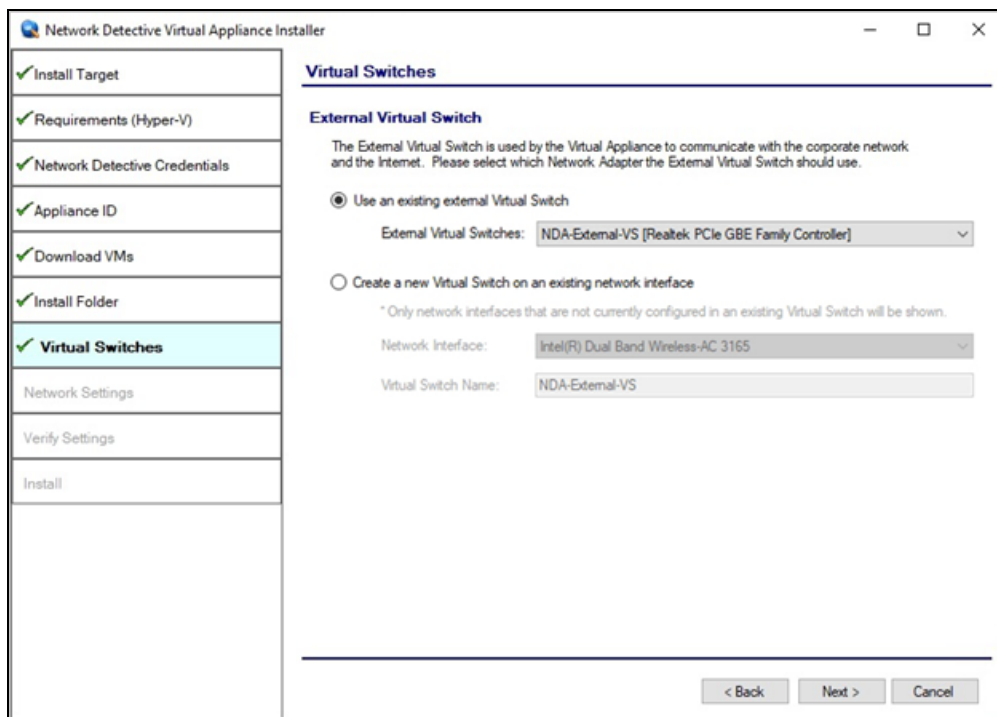
Important: The appliance requires an **External Virtual Switch** to be configured within the Hyper-V instance. The switch is necessary for the appliance to be installed and function.

In this step, you can either:

- Use an existing external Virtual Switch
- Create a new Virtual Switch on an existing network interface

Using an Existing External Virtual Switch

1. Select the **Use an existing external Virtual Switch** option.



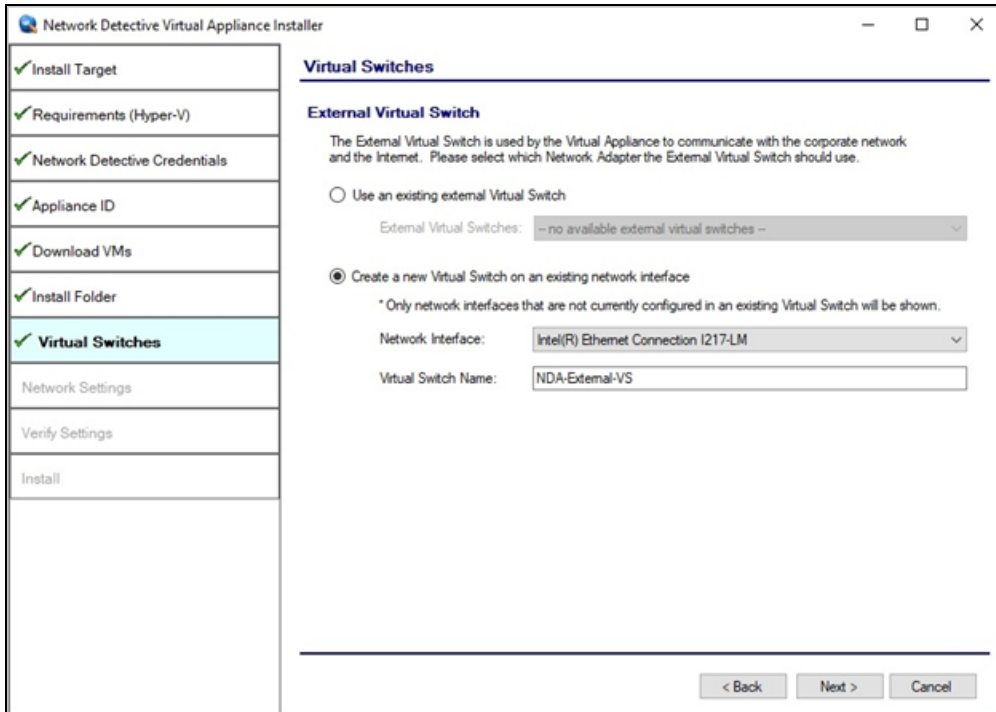
The screenshot shows the 'Network Detective Virtual Appliance Installer' window. On the left is a progress sidebar with steps: Install Target, Requirements (Hyper-V), Network Detective Credentials, Appliance ID, Download VMs, Install Folder, **Virtual Switches** (highlighted), Network Settings, Verify Settings, and Install. The main area is titled 'Virtual Switches' and contains the 'External Virtual Switch' section. It explains that the switch is used for communication with the corporate network and the Internet. Two options are available: 'Use an existing external Virtual Switch' (selected) and 'Create a new Virtual Switch on an existing network interface'. Under the selected option, a dropdown menu for 'External Virtual Switches' shows 'NDA-External-VS [Realtek PCIe GBE Family Controller]'. Under the unselected option, there are fields for 'Network Interface' (showing 'Intel(R) Dual Band Wireless-AC 3165') and 'Virtual Switch Name' (showing 'NDA-External-VS'). At the bottom right are buttons for '< Back', 'Next >', and 'Cancel'.

2. Use the drop-down menu to select a switch from a list of those available on the Hyper-V system.
3. Click **Next** button to continue the installation process.

Creating and Selecting a new External Virtual Switch

If the system being used is a new Hyper-V system and no External Virtual Switches are set-up and available, or if you wish to create an External Virtual Switch to use with the appliance:

1. Select the **Create a new Virtual Switch on an existing Network Interface** option.



2. Next, select the **Network Interface**.

Note: Do not use a Wireless NIC as the Network Interface for the External Virtual Switch.

3. Type in the name of the new **External Virtual Switch**.
4. Click **Next**.

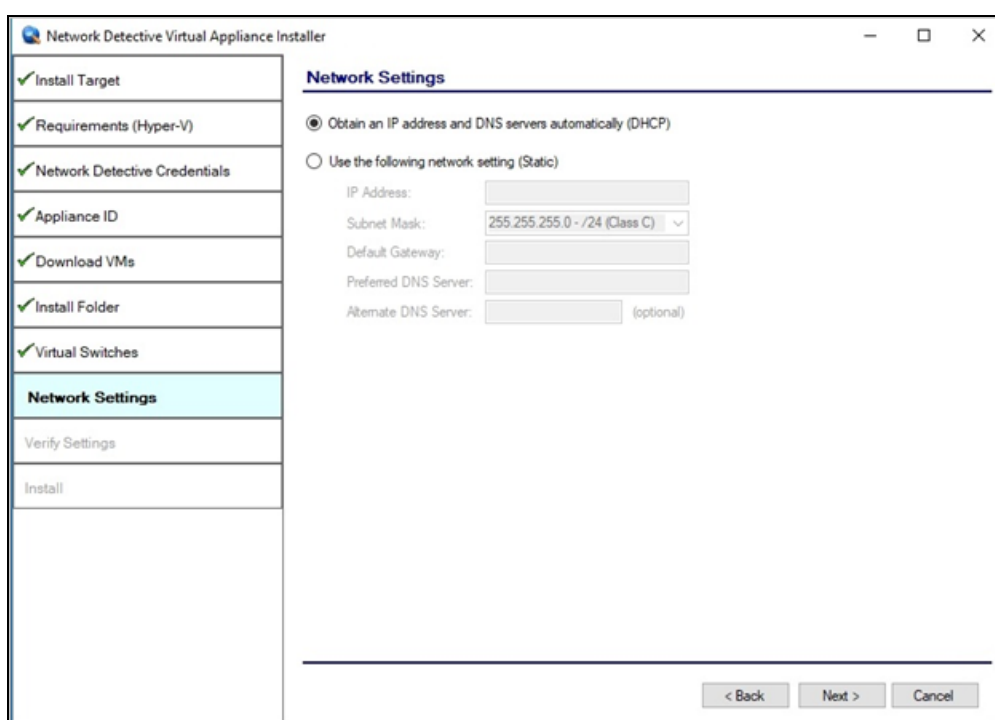
Step 9 — Define Network Settings

In this step, the Appliance can use an IP Address assigned by DHCP or a static IP address that you define.

Network Settings using DHCP

To set up the Appliance to obtain an IP address and DNS server information automatically:

1. Select the “**Obtain and IP address and DNS servers automatically (DHCP)**” option.



The screenshot shows the 'Network Detective Virtual Appliance Installer' window. On the left is a progress sidebar with the following items: 'Install Target' (checked), 'Requirements (Hyper-V)' (checked), 'Network Detective Credentials' (checked), 'Appliance ID' (checked), 'Download VMs' (checked), 'Install Folder' (checked), 'Virtual Switches' (checked), 'Network Settings' (highlighted in light blue), 'Verify Settings', and 'Install'. The main area is titled 'Network Settings' and contains two radio button options. The first option, 'Obtain an IP address and DNS servers automatically (DHCP)', is selected. The second option, 'Use the following network setting (Static)', is unselected. Below the static option are input fields for 'IP Address', 'Subnet Mask' (set to '255.255.255.0 - /24 (Class C)'), 'Default Gateway', 'Preferred DNS Server', and 'Alternate DNS Server' (with '(optional)' text). At the bottom right of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

2. Click **Next**.

Network Settings using a Static IP Address

To define a static IP address for use by the Appliance:

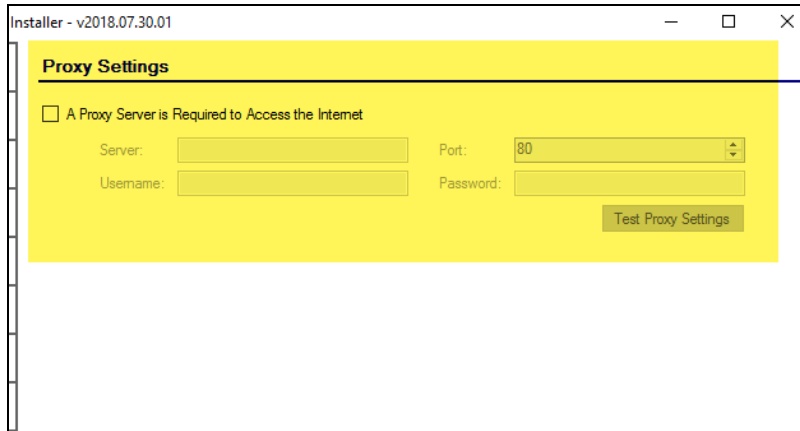
1. Select the **“Use the following network settings (Static)”** option.
2. Next, define the **IP Address**, **Subnet Mask**, **Default Gateway**, **Preferred DNS Server**, and the **Alternate DNS Server**. The **Alternate DNS Server** setting is optional.

