

# Working with the Linux Server

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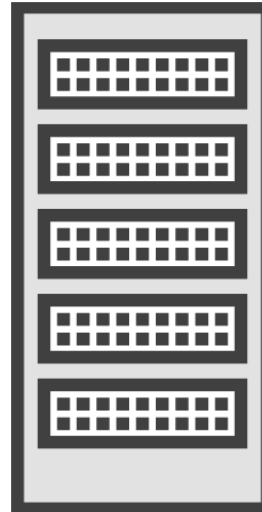
**David Clinton**

LINUX SYSTEM ADMINISTRATOR

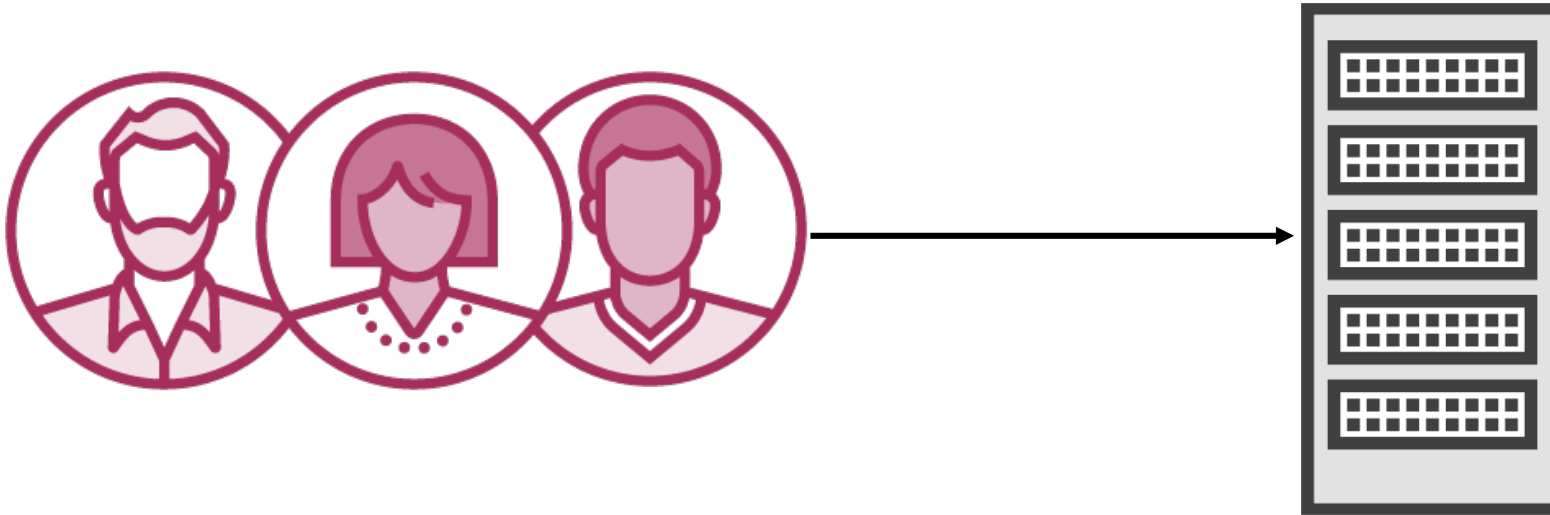
[bootstrap-it.com/linux-start](http://bootstrap-it.com/linux-start) | [@davidbclinton](https://twitter.com/davidbclinton) | [linkedin.com/in/dbclinton](https://linkedin.com/in/dbclinton)

