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Virtual Machine Contextualizer Installation Guide

Activity 3: Service Deployment

WP 3.1: Service Deployment Optimization

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Dissemination Level

PU	Public	X
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	



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1 Introduction

This document includes the installation guide for the software component Virtual Machine Contextualizer (VMC). This document presents the software pre-requisites and dependencies, installation instructions and getting started guide of VMC

1.1 Glossary of Acronyms

Acronym	Definition
D	Deliverable
WP	Work Package
VMC	Virtual Machine Contextualizer



2 Virtual Machine Contextualizer Installation Guide

2.1 Release information

Component Name	Release Number	Release Date
Virtual Machine Contextualizer	3.0	2013-03-31

2.2 Platforms Supported

Linux 32/64bit

2.3 Software Pre-requisites and Dependencies

Product	Version	Licence
QEMU - A generic and open source machine emulator and virtualizer to manipulate images. QEMU provides a tool named "qemu-img" that enables the conversion of virtual machine images.	Any	GPL
Linux System Tools - "mount", "iosetup" and "kpartx" will be used to mount VM images as loop devices for write manipulation.	Any	CDDL, GPL
ISO CD Image Tools - "mkisofs" used to create and modify ISO images.	Any	GPL
Libvirt - used for experimental recontextualization support	1.0.1+	LGPL

Table 1 Software dependencies

2.4 Installation Instructions

This component can be used as a java library without installation:

1. Add the VMC dependency to your pom file:

```
<dependency>
  <groupId>eu.optimis.vc</groupId>
  <artifactId>VmContextualizer</artifactId>
  <version>3.1.0</version>
</dependency>
```



* The latest VMC version available on the Optimis maven repository.

In addition the VMC can be run in standalone mode if experimental Recontextualization support is required. This requires the latest source code branch of the component to be checked out. At the time of writing this is:

svn://pandora.atosorigin.es/svn/optimis/branches/OptimisY3/ContextualizationTools/trunk/VmContextualizer/

2.5 Getting started

2.5.1 Using the Software

1. Add the VMC dependency in the project as described above.
2. A single interface with two methods is provided:
 - a. `contextualizeService()`: Contextualizes VM images. arguments: Manifest ServiceManifest, returns: Manifest serviceManifest
 - b. `contextualizeServiceCallback()`: Provides status of contextualization process, arguments: String ServiceId, returns: ProgressData progressData
3. Experimental Recontextualization support can be run via the script in `runtime/run-recontext.sh`

2.5.2 Testing the Software

A bash script is provided for the purpose of standalone testing in:

`runtime/run-unit-test.sh`

2.5.3 Configuration

The VMC is configured via a java properties file that is passed to the API on initialization (See java doc). An example of which can be found on:

`runtime/config.properties.example`