The screenshot shows the 'Network Detective Virtual Appliance Installer' window. On the left is a vertical navigation pane with the following items: 'Install Target', 'Requirements (Hyper-V)', 'Network Detective Credentials', 'Appliance ID', 'Download VMs', 'Install Folder', 'Virtual Switches', 'Network Settings' (highlighted in light blue), 'Verify Settings', and 'Install'. The main area is titled 'Network Settings' and contains two radio button options: 'Obtain an IP address and DNS servers automatically (DHCP)' (unselected) and 'Use the following network setting (Static)' (selected). Below these are five input fields: 'IP Address' (192.168.1.101), 'Subnet Mask' (255.255.255.0 - /24 (Class C) with a dropdown arrow), 'Default Gateway' (192.168.1.1), 'Preferred DNS Server' (192.168.1.10), and 'Alternate DNS Server' (192.168.1.11) with '(optional)' text to its right. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

3. Click **Next**.

Step 10 — Proxy Settings

When installing any RapidFire Tools Virtual Appliance (Cyber Hawk, Inspector 2, Reporter, and Audit Guru), you can specify a proxy server.



You will need:

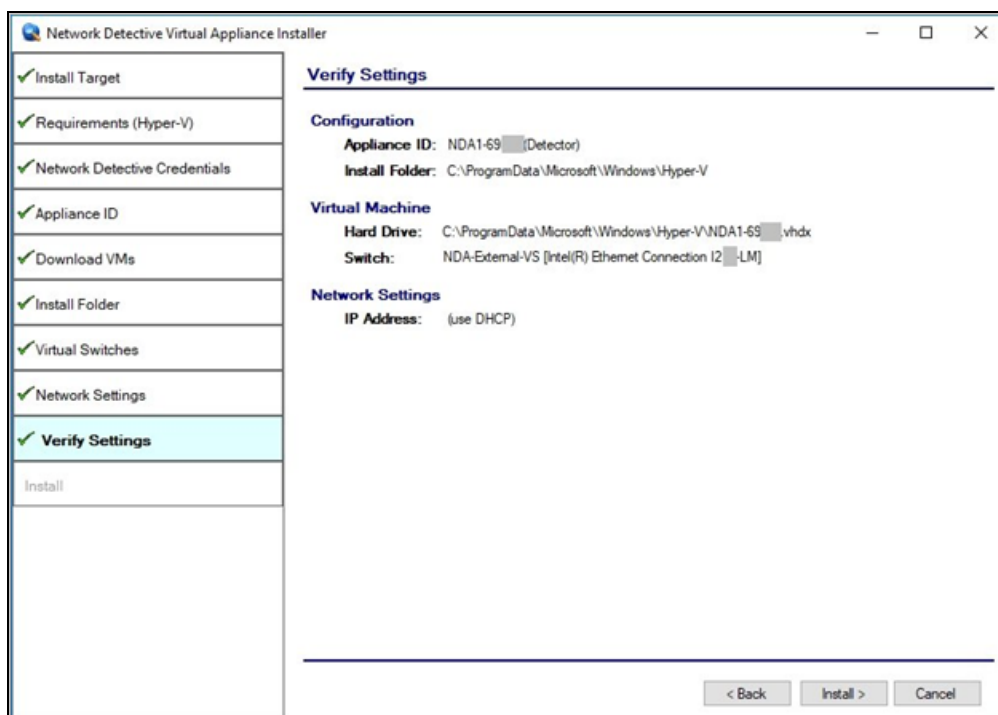
- Server name or IP address
- Port
- Username
- Password

Tip: Click **Test Proxy Settings** to be sure you can connect successfully.

Step 11 — Verify Settings Prior to Installation

Prior to completion of the installation process, the **Installer** will present the **Verify Settings** window.

Check, and, if necessary, modify the **Appliance ID**, **Install Folder**, the **Virtual Switches** configuration, and the **Virtual Hard Drive** locations.

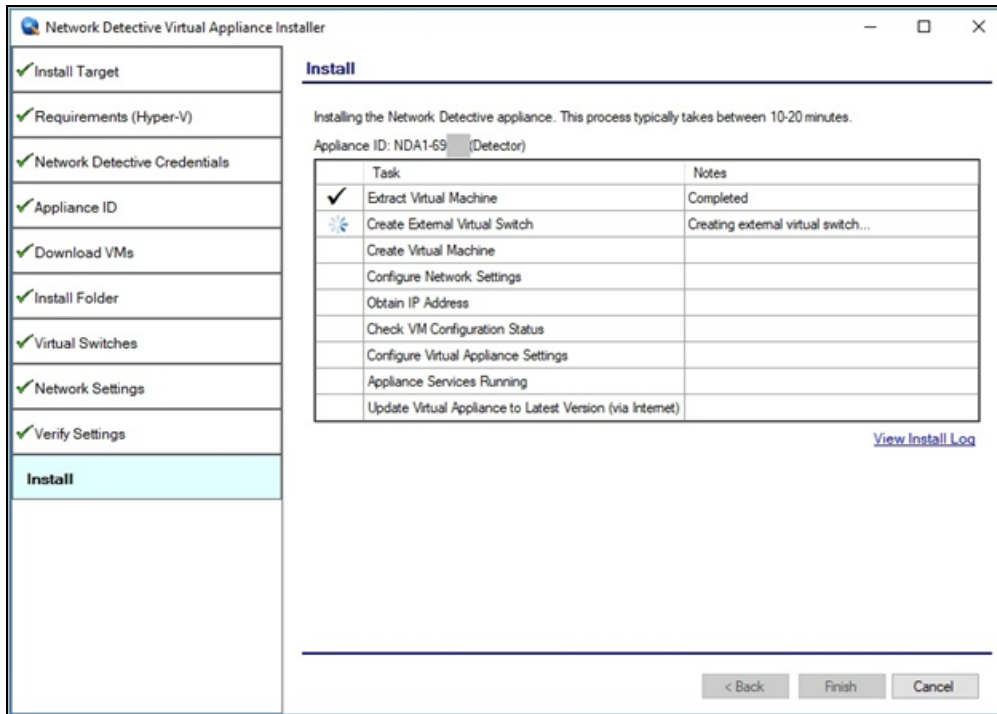


After verifying the settings are correct, click the **Install** button.

This action will start the **Virtual Appliance's** installation on the Hyper-V based system.

Step 12 — Monitor Installation Progress Status

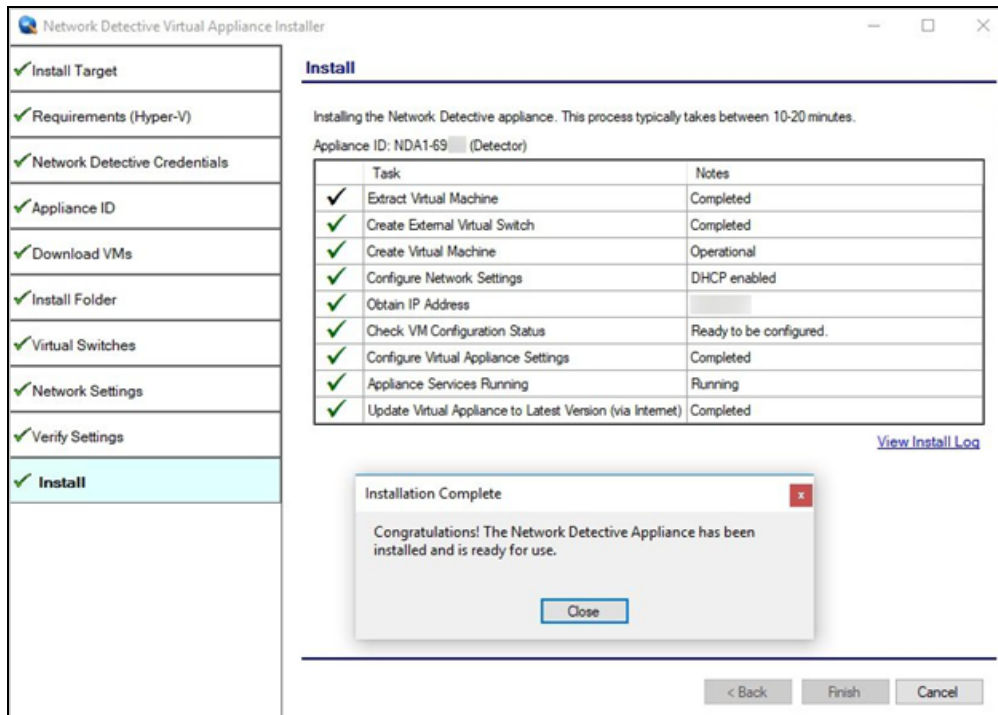
In this step, the installer details the status of the tasks performed during the installation.



If any installation task fails to complete, you can read a description of the issue in the Notes column.

When a **Task** during the installation process fails to complete, the appliance installation process is terminated. Click **Retry Install Now** to attempt the installation again.

When the installation process is successfully completed, a confirmation window will appear.



Tip: After installing the appliance, be sure to double check that it meets the [Virtual Appliance Operational System Requirements](#).

Note: During the user's Remote Access to the Hyper-V system used to perform the Virtual Appliance installation, the user may experience a temporary loss of Remote Access connectivity.

In cases, where the user that is remotely accessing the Hyper-V system in order to perform the installation of the Virtual Appliance, and the user creates a new External Virtual Switch for the Virtual Appliance's use, the established remote access network connection will be momentarily terminated by the Hyper-V system.

The remote access software used to access the system should issue one or more retries to re-establish the remote access connection to the Hyper-V system to enable the user to complete the Virtual Appliance installation process.

Step 13 — Confirm that Appliance Meets Operational Requirements

Once you install the appliance, be sure that it meets the Operational Requirements:

- 6 GB Available RAM
- 20 GB Hard Drive Space

Cyber Hawk Installation Procedure for VMware

To perform the installation of the **Virtual Appliance for VMware**, please follow the instructions below.

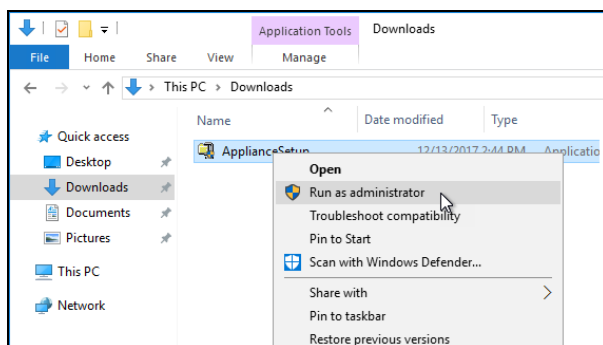
Step 1 — Download and Run the Virtual Appliance Installer

The **Installer** file is a self-extracting ZIP file that is used to initiate the installation of the **Virtual Appliance** on the host system. To begin the installation procedure:

1. Download and run the **Cyber Hawk Virtual Appliance Installer** file at <https://www.rapidfiretools.com/nd>. The Installer file is named **RapidFireToolsApplianceSetup.exe**.

