



Linux For Embedded Systems

For Arabs

Course 101:

Introduction to Embedded Linux

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Lecture 6: Installing Ubuntu



Choices for Ubuntu Installation

1. Booting from Ubuntu DVD
2. Installing Ubuntu alone on the machine
3. Installing Ubuntu along with Windows in a dual boot configuration
4. Installing Ubuntu inside a virtual machine
5. Other choices....

Virtualization

What ??



Virtualization

Why??



Virtualization is used for:

- Running Multiple Operating Systems simultaneously
- Easier Software Installations
- Testing and Disaster Recovery
- Infrastructure Consolidation

Virtualization

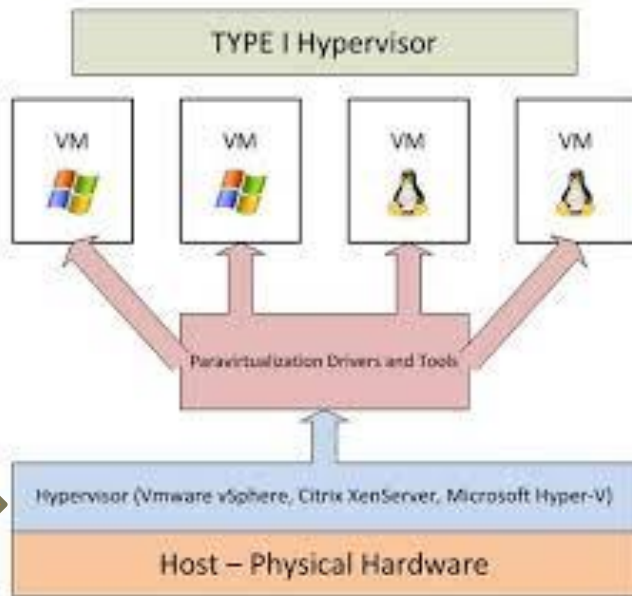
How ?



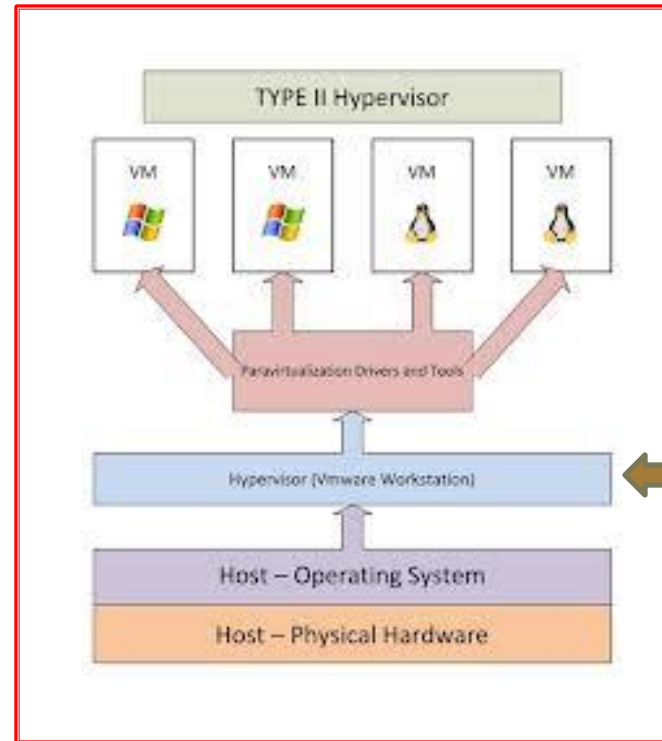
- We can achieve virtualization via the use of a Hyper-visor
- Hyper-Visor is a software that can accommodate multiple virtual machines. Each VM can have its own OS
- There are two types of Hyper-visors,
 - Type One (Bare-Metal Hyper-Visor)
 - Type Two (Use of host OS)

Virtualization

How ?



