Manual

Prepare VM for CKAN workshop

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Install VirtualBox

Download and Install VirtualBox

- https://www.virtualbox.org/wiki/Downloads

Download Ubuntu 20.04

- https://releases.ubuntu.com/focal/

Ubuntu 20.04.6 LTS (Focal Fossa)

Select an image

Ubuntu is distributed on three types of images described below.

Desktop image

The desktop image allows you to try Ubuntu without changing your computer at all, and at your option to install it permanently later. This type of image is what most people will want to use. You will need at least 1024MiB of RAM to install from this image.

64-bit PC (AMD64) desktop image

Choose this if you have a computer based on the AMD64 or EM64T architecture (e.g., Athlon64, Opteron, EM64T Xeon, Core 2). Choose this if you are at all unsure.

Server install image

The server install image allows you to install Ubuntu permanently on a computer for use as a server. It will not install a graphical user interface.

64-bit PC (AMD64) server install image

Choose this if you have a computer based on the AMD64 or EM64T architecture (e.g., Athlon64, Opteron, EM64T Xeon, Core 2). Choose this if you are at all unsure.

Oracle VM VirtualBox Manager

File   Machine   Help

Tools

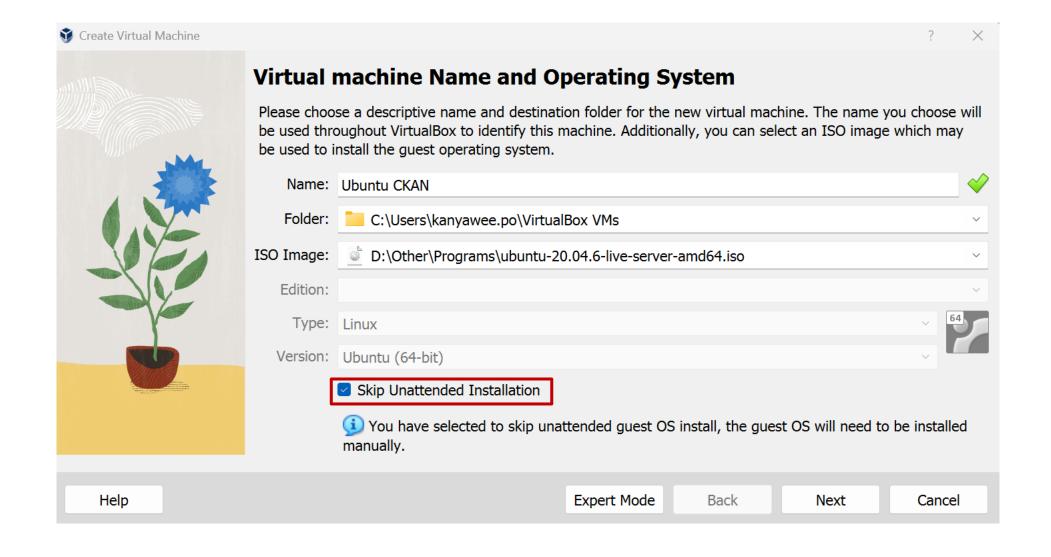Preferences   Import   Export   **New**   Add

Welcome to VirtualBox!

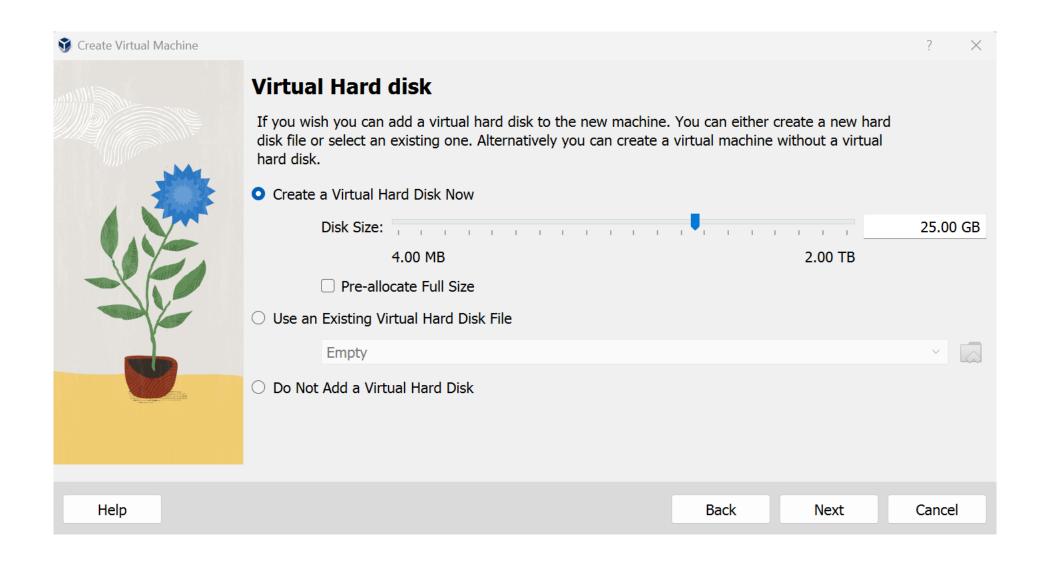The left part of application window contains global tools and lists all virtual machines and virtual machine groups on your computer. You can import, add and create new VMs using corresponding toolbar buttons. You can popup a tools of currently selected element using corresponding element button.