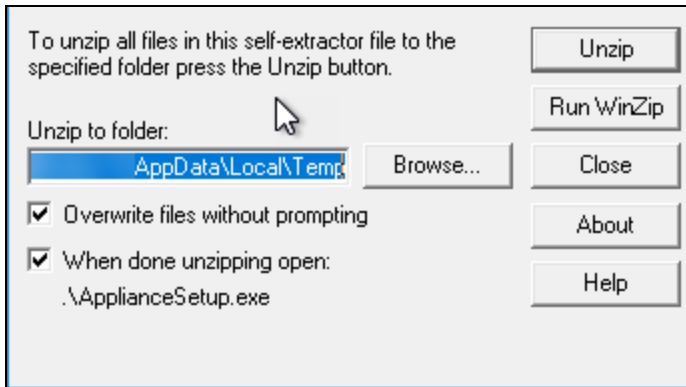
Important: Be sure to download the "Virtual Appliance Installer", and NOT the RapidFire Tools Server installer.

2. After downloading the installer, right click on **RapidFireToolsApplianceSetup.exe** and click **Run as Administrator**.



3. Use the **Unzip** option to unzip the files into a folder location of your choice and start

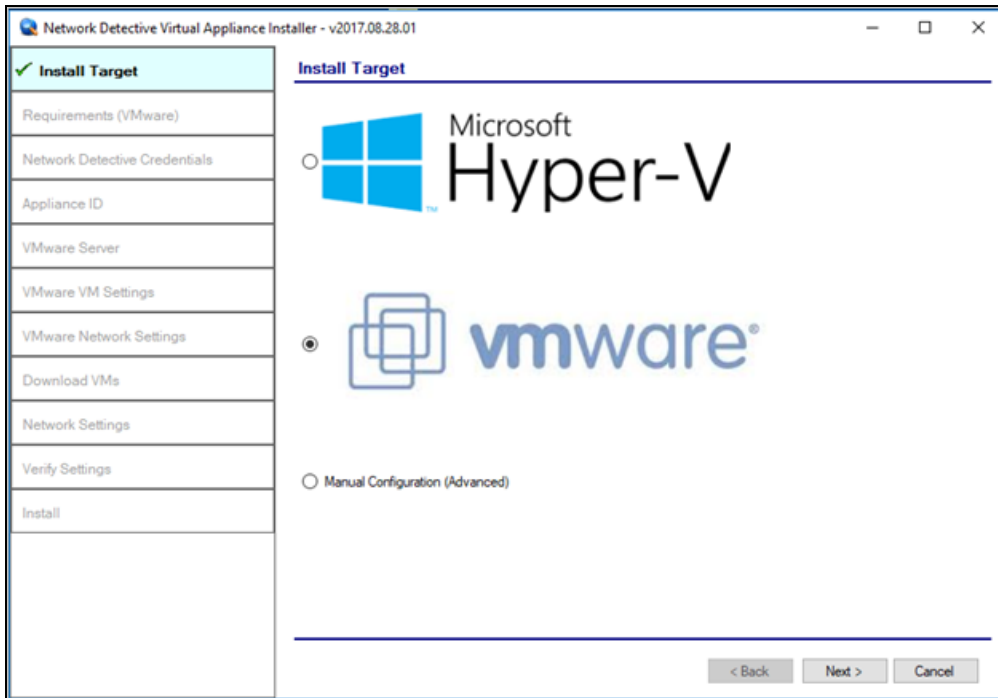
the installation program.



Important: You must have Administrator privileges and access rights in order to complete the installation process successfully.

Step 2 — Select Target

1. Select the **VMware** option to install on a VMware enabled system.

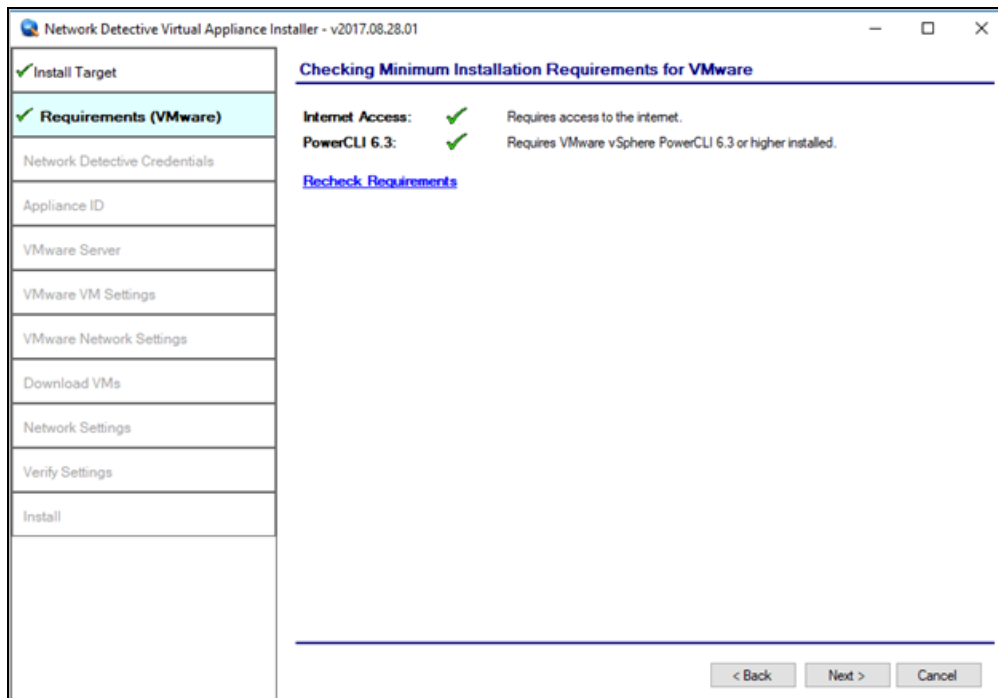


2. Select the **Next** button to proceed with the installation.

Step 3 — Verification that Installation Requirements are Met

In this step, the installer checks to see if the host system meets the system requirements. These requirements include:

- Internet access
- VMware vSphere PowerCLI 6.3 or higher installed

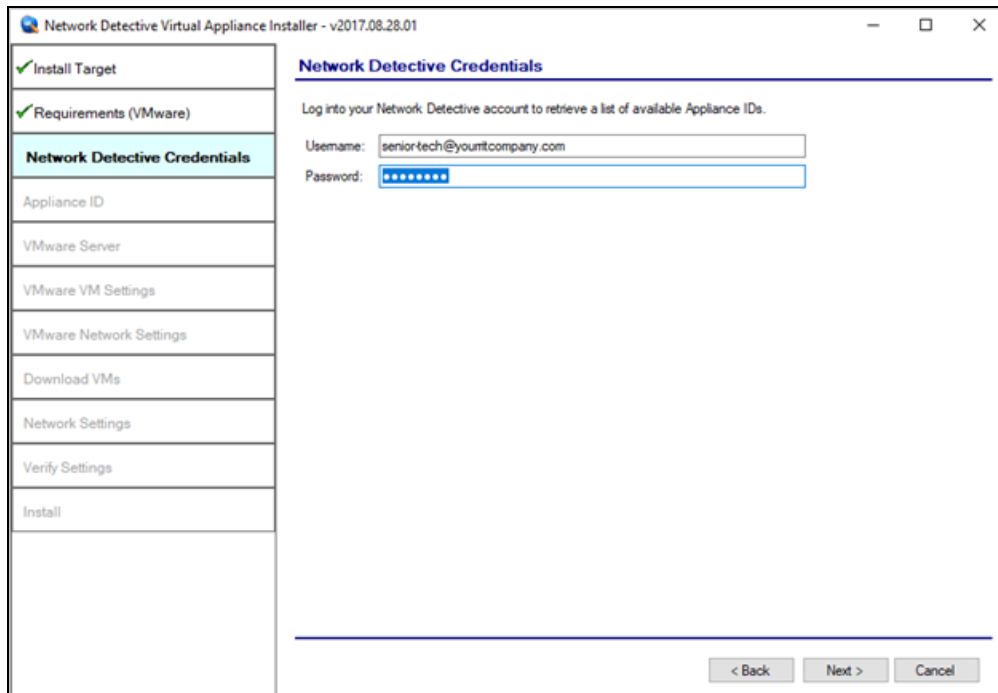


When all requirements are checked successfully, click **Next**.

Step 4 — Enter the Network Detective Account Credentials

In this step, enter your Network Detective account credentials in order to retrieve the list of Appliance IDs available for your account. To do this:

1. Enter valid **Network Detective** account login credentials.
2. Click **Next**.



The screenshot shows the 'Network Detective Virtual Appliance Installer - v2017.08.28.01' window. On the left is a vertical navigation pane with the following items: 'Install Target' (checked), 'Requirements (VMware)' (checked), 'Network Detective Credentials' (highlighted), 'Appliance ID', 'VMware Server', 'VMware VM Settings', 'VMware Network Settings', 'Download VMs', 'Network Settings', 'Verify Settings', and 'Install'. The main area is titled 'Network Detective Credentials' and contains the instruction: 'Log into your Network Detective account to retrieve a list of available Appliance IDs.' Below this are two input fields: 'Username:' with the value 'senior-tech@yourtcompany.com' and 'Password:' with a masked password of eight dots. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

Virtual Appliance ID Requirements

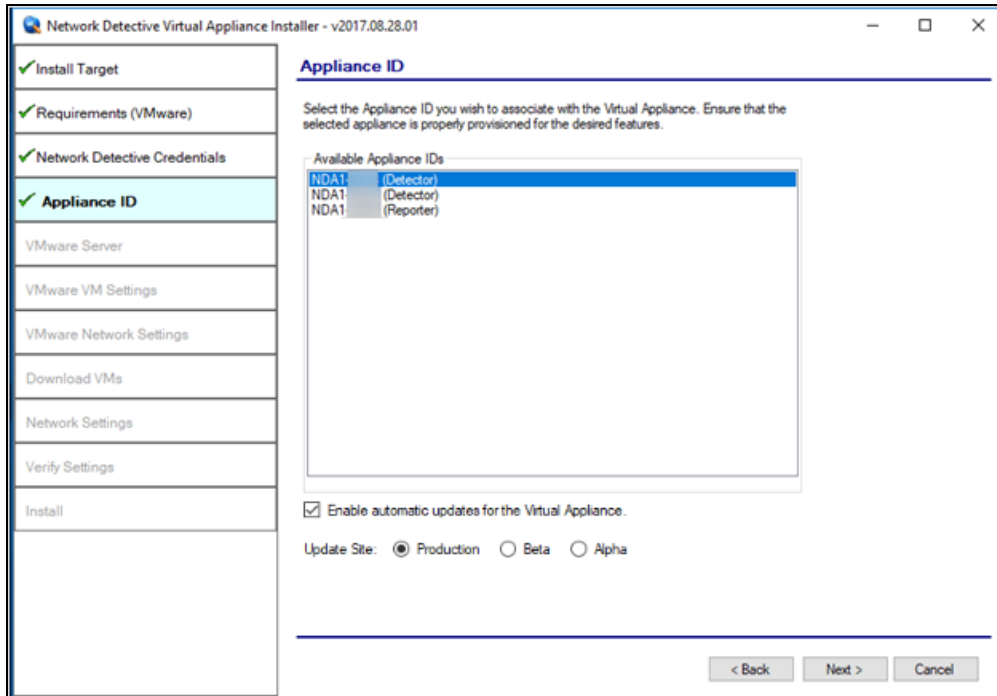
If during the login process you receive the “No available Appliance IDs are associated with this account” message, contact the Technical Support Team at RapidFire Tools to verify that at least one valid Virtual Appliance ID has been assigned to the user’s Network Detective account.