# What Is a Server?

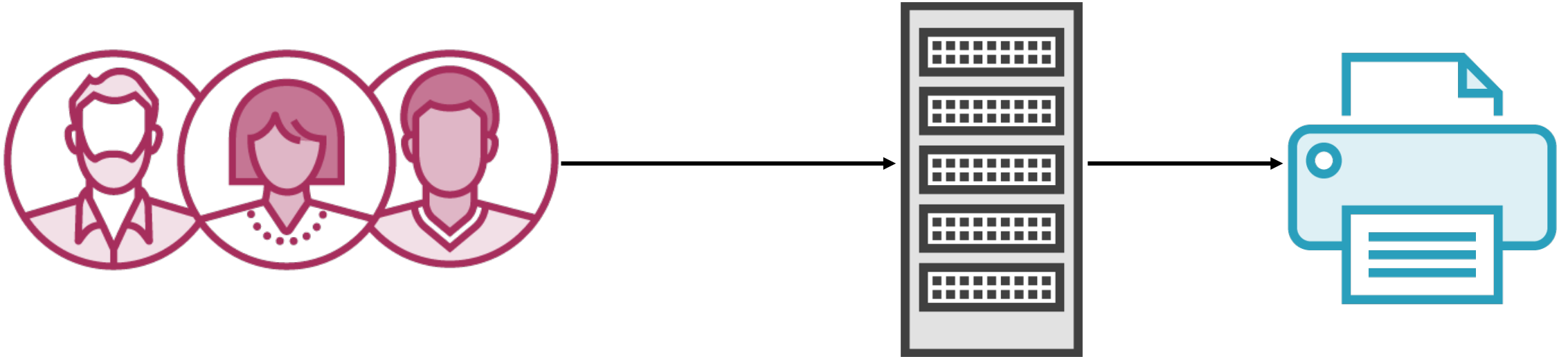
# What Is a Server?



