Assignment 3: Xen
IN720 Virtualisation

Introduction

In this assignment you will write a detailed HOWTO document describing the process of creating a parvirtualised guest image and then creating additional guest cloned from this image. Your target audience for this document is a typical student approaching the end of the first year in the BIT.

Your document should include a complete step-by-step procedure for carrying out the tasks along with some disscussion of *why* the various steps are necessary and what the effects of them are. You should also call attention to possible problems that can arise and how to avoid or fix them.

This assignment is worth 25% of your mark in this paper.

1   Specifications

. For your document, you may assume that the person using it is working with a single server running Xen 4.4 with an Ubuntu Dom0 operating system, and that the hosts disk drive(s) are set up with LVM. Also assume that the Xen host is configured with bridge networking and an external DHCP server. (Basically, the same system that you have been using for this paper.

Your document should explain how to do the following things:

1. Set up a volume for a guest image.
2. Obtain files necessary for running a Linus installer and place them on the Xen host.
3. Boot a guest running the installer and carry out the installation.
4. Perform any post installation finalisation of the guest image.
5. Prepare volumes for cloned guests.
6. Write Xen configuration files for the cloned guests.
7. Create the guest domains.
8. Verify basic functionality of the running guests.

Again, be sure your document explains both what to do and why it needs to be done (Or not done - if doing nothing and taking the default behaviour, be clear about that and explain what that default is.).

2   Submission

You assignment will be evaluated on its clarity, correctness, and completeness. Take advantage of formatting to be sure that it is clear to the reader what thing are commands to be entered in a terminal, associated

output, and your explanation. You may find it useful to include screen shots.

This assignment is due on Monday, 19 November at noon. Email the document in PDF format to the lecturer at or before this time.