Step 5 — Select Appliance ID Screen

After the Network Detective login credentials have been authenticated, you must assign an available Appliance ID that has been allocated to the user’s Network Detective account to the Virtual Appliance that is being installed.

The Appliance ID Window will display all of the Appliance IDs assigned to the user's account.

To the right of each Appliance ID value is a list of the Software Appliances (i.e. Cyber Hawk, Reporter, and/or Inspector) that are provisioned to operate with each Appliance ID.



Select the Appliance ID that is to be assigned to the Virtual Appliance that is being installed.

Then, choose how to update the appliance. Select whether to update to the **Production**, **Beta**, or **Alpha** version when such updates become available.

Record the Appliance ID for the Virtual Appliance Installation

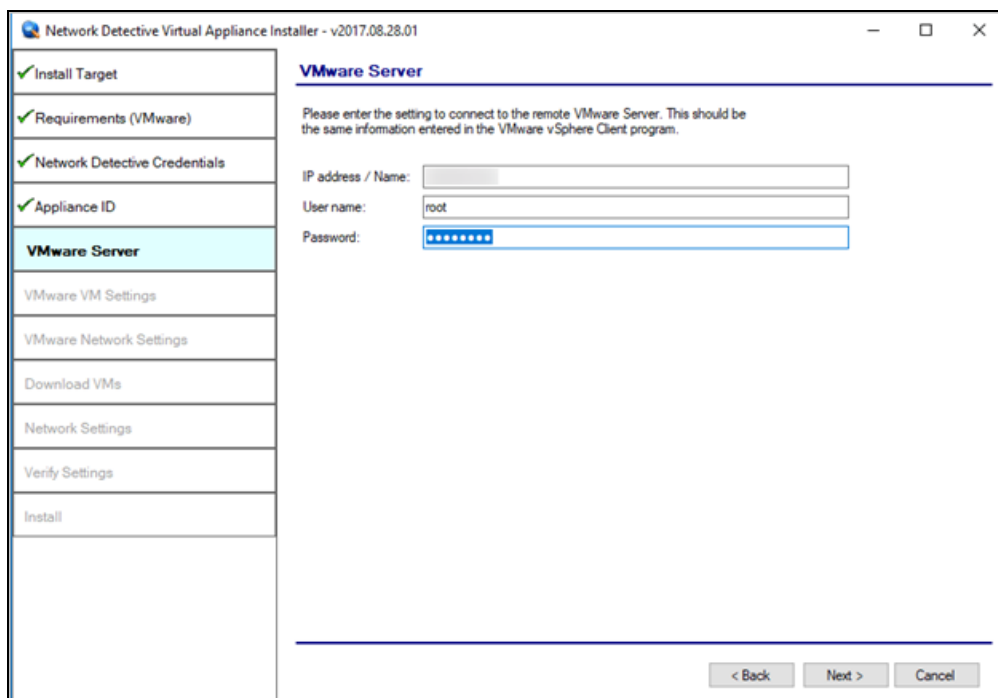
Upon selection of the Appliance ID, the Appliance ID should be recorded so that the user knows which Appliance ID has been associated with the Virtual Appliance's installation.

After selecting and recording the Appliance ID to be assigned to the Virtual Appliance installation, select the Next button to proceed to the next step of downloading the Virtual Machines that are required to complete the Virtual Appliance's installation.

Step 6 — Set VMware Server Credentials

In the VMware Server window, enter the **VMware Server** account **IP Address/Name** and login **credentials** used to access your **VMware Server** that will be used to operate the **Virtual Appliance**.

This should be the same information used in the VMware vSphere Client program used in your environment to access the **VMware Server**.

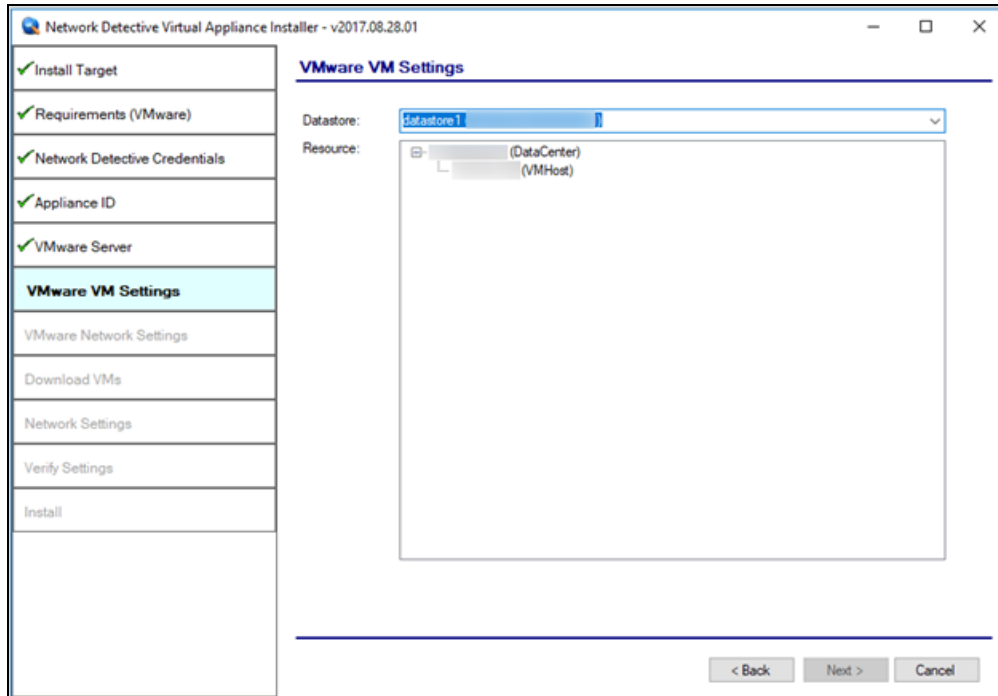


The screenshot shows a window titled "Network Detective Virtual Appliance Installer - v2017.08.28.01". On the left is a vertical navigation pane with the following items: "Install Target" (checked), "Requirements (VMware)" (checked), "Network Detective Credentials" (checked), "Appliance ID" (checked), "VMware Server" (highlighted in light blue), "VMware VM Settings", "VMware Network Settings", "Download VMs", "Network Settings", "Verify Settings", and "Install". The main area is titled "VMware Server" and contains the following text: "Please enter the setting to connect to the remote VMware Server. This should be the same information entered in the VMware vSphere Client program." Below this text are three input fields: "IP address / Name:" (empty), "User name:" (containing "root"), and "Password:" (containing seven dots). At the bottom right of the window are three buttons: "< Back", "Next >", and "Cancel".

Select the **Next** button to proceed with the installation.

Step 7 — Set VMware Server Settings

Select and enter in the VMware Server's **Datastore** and **Resource Pool** settings information in the fields presented in the VMware VM Settings window.

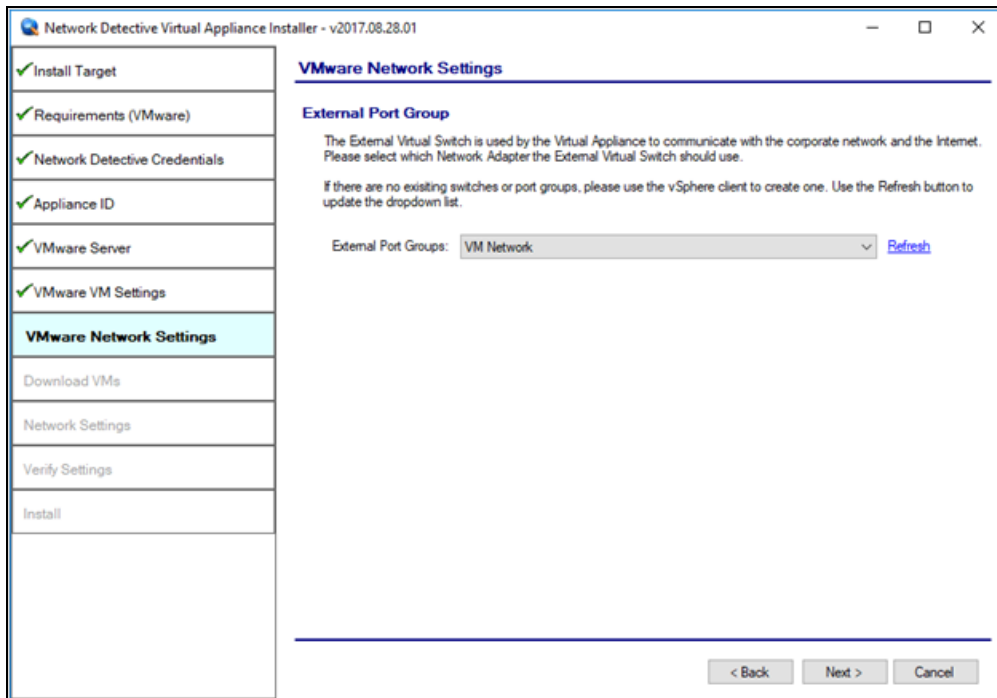


Select the **Next** button to proceed with the installation.

Step 8 — Set VMware Network Settings

Select the **External Port Group** that will be used by the **Virtual Appliance** to communicate with your network.

