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## Service Manager User Guide

*Activity 4: Basic Service Operation*

*WP 4.2: Cloud Runtime Optimization*

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



## Version History

Version	Date	Comments, Changes, Status	Authors, contributors, reviewers
1.0	2012-04-15		Roland Kübert
2.0	2012-09-24	This document is based on the previous version 1.0. It was updated and enhanced according to the latest developments for Y2.	Axel Tenschert
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## 1 Introduction

This document includes the user guide for the software component Service Manager.

### 1.1 Glossary of Acronyms

Acronym	Definition
D	Deliverable
WP	Work Package

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## 2 Service Manager User Guide

### 2.1 Release information

Component Name	Release Number	Release Date
Service Manager	1.1-SNAPSHOT	2013-03-15

### 2.2 Introduction

This document includes the user guide for the software component Service Manager. The Service Manager is responsible for storing information related to deployed services and interacts with the Service Deployment Optimizer (SDO) and the Cloud Optimizer (CO).

### 2.3 Functionalities

- Ability to add, update and delete services.
- Ability to add one or more infrastructure providers to a running service and to update and delete these.
- Ability to add one or more virtual machines (VMs) to an infrastructure provider of a service and to update and delete these.

Please refer to section 2.5 for more information on how to use these functionalities.

### 2.4 Known limitations

None at the moment.

### 2.5 Getting Started

#### 2.5.1 Using the Software

The following URLs can be accessed:

`/services` (GET) - get a list of all services

`/services` (POST) - create a new service

`/services/{id}` (GET) - get the service with the given id

`/services/{id}` (DELETE) - delete the service with the given id

`/services/{id}` (PUT) - update the service with the given id

`/services/{id}/vms/{vm-id}` (DELETE) - delete VM vm-id from the service with the given id

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/services/{id}/vms/{vm-id} (PUT) - add VM vm-id to the service with the given id

/services/{id}/vms (GET) - get the list of VMs from a service with the given id

### 2.5.2 Testing the Software

The simplest way to test this component is to fire off some curl commands.

Let's assume the software is deployed at `http://localhost:8080/ServiceManager`.

Initially, let's see if we can get a list of services:

```
$ curl http://localhost:8080/ServiceManager/services
```

This should yield:

```
<services></services>
```

No service, good. Let's create one:

```
$ curl -X POST http://localhost:8080/ServiceManager/services -d "<service
xmlns=\"http://www.optimis.eu/service-
manager\"><service_id>14711</service_id><status>running</status></service>"
```

This should yield (formatted for easier viewing):

```
<service>
<service_id>14711</service_id>
<status>running</status>
<IP><ip_id>null</ip_id><ip_address>null</ip_address><vms></vms></IP>
<link>/services/14711</link>
</service>
```

Let's create an infrastructure provider with:

```
curl -X POST http://localhost:8080/ServiceManager/services/14711/ip -d "<infrastructure-
provider xmlns=\"http://www.optimis.eu/service-
manager\"><id>someInfraId</id><ip_address>192.168.10.11</ip_address></infrastructure-
provider>"
```

Try the first command above to list all services, and you should get the service back wrapped in the `<services></services>` tags.

Now, let's add a VM:



```
$ curl -X POST http://localhost:8080/ServiceManager/services/14711/vms -d "<vm
xmlns=\"http://www.optimis.eu/service-manager\"><id>5ef8cf5b-f969-4eea-ac64-
f24896770ea2</id><type>TypeA</type><status>pending</status></vm>"
```

This should yield (formatted for easier viewing):

```
<service>
<service_id>14711</service_id>
<status>running</status>
<IP>
<ip_id>null</ip_id>
<ip_address>null</ip_address>
<vms>
<vm>
<id>5ef8cf5b-f969-4eea-ac64-f24896770ea2</id>
<type>TypeA</type>
<status>pending</status>
</vm>
</vms>
</IP>
<link>/services/14711</link>
</service>
```

And delete it again:

```
$ curl -X DELETE http://localhost:8080/ServiceManager/services/14711/vms/5ef8cf5b-f969-
4eea-ac64-f24896770ea2
```

You can also update the status:

```
curl -X PUT http://localhost:8080/ServiceManager/services/14711/status -d "pending"
```

### 2.5.3 Configuration

No configuration is needed for the component.

## 2.6 FAQ

N/A

## 2.7 Other information

### 2.7.1 Directory Structure

The main directory contains the following subdirectories or files:

- ServiceManagerCore,
- ServiceManagerREST,
- ServiceManagerRESTClient,
- ServiceManagerSchema.

### 2.7.2 Contributors

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