You can press the **F1** key to get instant help, or visit www.virtualbox.org for more information and latest news.

Create Virtual Machine

Virtual machine Name and Operating System

Please choose a descriptive name and destination folder for the new virtual machine. The name you choose will be used throughout VirtualBox to identify this machine. Additionally, you can select an ISO image which may be used to install the guest operating system.

Name: Ubuntu CKAN ✔

Folder: 📁 C:\Users\kanyawee.po\VirtualBox VMs

ISO Image: 💿 D:\Other\Programs\ubuntu-20.04.6-live-server-amd64.iso

Edition:

Type: Linux `64`

Version: Ubuntu (64-bit)

☑ Skip Unattended Installation

ℹ You have selected to skip unattended guest OS install, the guest OS will need to be installed manually.

Help   Expert Mode   Back   Next   Cancel

Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

Base Memory:

4 MB   16384 MB

`4096 MB`

Processors:

1 CPU   20 CPUs

`2`

☐ Enable EFI (special OSes only)

Help   Back   Next   Cancel

Create Virtual Machine

? ✕

Virtual Hard disk

If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select an existing one. Alternatively you can create a virtual machine without a virtual hard disk.

◉ Create a Virtual Hard Disk Now

Disk Size: |————————————————▮——————————————| 25.00 GB

4.00 MB   2.00 TB

☐ Pre-allocate Full Size

○ Use an Existing Virtual Hard Disk File

Empty ▾

○ Do Not Add a Virtual Hard Disk

Help   Back   Next   Cancel
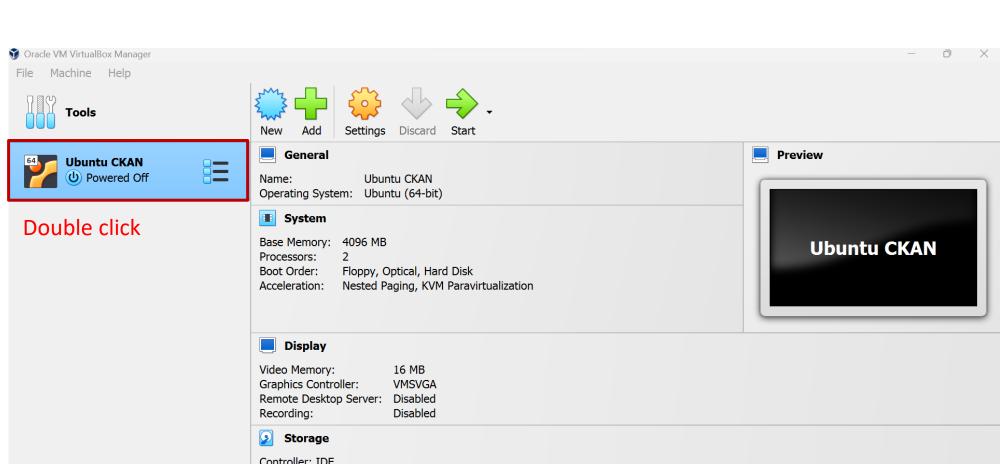
Summary

The following table summarizes the configuration you have chosen for the new virtual machine.
When you are happy with the configuration press Finish to create the virtual machine.
Alternatively you can go back and modify the configuration.

Machine Name and OS Type	
Machine Name	Ubuntu CKAN
Machine Folder	C:/Users/kanyawee.po/VirtualBox VMs/Ubuntu CKAN
ISO Image	D:/Other/Programs/ubuntu-20.04.6-live-server-amd64.iso
Guest OS Type	Ubuntu (64-bit)
Skip Unattended Install	true
Hardware	
Base Memory	4096
Processor(s)	2
EFI Enable	false
Disk	
Disk Size	25.00 GB
Pre-allocate Full Size	false

Help   Back   Finish   Cancel

Oracle VM VirtualBox Manager

File   Machine   Help

Tools

Ubuntu CKAN
Powered Off

Double click

New   Add   Settings   Discard   Start

General

Name: Ubuntu CKAN
Operating System: Ubuntu (64-bit)