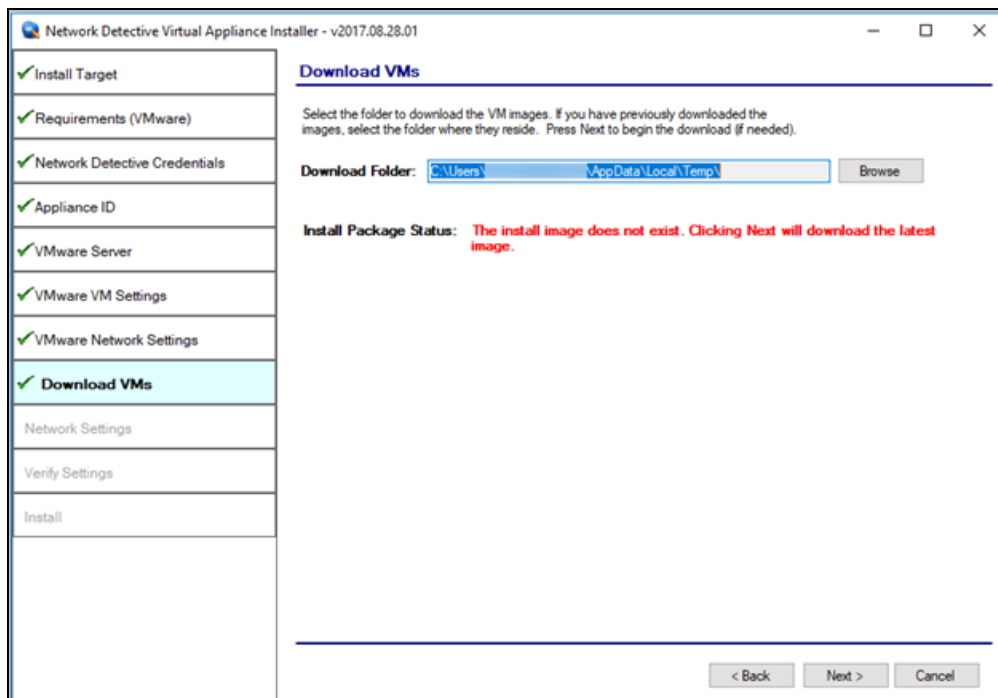
Note: If there are no existing switches or **External Port Groups** available, then use vSphere to create one, and select the Refresh link in the **VMware Network Settings** window to make the **External Port Group** you created available for selection.



Select the **Next** button to proceed with the installation.

Step 9 — Initiate the Download VM Process

In this step of the **Virtual Appliance's** installation process, the window below will be displayed to indicate that the VM required to install the **Virtual Appliance** have not been downloaded at this point of the installation process.

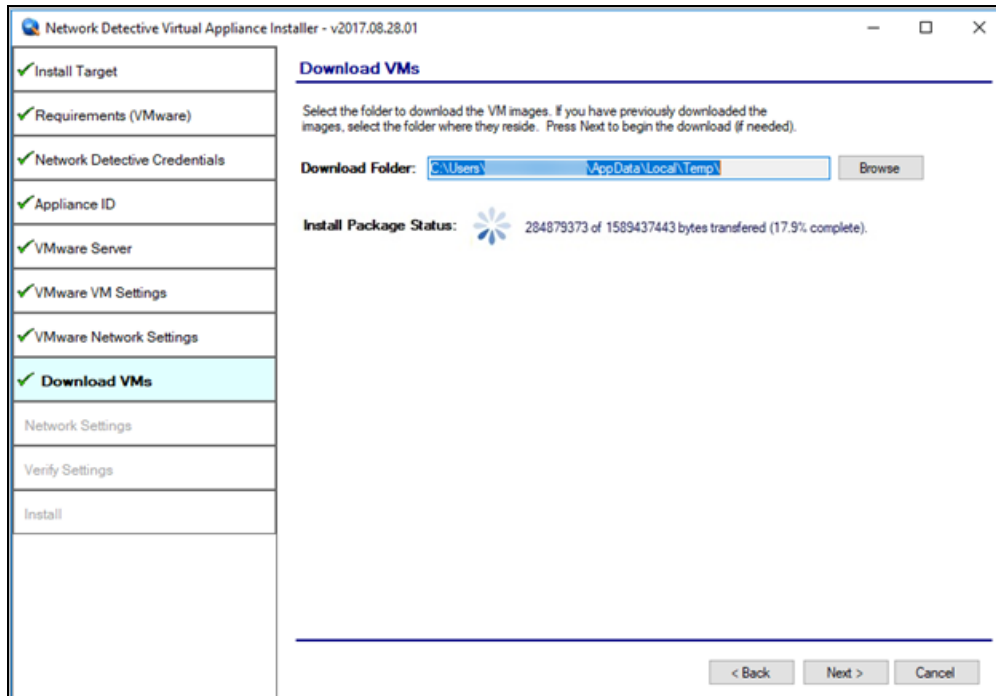


To proceed with downloading the required VM, the user must select the folder that is to be used to store the VM that are about to be downloaded.

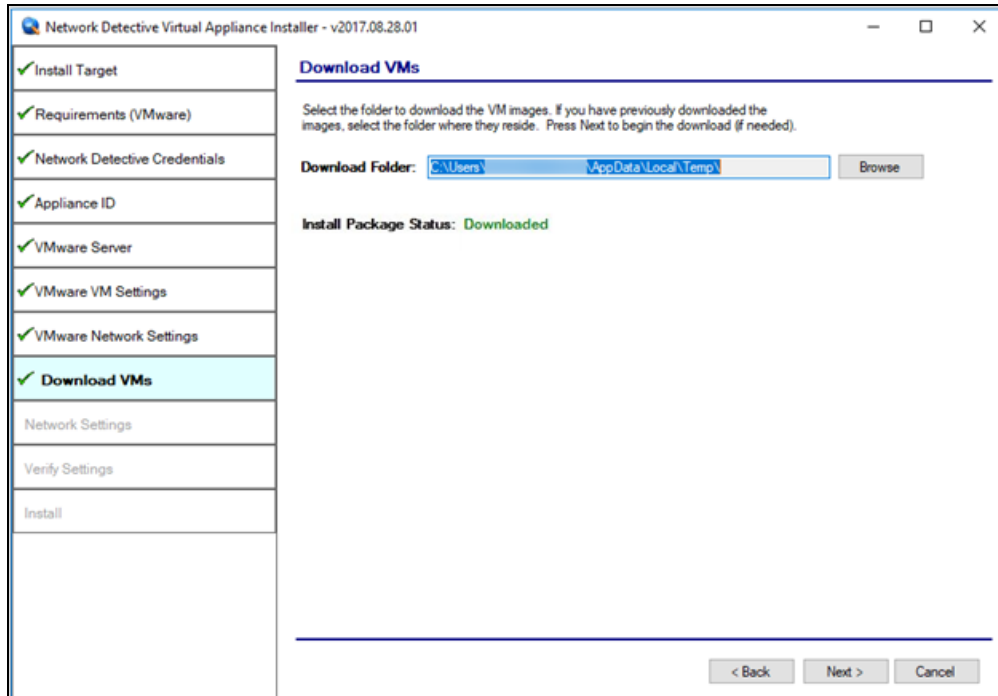
Then select the **Next** button to initiate the download process. A window will be displayed to present the progress of the VM download process.

Step 10 — View VM Download Progress and Install Package Status

During the VM download process, the Install Package Status bar will display the progress of the VM download.



Once the VM have been downloaded, or when the user selects a folder where the VM bundle has already been downloaded, the **Install Package Status** in the **Download VM** window will be updated to indicate that the VM have been “**downloaded**” as displayed below.

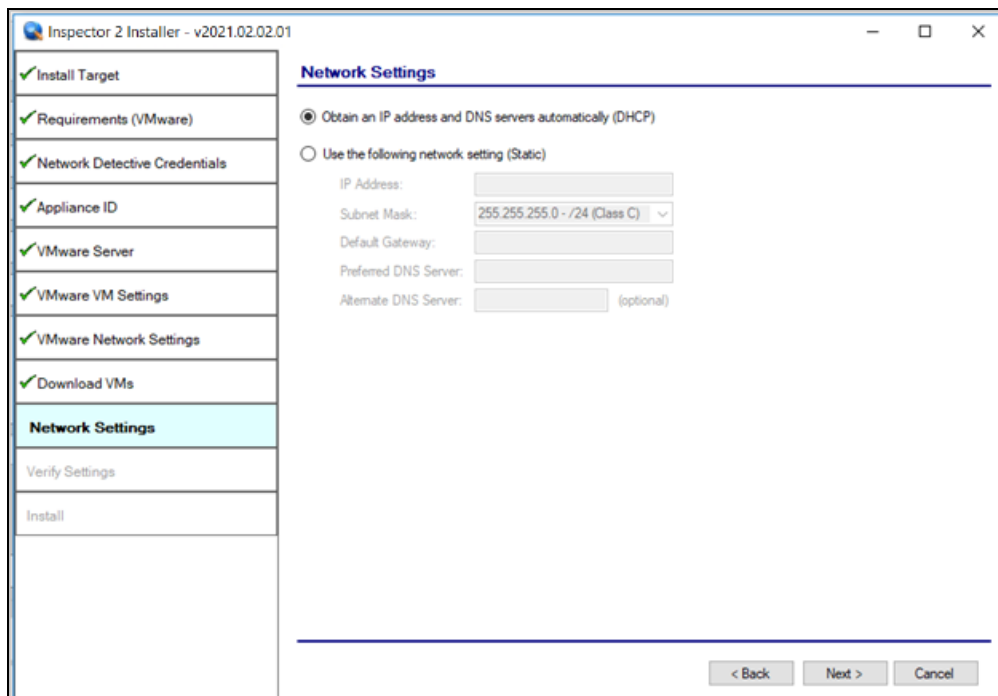


Once the VM have been downloaded or available for installation, proceed with **Virtual Appliance** installation process by selecting the **Next** button.

The next window displayed enables the user to select the folder to be used for the **Virtual Appliance's** installation

Step 11 — Define Network Settings

In this step of the **Virtual Appliance's** installation process, the window below will be displayed to enable you to assign the Network Settings for the installation.

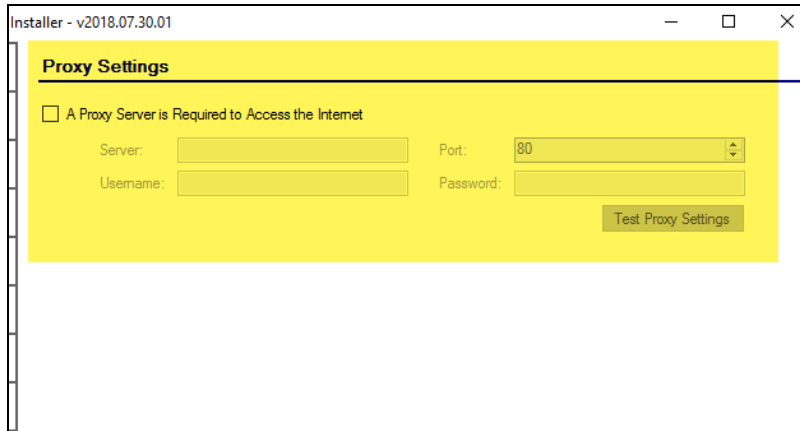


The screenshot shows the 'Inspector 2 Installer - v2021.02.02.01' window. On the left is a vertical progress bar with the following steps: 'Install Target', 'Requirements (VMware)', 'Network Detective Credentials', 'Appliance ID', 'VMware Server', 'VMware VM Settings', 'VMware Network Settings', 'Download VMs', 'Network Settings' (highlighted in light blue), 'Verify Settings', and 'Install'. The main area is titled 'Network Settings' and contains two radio button options: 'Obtain an IP address and DNS servers automatically (DHCP)' (selected) and 'Use the following network setting (Static)'. Below these are input fields for 'IP Address', 'Subnet Mask' (set to '255.255.255.0 - /24 (Class C)'), 'Default Gateway', 'Preferred DNS Server', and 'Alternate DNS Server' (with '(optional)' text). At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.

