

HOW-TO: Build a virtual machine on VMware ESXi

- [Background](#)
 - [Pre-requisites](#)
- [Procedure](#)
 - [Setup the repository area](#)
 - [Building the virtual machine](#)
- [Appendix](#)

Background

Build a virtual machine on an VMware ESXi hypervisor.


Repository	https://github.com/tenzin-io/vmware-builder
-------------------	---

Pre-requisites

- A machine with the following packages
 - Go compiler tools
 - Ansible
 - Hashicorp's Packer
 - Openssl
 - Git SCM

Procedure

Setup the repository area

	Steps
1	First clone the Git repository. https://github.com/tenzin-io/vmware-builder
2	Perform <code>make</code> at the root of the repository.
3	Go into the <code>installer_blobs</code> folder.
4	Run the <code>./get_files.yml</code> ansible playbook.
5	Run the <code>./mount_iso_folders.yml</code> ansible playbook. <div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; margin-top: 10px;"> This ansible playbook mounts ISO files on to an <code>iso_contents</code> folder.</div>
6	Go into the <code>config</code> folder.

7 Create a config yaml file that describes the ESXi host.


```

config.example.yml
---
build:
  server: vsphere-1 # ESX host
  user: builder # ESX user with admin permissions
  password: Secret123 # ESX user's password
  network: VM Network # virtual network to create the VM on
  datastore: nvme1 # the datastore to create the VM on

vm:
  user: sysuser # the VM user
  password: Welcome123 # the VM password

blob:
  dir: installer_blobs # the folder path of the vendor files

```

 Do not commit the config yaml file into Git, this file contains authentication information.

Building the virtual machine

Steps	
1	<p>The ./builder binary without options will print the usage information.</p> <pre> Usage of ./builder: -c string Config file path. -n string Virtual machine name. -o string Operating system. Examples: debian, centos, ubuntu -r string Operating system release name. Examples: bullseye, 8-stream, focal -version Print program version. </pre>
2	<p>An example argument list to the builder binary.</p> <pre> ./builder -c config/vs-2.nvme1.yaml -n server-1 -o debian -r bullseye </pre>

Appendix

	Document	Link
1	The vmware-builder Git repository	https://github.com/tenzin-io/vmware-builder
2	Hashicorp's Packer	https://www.packer.io