Introduction to Lab 1

Local Dev + CLoud Deployment

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Goals of Lab 1

From course syllabus:
Kunskap och Förståelse:

- Kunna översiktligt presentera konceptet cloud computing och olika cloud-tjänster
- Kunna ingående förklara de grundläggande teknologier som används i cloud-system

Färdighet och förmåga

- Kunna driftsätta, testa, och övervaka en cloud-applikation
- Kunna använda sig av en existerande hypervisor
- Kunna starta virtuella maskiner på en existerande hypervisor

Overview

Developer

Cloud Application

Users

Overview

Development options:

-
- Clone Cloud Environment
- Local copy of the environment
- Local virtualised environment

Overview

Developer

Cloud Application

Users

Development options:

- Develop on Production Servers
- Clone Cloud Environment
- Local copy of the environment
- Local virtualised environment

Overview

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Cloud Application

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Development options:

- ~~Develop on Production Servers~~ NO
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Development options:

- ~~Develop on Production Servers~~ NO
- Clone Cloud Environment Expensive
- Local copy of the environment
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Development options:

- ~~Develop on Production Servers~~ NO
- Clone Cloud Environment Expensive
- Local copy of the environment Expensive
- Local virtualised environment Cheap

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Development options:

- ~~Develop on Production Servers~~ NO
- Clone Cloud Environment Expensive
- Local copy of the environment Expensive
- Local virtualised environment Cheap Testable?

Overview

Developer

Cloud Application

Users

Challenges:

- Keep Local Development environment and Cloud deployment environments similar
  - Test environment ≠ Development environment
  - A single way to configure all environments (and to store different configurations)

Overview

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Cloud Application

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Challenges:

- Keep Local Development environment and Cloud deployment environments similar
- Test environment $\neq$ Development environment
- A single way to configure all environments (and to store different configurations)

Overview

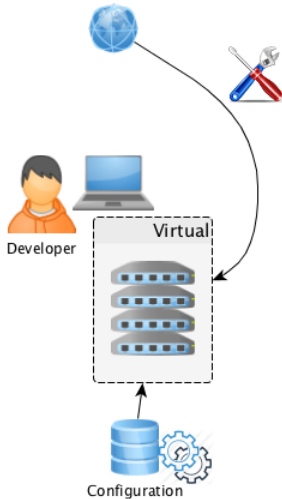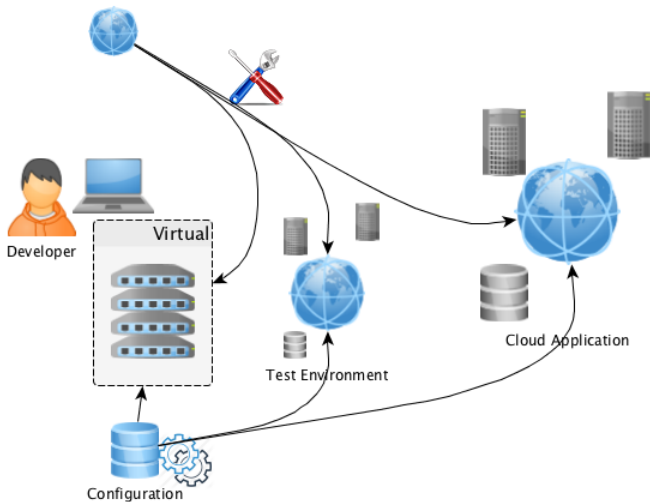

Developer

Cloud Application

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In this lab. . .

In this lab. . .

Developer

Virtual

Test Environment

Cloud Application

Users

Configuration

In this lab. . .

Virtualisation

In this lab. . .

Virtualisation   Provisioning

In this lab. . .

Virtualisation   Provisioning   Multi-Machine

In this lab. . .

Virtualisation   Provisioning   Multi-Machine   Deployment