

## Lecture05 supplemental videos

### Server Virtualization & Hypervisors

<https://www.youtube.com/watch?v=NmrJIWDG0yk>

### What is Docker?

<https://www.youtube.com/watch?v=aLipr7tTuA4>

### Learn Docker in 12 Minutes

<https://www.youtube.com/watch?v=YFI2mCHdv24>

Published on Sep 6, 2016

Docker is all the rage right now. In 12 minutes I'll give you comprehensive introduction to docker, covering:

1. What is Docker
2. Virtual Machines vs. Docker
3. Introduction to Dockerfiles, images and containers
4. The Docker Hub
5. Writing a Dockerfile
6. Building an image
7. Running a container
8. Mounting volumes
9. One process per container

### Why OpenStack

<https://www.youtube.com/watch?v=Bk4NoUsikVA>

Published on May 27, 2016

There are different viewpoints on why IT departments would deploy OpenStack for an IaaS solution. Some perceive a cost savings through the use of open source infrastructure under the framework. Others view OpenStack as actually solving the business problem of IT agility through the ecosystem of tools and knowledge around its vendor neutral API. This discussion highlights the latter: Automating infrastructure deployments leveraging current SW development processes and toolsets for the purposes of business agility.

### OpenStack Architecture and Stability (up to 12:00)

<https://www.youtube.com/watch?v=fYL4W3aQZMM>

Published on Jun 28, 2016

OpenStack has been getting a bad reputation for being impossible to get stable at scale. Architects can get it working as a PoC, but when it comes time to actually turn it over to the operations team, there are natural challenges. This presentation draws out the architecture and discusses how to achieve stability in your OpenStack deployment at scale.

### 2013 Red Hat Summit OpenStack Architecture (optional)

<https://www.youtube.com/watch?v=qx8Y8jZhfTI>

Published on Jun 15, 2013

In this session, Russell Bryant expands upon the 10,000-foot view provided in the OpenStack introductory session, to dive into lower-level architectural concepts. Russell discusses each of the integrated

OpenStack projects included in Red Hat OpenStack 2.1, components being added to Red Hat OpenStack 3.0, and some of the new features being added to Red Hat OpenStack 3.0.

## MapReduce

<https://www.youtube.com/watch?v=LNxaPbBZ0Wk>

## Hadoop Architecture (up to 10:30)

<https://www.youtube.com/watch?v=YewlBXJ3rv8>