Once you have defined the **Network Settings** for the **Virtual Appliance**, proceed with **Virtual Appliance** installation process by selecting the **Next** button.

Step 12 — Proxy Settings

When installing any RapidFire Tools Virtual Appliance (Cyber Hawk, Inspector 2, Reporter, and Audit Guru), you can specify a proxy server.



You will need:

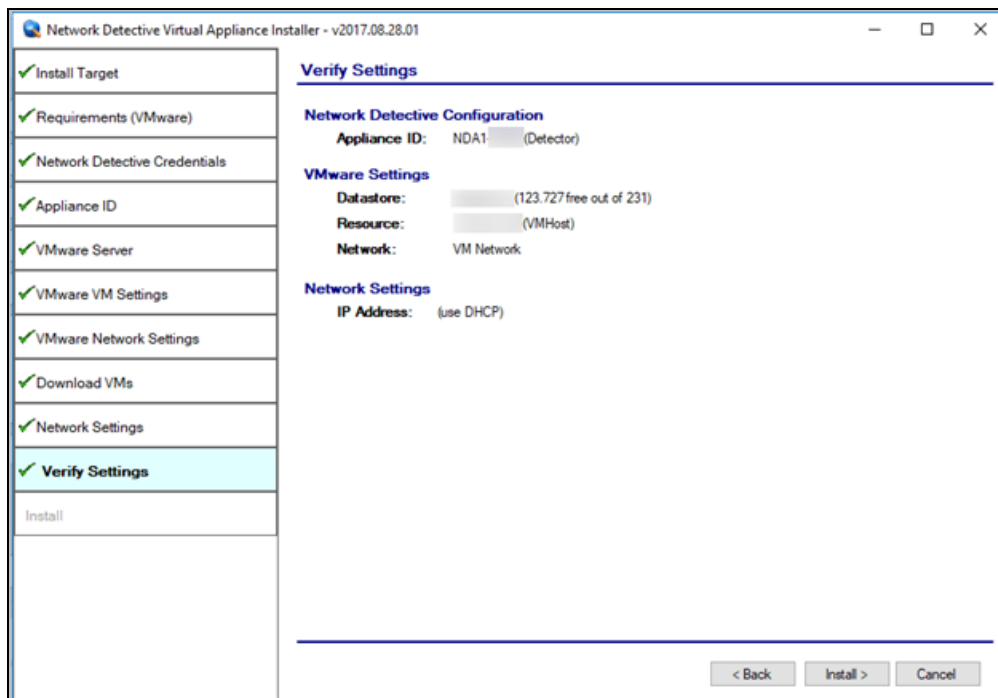
- Server name or IP address
- Port
- Username
- Password

Tip: Click **Test Proxy Settings** to be sure you can connect successfully.

Step 13 — Verify Settings Prior to Installation

Prior to the completion of the installation process, the **Installer** will present the **Verify Settings** window.

This step in the installation process provides the user with the opportunity to check, and if necessary, modify the **Appliance ID** section, **VMware Server Settings**, **VMware VM Settings**, and the **VMware Network Settings** configuration.

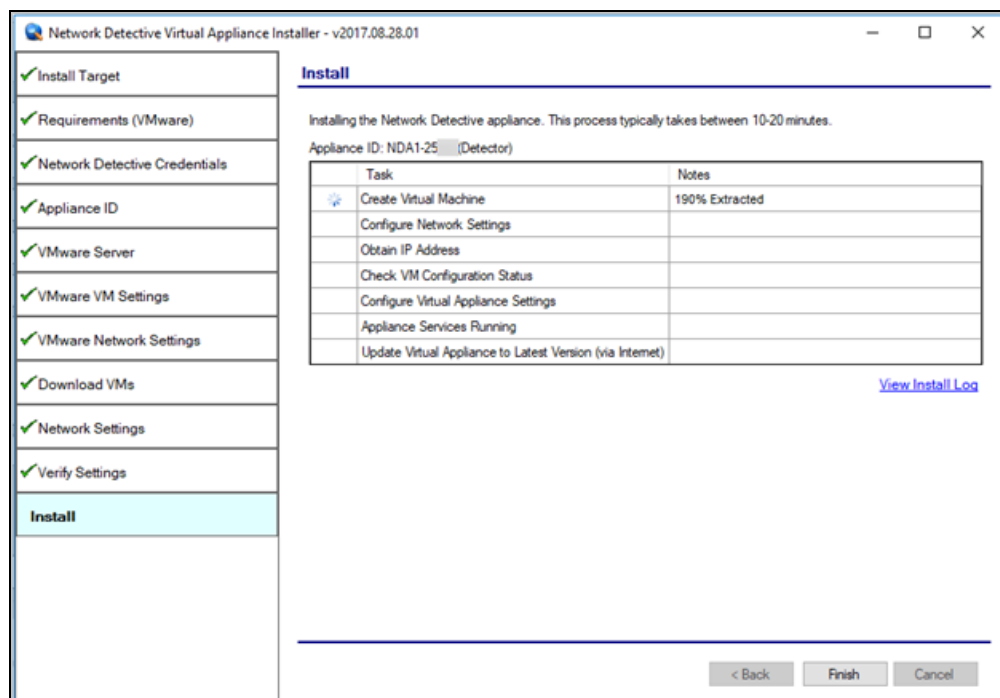


After verifying the settings are correct, select the **Install** button.

This action will start the **Virtual Appliance's** installation on the VMware based system.

Step 14 — Monitor Installation Progress Status

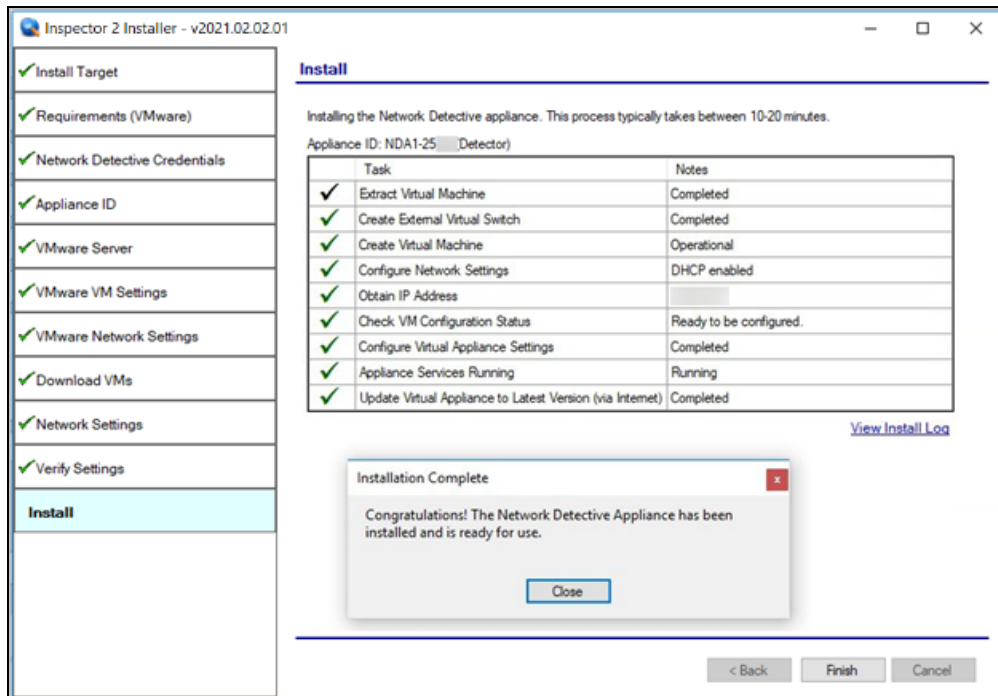
During this final step in the installation process, the **Installer** program's window presents the installation tasks and their statuses as the **Installer** program installs and configures the **Virtual Appliance**.



In the case that any installation **Task** fails to complete, the user will be presented with a description of the issue within the **Notes** column of this window.

When a **Task** during the installation process fails to complete, the **Virtual Appliance** installation process is terminated. A “**Retry Install Now**” link will appear to enable the user to attempt to retry the installation.

When the installation process is successfully completed, the **Installer** will notify the user that the **Virtual Appliance** installation process is complete as displayed below.



Tip: After installing the appliance, be sure to double check that it meets the [Virtual Appliance Operational System Requirements](#).

Step 15 — Confirm that Appliance Meets Operational Requirements

Once you install the appliance, be sure that it meets the Operational Requirements:

- 6 GB Available RAM
- 20 GB Hard Drive Space

Manual Installation for VMware deployment

Step 1 : Download the VMware appliance OVA

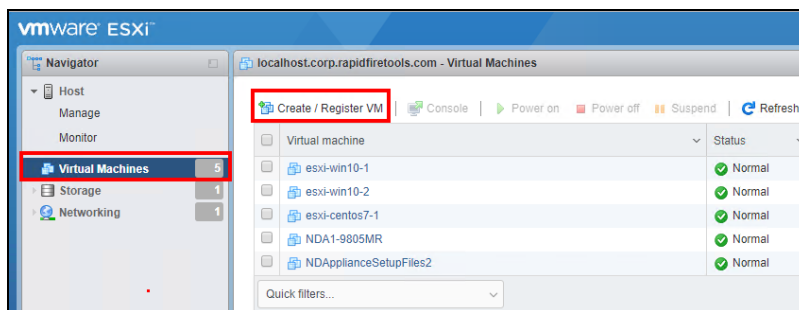
Download the appliance at:

<https://s3.amazonaws.com/networkdetective/download/NDApplianceSetupFiles2-VMware.ova>.

Step 2: Launch the VMware vSphere Client and log in

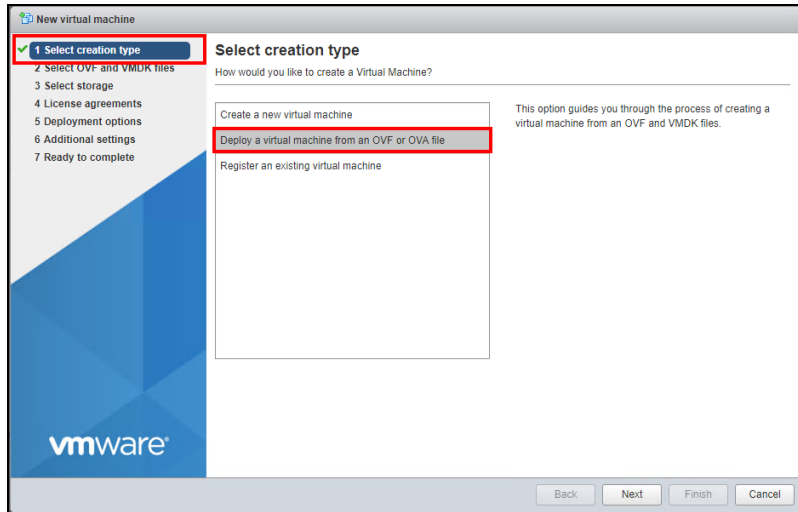
Step 3: Launch the VMware New Virtual Machine Wizard

Click the **Virtual Machines** link in the Navigator pane to the left and click **Create /Register VM** in the virtual machines pane to the right to launch the New Virtual Machine wizard.