# What Is a Server?



# What Is a Server?



# Overview



# Overview



## Server applications

# Overview



## Server applications

- Apache



# Overview



## Server applications

- Apache
- Nextcloud

# Overview



## Server applications

- Apache
- Nextcloud
- Yum

# Overview



## Server applications

- Apache
- Nextcloud
- Yum
- Snaps

# Overview



## Server applications

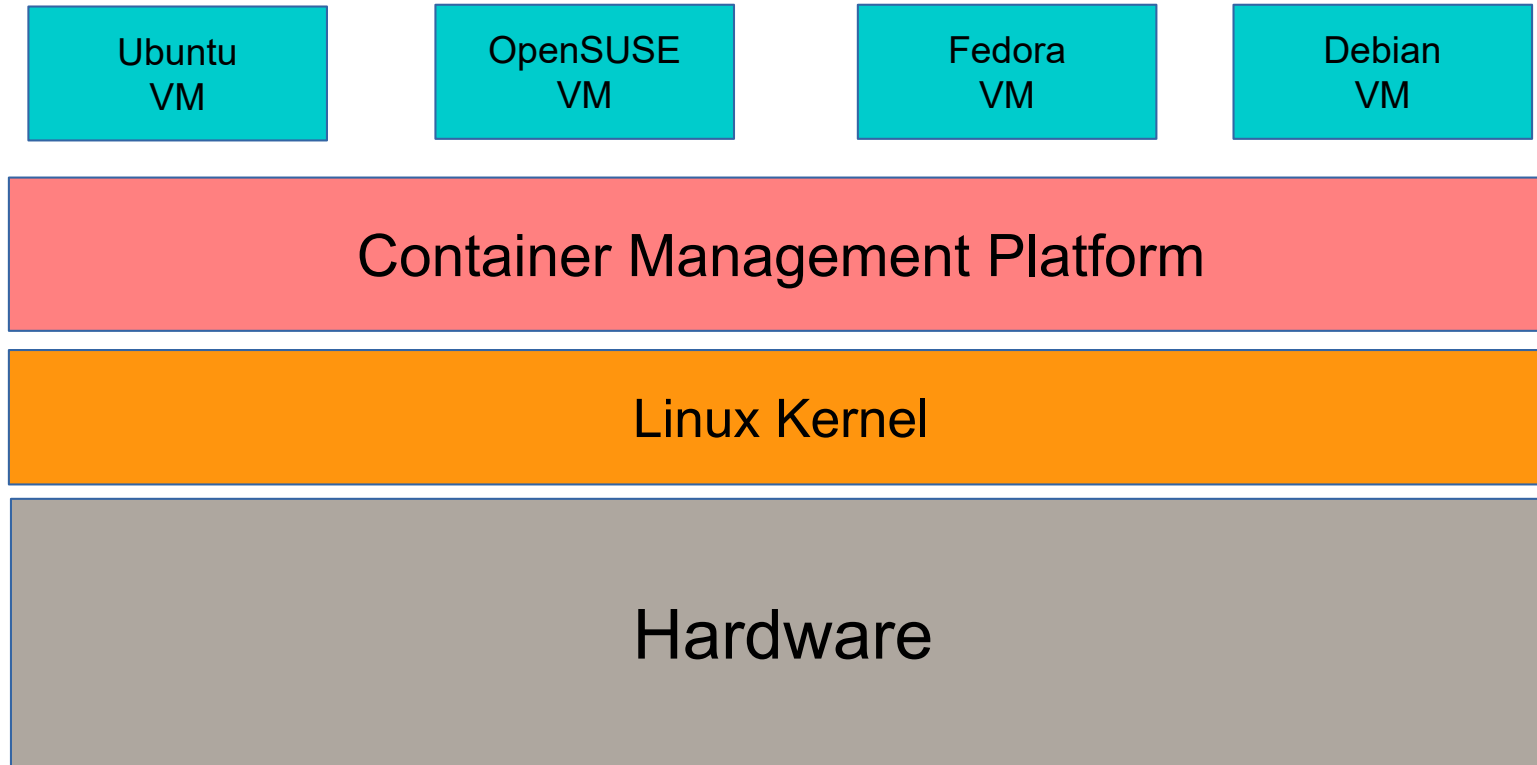
- Apache
- Nextcloud
- Yum
- Snaps

## LXC (Linux Containers)

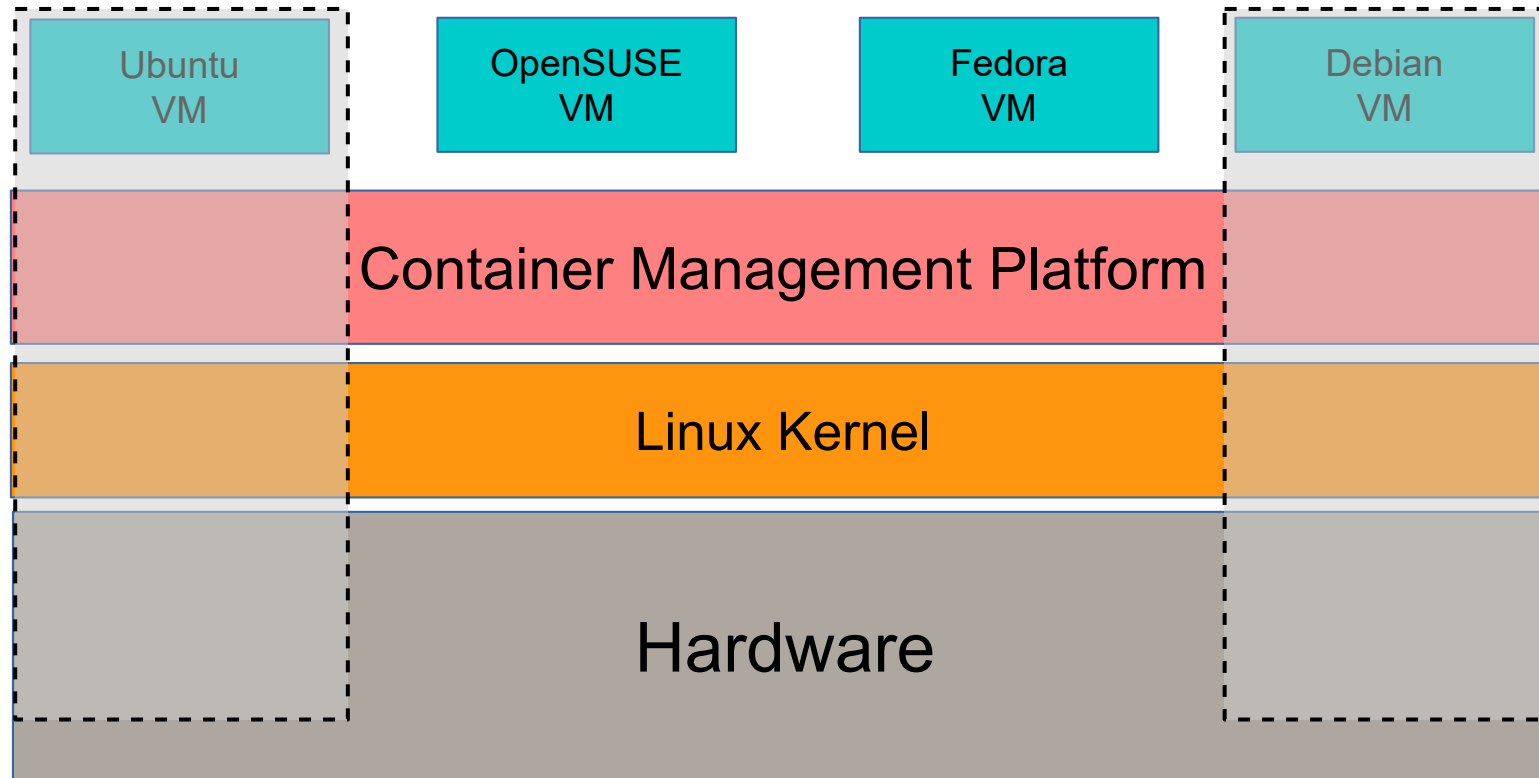
# Using Linux Containers

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# Linux Server Virtualization



# Linux Server Virtualization



# Installing and Working with Server Apps: Apache

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# Installing and Working with Server Apps: Nextcloud

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# Public Document Hosting Limitations

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**Regulatory  
requirements**

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**Third-party  
lock-in**

# Public Document Hosting Limitations

**Regulatory  
requirements**

**Third-party  
lock-in**

**Lack of  
control**

# Manual Nextcloud Installation



Manual  
Nextcloud  
Installation

**Install a LAMP server**

# Manual Nextcloud Installation

**Install a LAMP server**

**Configure service connectivity**



# Manual Nextcloud Installation

**Install a LAMP server**

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**Download Nextcloud archive**

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**Set permissions**