Hyper-Visor Acts as a light host OS



Hyper-Visor Acts as an Application









Installing Ubuntu

<http://www.wikihow.com/Install-Ubuntu-on-VirtualBox>

Download & Install Oracle Virtual Box



<https://www.virtualbox.org/>

Download Ubuntu

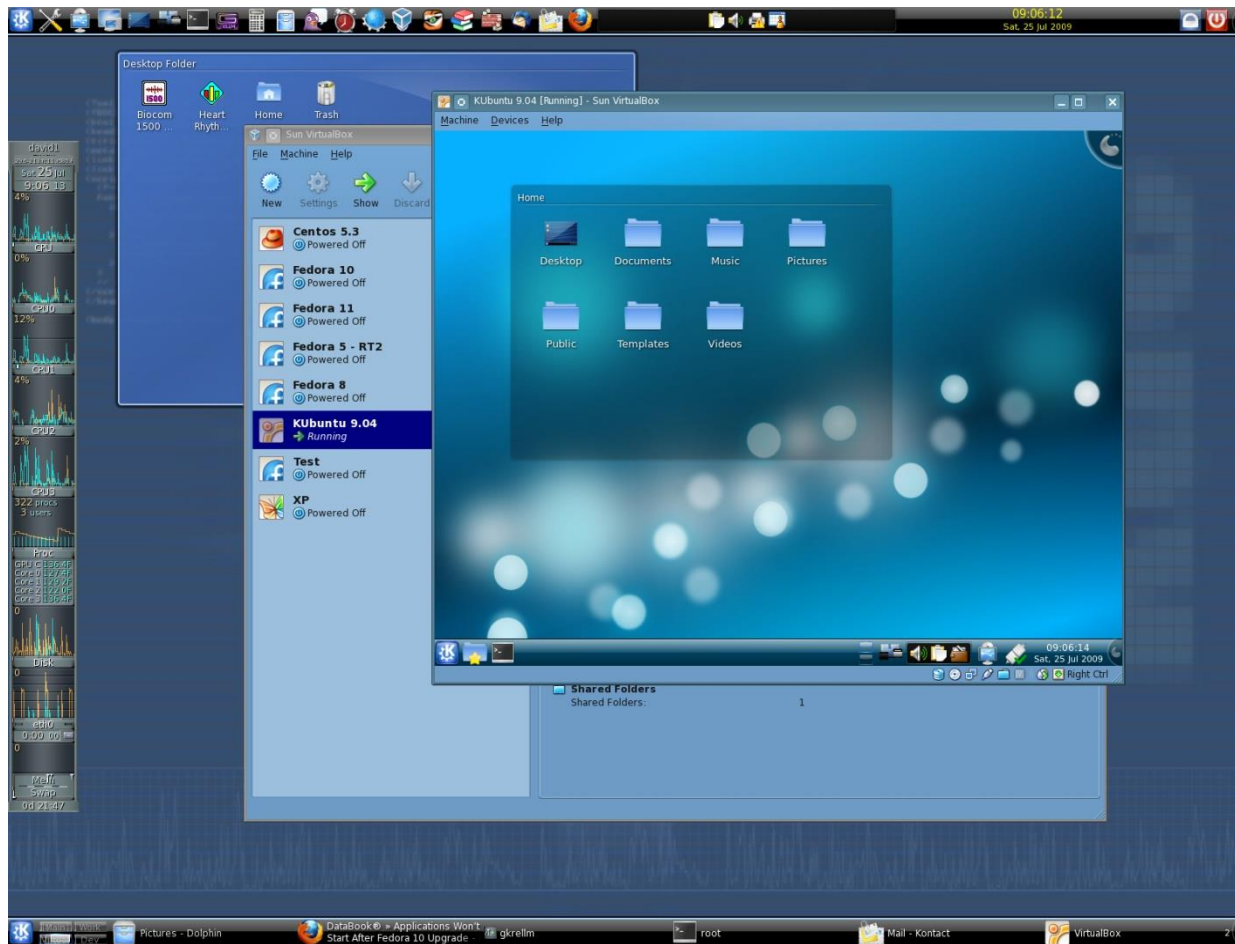


<http://www.ubuntu.com/download/desktop>

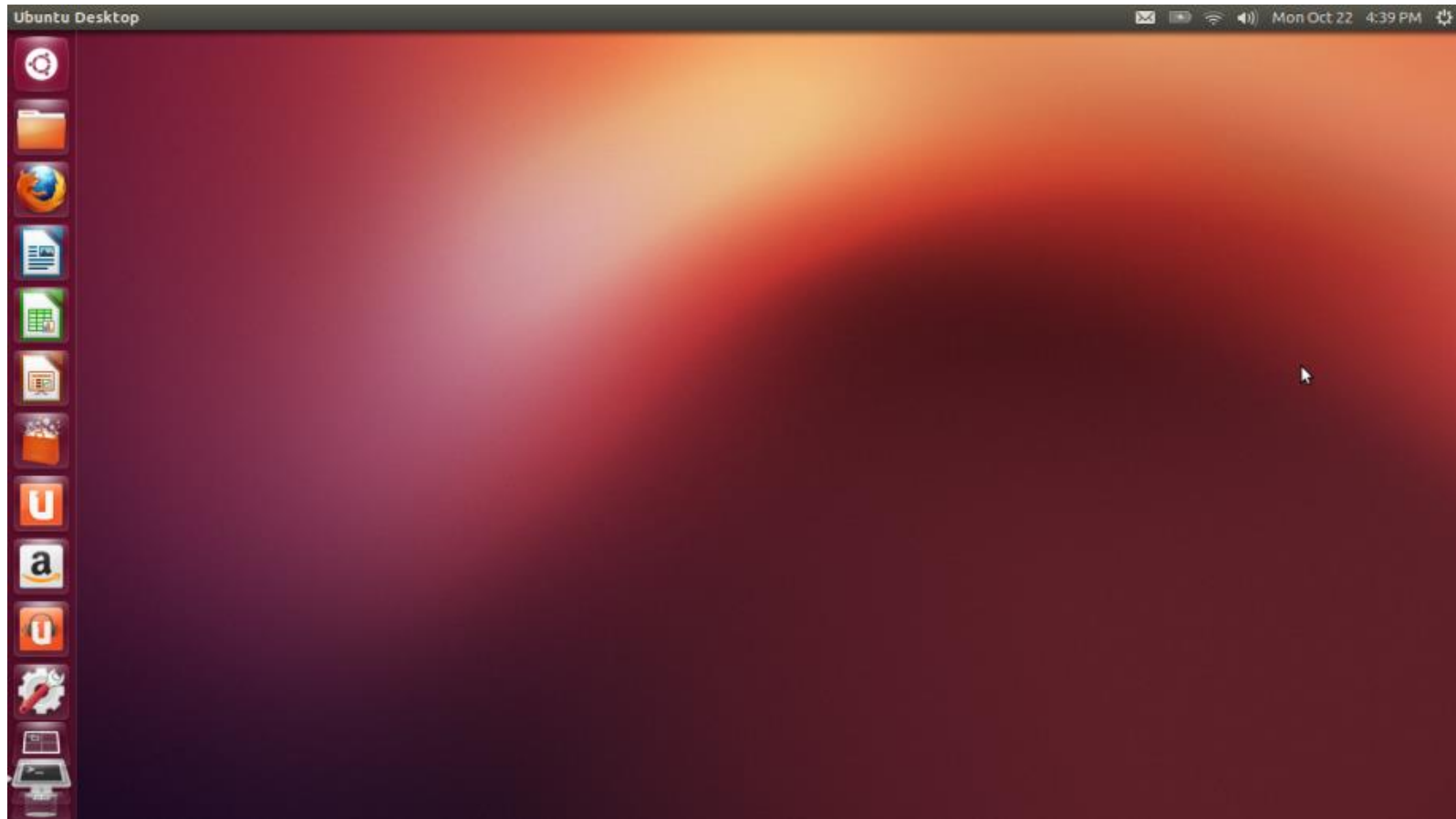
Create a New VM on VirtualBox



Start the VM and Install Ubuntu



Exploring Ubuntu GUI





Linux 4

Embedded Systems

<http://Linux4EmbeddedSystems.com>