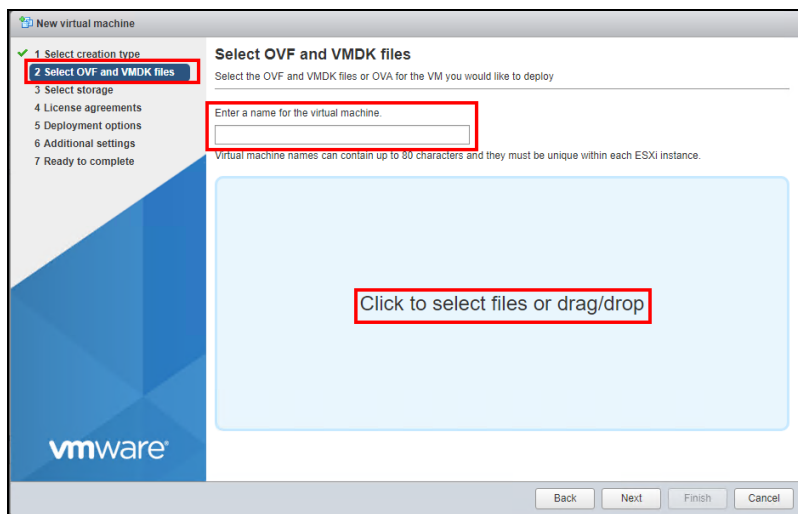


Step 4: Creating a VMware Virtual Machine

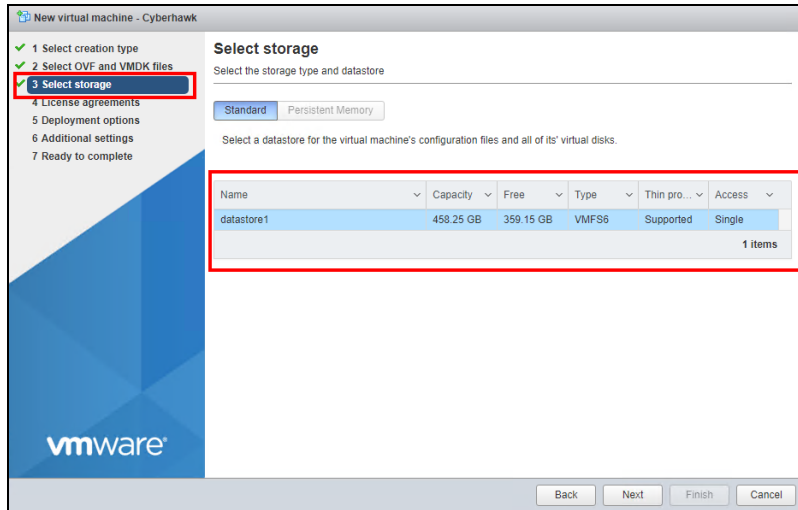
- **Select Creation Type** – Select the option to Deploy a virtual machine from an OVF or OVA file.



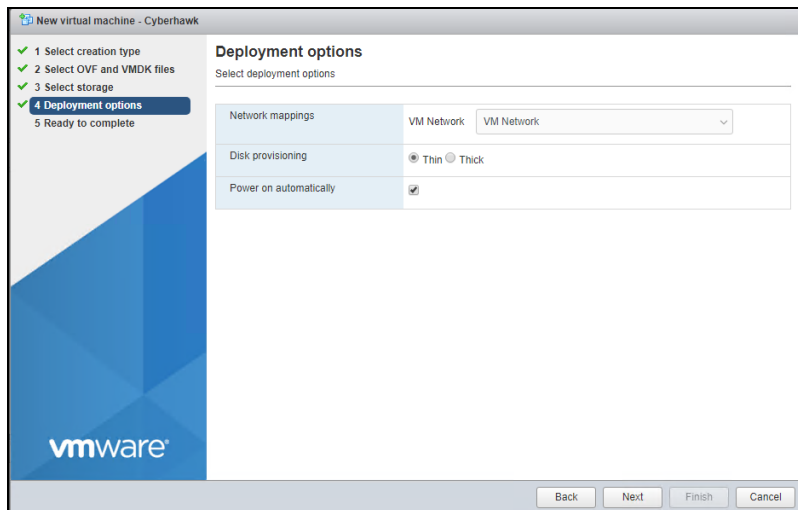
- **Select OVF and VMDK files** – Enter a Name for the Virtual Machine (ie. Cyber Hawk). Drag and Drop the OVA you downloaded in Step 1 into the highlighted Area or double click the highlighted area to bring up the file explorer and navigate to the file. Once the file appears in the highlighted area click Next.



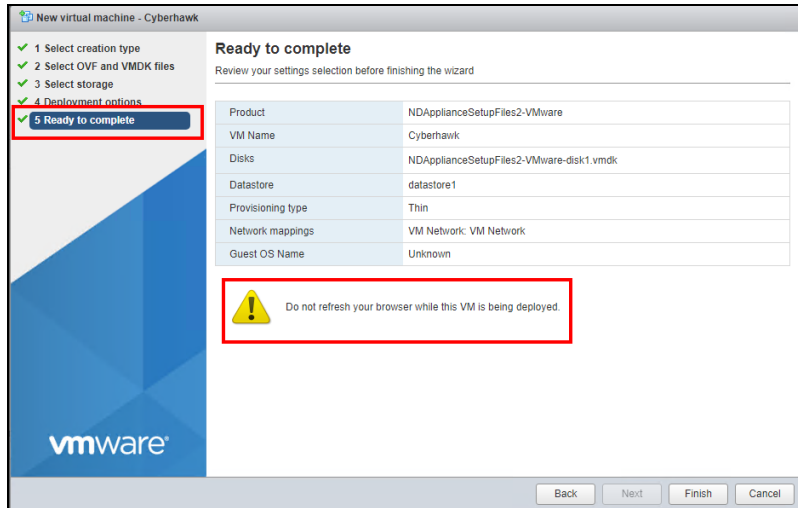
- **Select Storage** – Select the Datastore where you would like to store the virtual machines configuration and virtual disks.



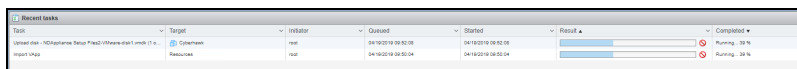
- **Deployment Options** – Select the appropriate Network Mappings. Make sure the network selected can communicate with the network that will be scanned. For the disk provisioning options Thick is always best for better I/O but you may opt to use Thin depending on how much space you have available. You can leave the Power on Automatically option checked and click Next.



- **Ready to Complete** – Review the settings before finishing the Wizard and make sure NOT to refresh your browser while the Virtual Machine is being deployed. Click Finish.

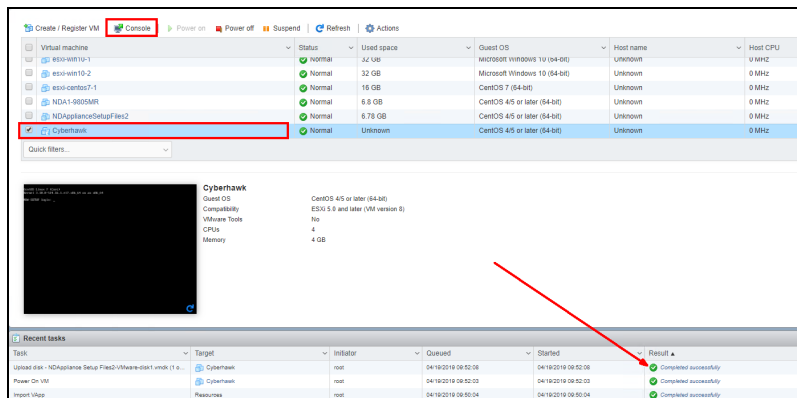


- **Virtual Machine deployment** – You can view the Recent Tasks section of the Virtual Machines to check the deployment progress.



Step 4: Verify successful deployment of virtual machine

The results column of the Recent Tasks should have a check mark stating ‘Completed Successfully’ VM upload, Importing of the VM and Powering up the VM.

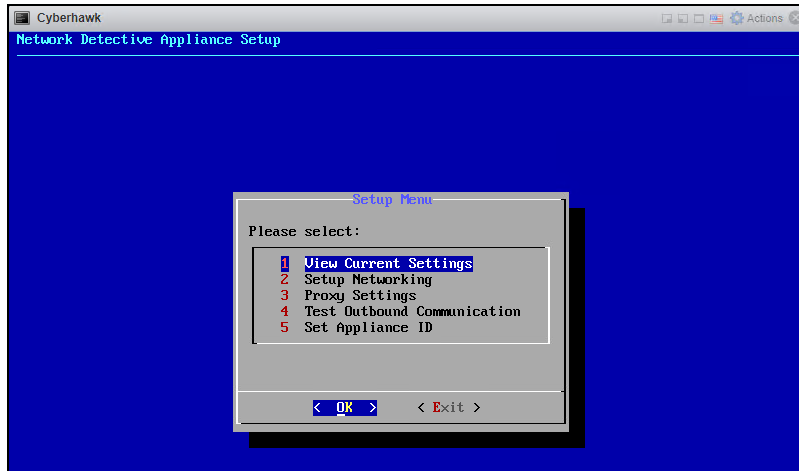


Step 5: Log into the Virtual Machine to set up your Cyber Hawk appliance

Once you have verified successful deployment of your virtual machine launch the virtual machine console (see screen capture from step 4) and log into the VM using the following credentials.

- User: setup
- Password: setup-nda

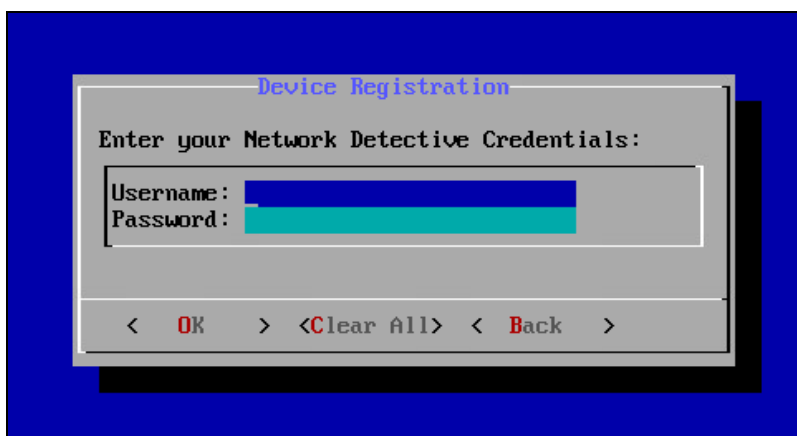
After entering the credentials, the Cyber Hawk troubleshooting console will come up.