Preview

Ubuntu CKAN

System

Base Memory: 4096 MB
Processors: 2
Boot Order: Floppy, Optical, Hard Disk
Acceleration: Nested Paging, KVM Paravirtualization

Display

Video Memory: 16 MB
Graphics Controller: VMSVGA
Remote Desktop Server: Disabled
Recording: Disabled

Storage

Controller: IDE
   IDE Secondary Device 0:   [Optical Drive] ubuntu-20.04.6-live-server-amd64.iso (1.39 GB)
Controller: SATA
   SATA Port 0:   Ubuntu CKAN.vdi (Normal, 25.00 GB)

Audio

Host Driver: Default
Controller: ICH AC97

Network

Adapter 1:   Intel PRO/1000 MT Desktop (NAT)

Install Ubuntu

Use UP, DOWN and ENTER keys to select your language.

```
                    [ Asturianu                          ▶ ]
                    [ Bahasa Indonesia                   ▶ ]
                    [ Català                              ▶ ]
                    [ Deutsch                             ▶ ]
                    [ English                             ▶ ]
                    [ English (UK)                        ▶ ]
                    [ Español                             ▶ ]
                    [ Français                            ▶ ]
                    [ Galego                              ▶ ]
                    [ Hrvatski                            ▶ ]
                    [ Latviski                            ▶ ]
                    [ Lietuviškai                         ▶ ]
                    [ Magyar                              ▶ ]
                    [ Nederlands                          ▶ ]
                    [ Norsk bokmål                        ▶ ]
                    [ Polski                              ▶ ]
                    [ Português                           ▶ ]
                    [ Suomi                               ▶ ]
                    [ Svenska                             ▶ ]
                    [ Čeština                             ▶ ]
                    [ Ελληνικά                            ▶ ]
                    [ Беларуская                          ▶ ]
                    [ Русский                             ▶ ]
                    [ Српски                              ▶ ]
                    [ Українська                          ▶ ]
```

Version 23.08.1 of the installer is now available (22.07.2 is currently running).

You can read the release notes for each version at:

                    https://github.com/canonical/subiquity/releases

If you choose to update, the update will be downloaded and the installation will continue from here.

                          [Update to the new installer]
                          [Continue without updating   ]
                          [Back   ]

Please select your keyboard layout below, or select "Identify keyboard" to
detect your layout automatically.

Layout: [English (US)   ▼]

Variant: [English (US)   ▼]

[Identify keyboard]

[Done   ]
[Back   ]

Configure at least one interface this server can use to talk to other machines,
and which preferably provides sufficient access for updates.

```
  NAME    TYPE  NOTES
[ enp0s3  eth   -                    ► ]
  DHCPv4  10.0.2.15/24
  08:00:27:a9:46:07 / Intel Corporation / 82540EM Gigabit Ethernet Controller
(PRO/1000 MT Desktop Adapter)

[ Create bond ► ]
```

```
[ Done ]
[ Back ]
```

If this system requires a proxy to connect to the internet, enter its details here.

Proxy address:

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user][:pass]@]host[:port]/".

[Done]
[Back]

If you use an alternative mirror for Ubuntu, enter its details here.

Mirror address: `http://th.archive.ubuntu.com/ubuntu`
                   You may provide an archive mirror that will be used instead of
                   the default.

                              [Done   ]
                              [Back   ]

Configure a guided storage layout, or create a custom one:

(X) Use an entire disk

     [VBOX_HARDDISK_VB8319abdf-0baa25b8 local disk 25.000G ▼]

     [X] Set up this disk as an LVM group

          [ ] Encrypt the LVM group with LUKS

                    Passphrase:

                    Confirm passphrase:

( ) Custom storage layout

                              [Done   ]
                              [Back   ]

FILE SYSTEM SUMMARY

```
  MOUNT POINT        SIZE    TYPE       DEVICE TYPE
[ /              11.496G   new ext4   new LVM logical volume     ► ]
[ /boot           2.000G   new ext4   new partition of local disk ► ]
```

AVAILABLE DEVICES

```
  DEVICE                                    TYPE              SIZE
[ ubuntu-vg (new)                           LVM volume group  22.996G  ► ]
  free space                                                  11.500G  ►

[ Create software RAID (md) ► ]
[ Create volume group (LVM) ► ]
```

