Deploying the OVA directly to vCenter

- 1. Select "Deploy OVF Template" in vCenter
- 2. Input your virtual machine name, and select the folder, compute resource.
- 3. Review and accept the template details
- 4. Select your datastore
- 5. Select your virtual machine destination network
- 6. Configure the appliance properties
 - a. Hostname
 - b. IP Address

Note: If no IP address is set, appliance will use DHCP

- c. Network CIDR Prefix
- d. Gateway
- e. DNS
- f. DNS Domain
- g. NTP
- h. Proxy Settings
- i. OS Credentials Root password

Note: this is a mandatory parameter, failure to set a password will lead to a failed deployment.

- j. Folding@Home Settings
 - i. Your chosen username
 - ii. Team ID
 - iii. Passkey

Note: A passkey is provided to authenticate you as a user and is optional.

https://apps.foldingathome.org/getpasskey

- iv. F@H Mode
- v. GPU enabled

Note: if you are using a virtual machine with a GPU, this must be in passthrough mode

vi. F@H Remote Mgmt allowed networks

Note: Default allows all connections from FAHControl 127.0.0.1 must always be present, accept inputs are [IP Address] [IP Network/CIDR}

Example;

127.0.0.1 192.168.10.10 127.0.0.1 192.168.10.0/24

vii. F@H Remote Mgmt password

Note: This sets a password to be used when connecting FAHControl to your Appliance. The default is *VMware1!*

viii. Enable F@H Stats in VM Console

For appliance version 1.0.1 and higher, there has been a change which allows the auto configuration of "Big Advanced" workloads when your appliance detect 16 CPUs or higher. This detection will run upon every boot. You can read more about this setting here;

https://foldingathome.org/support/faq/installation-guides/configuration-guide/#big-advanced

Deploying OVA directly to a ESXi Host

Deploying the OVA to an ESXi host using the host client UI is not supported, you must instead use the OVFTool;

- https://code.vmware.com/web/tool/4.3.0/ovf
- 1. Create the script for your system, you will find options for Windows/Linux/MAC OS X here;
 - https://github.com/lamw/vmware-fah-automation
- 2. Modify the script with variables for your system in a code editor
 - https://code.visualstudio.com/download
- 3. Modify the script to be executable
 - For Mac OS X and Linux;
 - i. Open terminal "chmod +x {script location}



4. Run script

|deanl-a01:VMware OVF Tool deanl\$ sud /Users/deanl/Downloads/./fahdeploy.sh
Opening OVA source: /Users/deanl/Downloads/VMware-Appliance-FaH_1.0.1.ova
The manifest validates
Opening VI target: vi://root@192.168.128.233:443/
Deploying to VI: vi://root@192.168.128.233:443/
Transfer Completed
Powering on VM: VMWARE-FAH
Task Completed
Completed successfully

Once the script has finished, you will see a deployed and powered on virtual machine that you can connect to using the web interface or FAHControl.

Deploying OVA to VMware Fusion & VMware Workstation

This is supported for OVA version 1.0.1 and higher.

Troubleshooting

Q: I'm not receiving any work units?

A: Visit the Folding@Home project support forums at https://foldingforum.org/

If you think there is something wrong,

1. Check the status of the Service;

/etc/init.d/FAHClient status

2. You can restart the services with;

/etc/init.d/FAHClient stop /etc/init.d/FAHClient start Or /etc/init.d/FAHClient restart

You can then view the logs as below

Logs Location on OVA:

Run /etc/init.d/FAHClient log -v Or

Run less /var/lib/fahclient/log.txt

If you see logging as below, this means your appliance is actively running a work unit

```
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:
                                                   CWD: /var/lib/fahclient/work
4:35:22:WU00:FS00:0xa7:****
                                                                            <del>«×××××××</del> Build - libFAH <del>×××××</del>
4:35:22:WU00:FS00:0xa7:
                                            Version: 0.0.18
4:35:22:WU00:FS00:0xa7:
                                         Author: Joseph Coffland <joseph@cauldrondevelopment.com>Copyright: 2019 foldingathome.org
4:35:22:WU00:FS00:0xa7:
                                           Homepage: https://foldingathome.org/
Date: Nov 5 2019
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:
                                           Time: 06:13:26
Revision: 490c9aa2957b725af319379424d5c5cb36ef<u>b</u>656
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:
                                              Branch: master
4:35:22:WU00:FS00:0xa7:
                                           Compiler: GNU 8.3.0
                                           Options: -std=c++11 -03 -funroll-loops -fno-pie
Platform: linux2 4.19.0-5-amd64
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:
                                                 Bits: 64
4:35:22:WU00:FS00:0xa7:
                                                 Mode: Release
4:35:22:WU00:FS00:0xa7:
4:35:22:WU00:FS00:0xa7:*
                                                                           ************* Build ******
4:35:22:WU00:FS00:0xa7:
                                                 SIMD: aux_256
4:35:22:WU00:FS00:0xa7:****
4:35:22:WU00:FS00:0xa7:Project: 14303 (Run 5, Clone 703, Gen 5)
4:35:22:WU00:FS00:0xa7:Unit: 0x000000069bf7a4d55e66cbf687e2ec39
4:35:22:WU00:FS00:0xa7:Reading tar file core.xml
4:35:22:WU00:FS00:0xa7:Reading tar file frame5.tpr
4:35:22:WU00:FS00:0xa7:Digital signatures verified
4:35:22:WU00:FS00:0xa7:Stylital Signatures Geriffed
4:35:22:WU00:FS00:0xa7:Steps: first=2500000 total=500000
4:35:22:WU00:FS00:0xa7:Steps: first=2500000 total=500000
4:35:22:WU00:FS00:0xa7:Completed 1 out of 500000 steps (0%)
4:37:52:WU00:FS00:0xa7:Completed 5000 out of 500000 steps (1%)
```

You can find the full Linux command line options at this website;

https://foldingathome.org/support/faq/installation-guides/linux/command-line-options/

Q: Using FAHControl to manage multiple clients does not work A: FAHControl uses the default TCP Port 36330 Test access with telnet you should get a response as below.

```
P192.168.200.190 - PuTTY

Welcome to the Folding@home Client command server.

>
```

The VMware Appliance for Folding@Home has IPTables configured to allow this port by default, if you did not specify a specific remote management address during deployment, then access is open to all IP addresses.

Ensure that the machine where you are running FAHControl is not blocking outbound connections to TCP 33630.