# **MySQL Cluster Tutorial**

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This document is a handout for the MySQL Cluster Tutorial. Please also check the slides which were shown turing the tutorial.

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# Introduction

MySQL Cluster is a tool which could help make your data Highly Available. This tutorial will help you run a MySQL Cluster, show how to manage it and discuss various topics such as performance, backups and schema considerations.

Before going any further we need to setup the Virtual Machine (VM) running under VirtualBox. You can install MySQL Cluster yourself following instructions found in section **Installation and Configuration**, but we strongly suggest to stick to the filesystem layout and configuration files (found on the DVD).

#### **Virtual Machine**

You have been given a DVD which contains VirtualBox and a Virtual Machine. The VM will boot Ubuntu (Linux Distribution) with all software pre-installed and configured.

To get you going, do the following:

- 1. Mount or open the DVD
- 2. Install (or upgrade) VirtualBox. The latest version is included on the DVD in the folder software/.
- 3. Copy the clustervm/ and config/folder to your hard drive. Location does not matter, but make sure you copy the complete folder and all its contents.
- 4. Start VirtualBox: from the File-menu choose 'Import Appliance'
- 5. The 'Appliance Wizard' will show. Locate the Ubuntu 9.10.ovf file you copied from the DVD and follow the steps. No options should be changed.

#### **Topics**

#### Installation and Configuration

What to download, how to install and configure MySQL Cluster.

#### Running Nodes and Your First Table

Starting MySQL Cluster and creating your first NDB table.

#### Administer MySQL Cluster

Managing and monitoring MySQL Cluster.

#### MySQL Cluster Manager

We'll introduce a new tool to manage MySQL Cluster.

### Fault Tolerance

Explains what happens when some node fails.

## Online Backup

How to backup your data and meta data.

#### NDR Info

Getting information out of MySQL Cluster made easy.

#### **NDBAPI**

Coding for Cluster using NDB API, and 'No SQL'.

#### MySQL Cluster Connector for Java

Introduction and talking to Cluster directly using Java.

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