USED DEVICES

```
  DEVICE                                    TYPE              SIZE
[ ubuntu-vg (new)                           LVM volume group  22.996G  ► ]
  ubuntu-lv    new, to be formatted as ext4, mounted at /     11.496G  ►

[ VBOX_HARDDISK_VB8319abdf-0baa25b8         local disk        25.000G  ► ]
  partition 1  new, BIOS grub spacer                           1.000M  ►
  partition 2  new, to be formatted as ext4, mounted at /boot  2.000G  ►
  partition 3  new, PV of LVM volume group ubuntu-vg          22.997G  ►
```

```
                        [ Done   ]
                        [ Reset  ]
                        [ Back   ]
```

FILE SYSTEM SUMMARY

```
  MOUNT POINT      SIZE    TYPE       DEVICE TYPE
[ /             11.496G  new ext4   new LVM logical volume      ► ]
[ /boot          2.000G  new ext4   new partition of local disk ► ]
```

AVAILABLE DEVICES

```
┌───────────────────── Confirm destructive action ─────────────────────┐
│                                                                       │
│  Selecting Continue below will begin the installation process and     │
│  result in the loss of data on the disks selected to be formatted.    │
│                                                                       │
│  You will not be able to return to this or a previous screen once the │
│  installation has started.                                            │
│                                                                       │
│  Are you sure you want to continue?                                   │
│                                                                       │
│                          [ No            ]                            │
│                          [ Continue      ]                            │
│                                                                       │
└───────────────────────────────────────────────────────────────────────┘
```

```
partition 2  new, to be formatted as ext4, mounted at /boot      2.000G  ►
partition 3  new, PV of LVM volume group ubuntu-vg               22.997G  ►
```

```
                          [ Done        ]
                          [ Reset       ]
                          [ Back        ]
```

Password: ckan1234

You can choose to install the OpenSSH server package to enable secure remote
access to your server.

[X]   Install OpenSSH server

Import SSH identity: [No   ▼]
                       You can import your SSH keys from GitHub or Launchpad.

      Import Username:

               [X]   Allow password authentication over SSH

                              [Done   ]
                              [Back   ]

These are popular snaps in server environments. Select or deselect with SPACE,
press ENTER to see more details of the package, publisher and versions
available.

```
[ ] microk8s            Kubernetes for workstations and appliances          ▶
[ ] nextcloud           Nextcloud Server - A safe home for all your data     ▶
[ ] wekan               The open-source kanban                               ▶
[ ] kata-containers     Build lightweight VMs that seamlessly plug into the c ▶
[ ] docker              Docker container runtime                             ▶
[ ] canonical-livepatch Canonical Livepatch Client                           ▶
[ ] rocketchat-server   Rocket.Chat server                                   ▶
[ ] mosquitto           Eclipse Mosquitto MQTT broker                        ▶
[ ] etcd                Resilient key-value store by CoreOS                  ▶
[ ] powershell          PowerShell for every system!                         ▶
[ ] sabnzbd             SABnzbd                                              ▶
[ ] wormhole            get things from one computer to another, safely      ▶
[ ] aws-cli             Universal Command Line Interface for Amazon Web Servi ▶
[ ] google-cloud-sdk    Google Cloud SDK                                     ▶
[ ] slcli               Python based SoftLayer API Tool.                     ▶
[ ] doctl               The official DigitalOcean command line interface     ▶
[ ] conjure-up          Package runtime for conjure-up spells                ▶
[ ] postgresql10        PostgreSQL is a powerful, open source object-relation ▶
[ ] heroku              CLI client for Heroku                                ▶
[ ] keepalived          High availability VRRP/BFD and load-balancing for Lin ▶
[ ] prometheus          The Prometheus monitoring system and time series data ▶
[ ] juju                Juju - a model-driven operator lifecycle manager for  ▶
```

```
                              [ Done          ]
                              [ Back          ]
```

```
            configuring apt configuring apt
            installing missing packages
            configuring iscsi service
            configuring raid (mdadm) service
            installing kernel
            setting up swap
            apply networking config
            writing etc/fstab
            configuring multipath
            updating packages on target system
            configuring pollinate user-agent on target
            updating initramfs configuration
            configuring target system bootloader
            installing grub to target devices
       finalizing installation
         running 'curtin hook'
            curtin command hook
       executing late commands
final system configuration
  configuring cloud-init
  calculating extra packages to install
  installing openssh-server
    curtin command system-install
  downloading and installing security updates
    curtin command in-target
  restoring apt configuration
    curtin command in-target
subiquity/Late/run
```

[View full log]
[Reboot Now]

ckan login:
ckan login: ckan
Password:

Login with username and password

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-162-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

 System information as of Tue 12 Sep 2023 05:04:04 PM UTC

 System load: 0.41   Processes: 111
 Usage of /:   41.6% of 11.21GB   Users logged in: 0
 Memory usage: 5%   IPv4 address for enp0s3: 10.0.2.15
 Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

46 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ckan@ckan:~$

Network Setting