Step 6: Setting up your Cyber Hawk Appliance

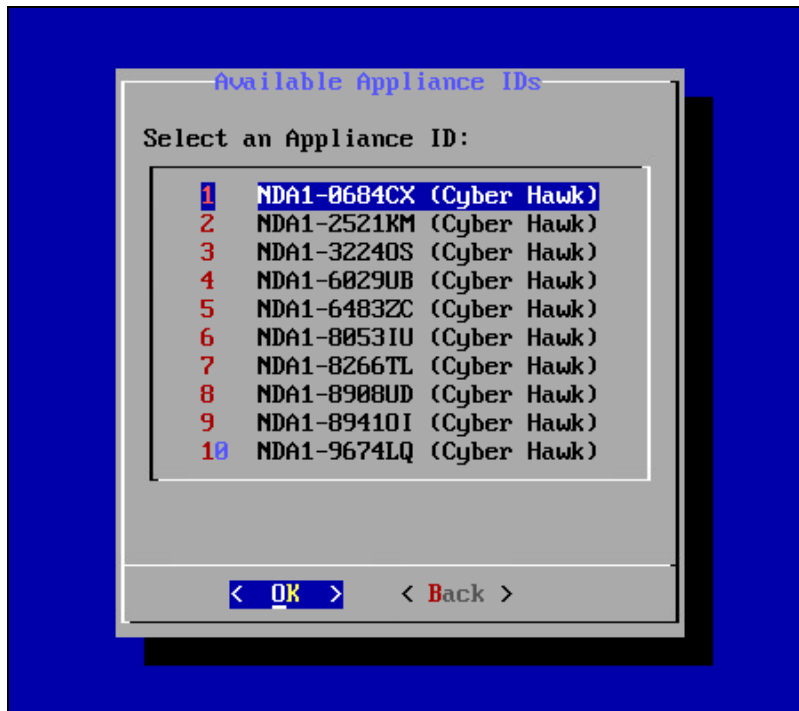
- Use the your Up/Down Arrow keys to select Option 5 – Set Appliance ID and click hit Enter.
- Enter your Network Detective credentials in the Device Registration dialog and then hit the Tab key to select an option (OK, Clear All, Back). Select OK and hit enter.

Note: You must use the up/down arrow keys to switch between the username and password fields.

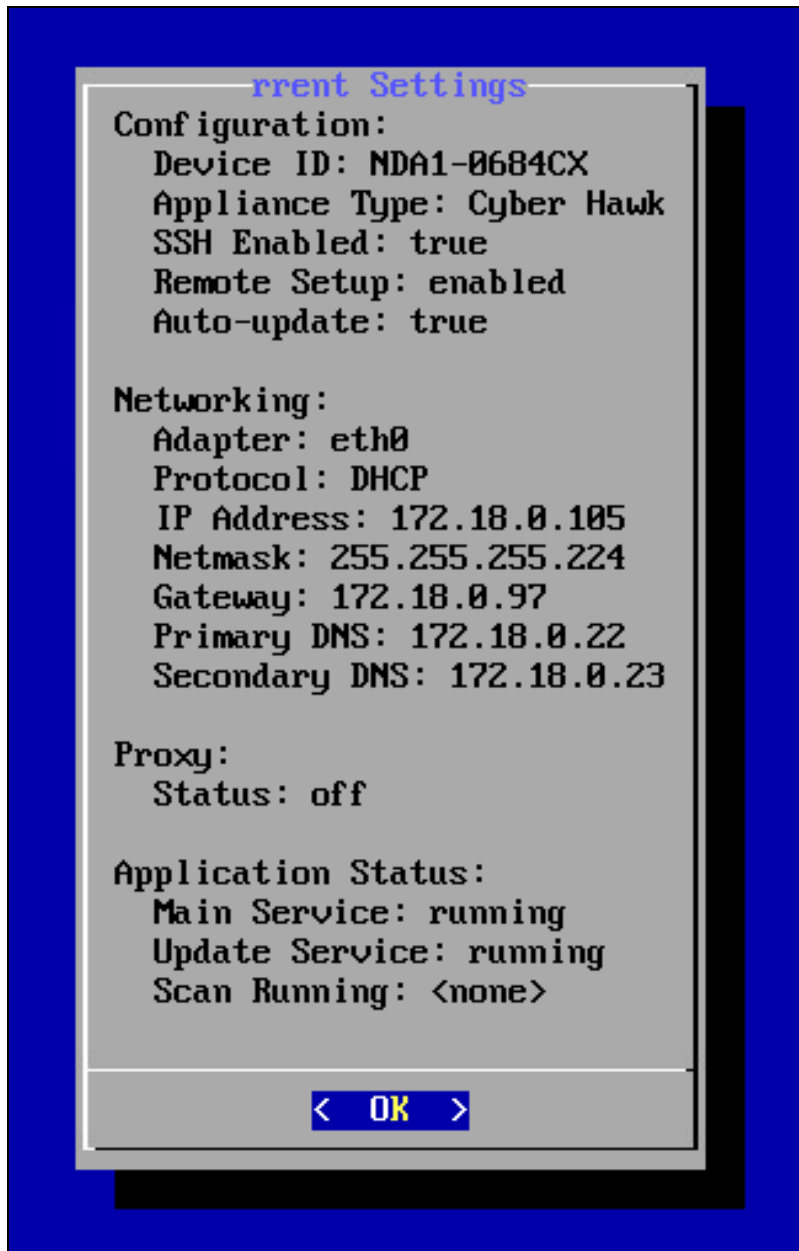


- Upon a successful login the following the Available Appliance IDs window will come up listing all the appliance IDs provisioned under your account that have yet to be

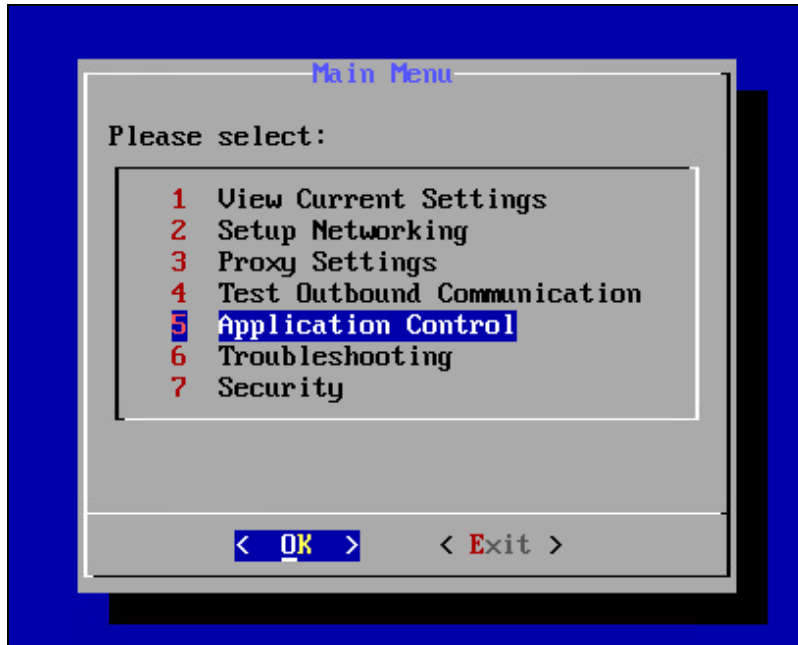
deployed. Select an Appliance ID with (Cyber Hawk) beside the ID. Again, use the up/down arrow keys to select the desired appliance id. Hit Enter.



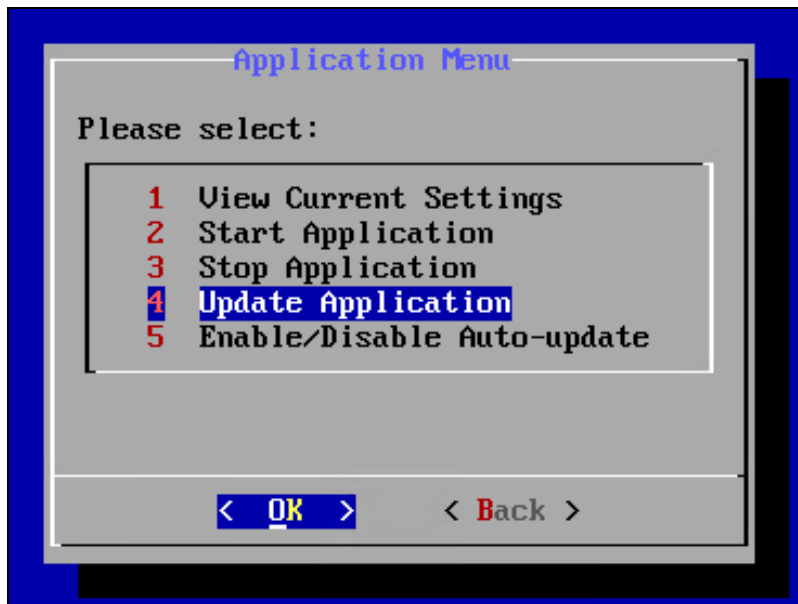
- Once the appliance ID has been selected the following dialog will come up showing the Cyber Hawks' current settings. Review the settings and hit enter to Exit the current settings window.



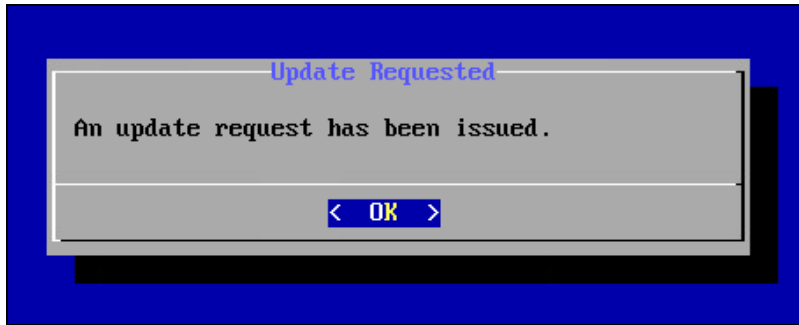
- Once you have exited the Current Settings window you will be brought back to the Troubleshooting Console's main menu. Use the up/down arrow keys and highlight the Option 5 – Application Control. Hit Enter.



- When the Application Menu comes up use the up/down arrow keys to select Option 4 – Update Application. Hit Enter.



- The next screen will display that an update has been requested. This request will update your Cyber Hawk application to the latest version.



- Hit enter to bring you back to the application menu then select Back to bring you back to the Troubleshooting Console main menu. Select Exit and hit Enter to exit the Troubleshooting Console.

Step 7: Verify your Cyber Hawk Appliance is checking into the Rapidfire Tools servers and appears Active in the Network Detective application

Log into the **Network Detective** Application and Click the Appliances tab. Your newly deployed Cyber Hawk should have a green communication indicator to left of the Appliance ID and the Update Status column should show Current (see below).