# Manual Nextcloud Installation

**Install a LAMP server**

**Configure service connectivity**

**Download Nextcloud archive**

**Set permissions**

**Troubleshoot**

# Compiling Code in Linux

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When  
Compiling  
Makes Sense



When  
Compiling  
Makes Sense

**New code**

When  
Compiling  
Makes Sense

**New code**

**Customizing existing code**

When  
Compiling  
Makes Sense

**New code**

**Customizing existing code**

**Customizing the Linux kernel**



# Risks

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**No automated  
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**Dependencies  
broken by system  
updates**

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**Dependencies  
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**Unreliable source  
code repos**

```
# sudo apt install autoconf g++ subversion linux-source \  
linux-headers-`uname -r` build-essential tofrodos \  
git-core subversion dos2unix make gcc automake cmake \  
checkinstall git-core dpkg-dev fakeroot pbuilder \  
dh-make debhelper devscripts patchutils quilt \  
git-buildpackage pristine-tar git yasm checkinstall \  
cvs mercurial
```

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Packages needed to compile binaries

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Packages needed to compile binaries

<https://bootstrap-it.com/linux-start>

# Review



## Linux package managers

- APT Debian/Ubuntu
- YUM Red Hat/CentOS

```
$ sudo nano /etc/apt/sources.list
```

```
$ ls /etc/apt/sources.d
```

```
$ sudo apt update
```

```
$ apt search glabels
```

```
$ apt show glabels
```

```
$ sudo apt install glabels
```

Productivity and server software

Linux desktops

# Course Review

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