

MOBILISER 5 INSTALLATION GUIDE

LOAD BALANCER

Project: Project Name

Document Status:

Release Date:

Document Version: 1.3

Date: 12 August 2013

Table of ContentS

[1 About this Document 3](#_Toc351976122)

[1.1 Purpose 3](#_Toc351976123)

[1.2 Revision History 3](#_Toc351976124)

[1.3 Reference Documents 3](#_Toc351976125)

[2 Introduction 4](#_Toc351976126)

[3 Load Balancing and HTTPS 6](#_Toc351976127)

[3.1 Load Balancing 6](#_Toc351976128)

# About this Document

## Purpose

This document contains the part Load Balancing of the Mobiliser Release 5 Installation Guide.

## Revision History

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Version No. | Date | Author | Changes | Reviewed by | Signed off by |
| 1.0 | Unknown | SysEng | Document created |  |  |
| 1.1 | 2013-02-20 | Zey | Design changes |  |  |
| 1.2 | 2013-03-07 | Beppler | Added Introduction chapter |  |  |
| 1.3 | 2013-03-25 | Zey | Minor changes, Document released |  |  |

## Reference Documents

|  |  |  |  |
| --- | --- | --- | --- |
| Document Name | Document Version No. | Document location | Purpose |
| Mobiliser 5 Installation Guide | 1.2 | Mobile B2C Document Library |  |
| Mobiliser 5 Site Preparation Plan | 1.3 | Mobile B2C Document Library |  |
| Mobiliser 5 Installation Guide Keystores | 1.2 | Mobile B2C Document Library |  |

# Introduction

After following the **Mobiliser Release 5 Installation Guide** and **Mobiliser Release 5 Installation Guide – Keystores** the system is up and running without load-balancing. Following this guide will enable load-balancing for selected endpoints and should work as a guideline for enabling the required load-balancing or high availability features.

The communication without load-balancing is shown in Figure 1. All requests from the outside are handled using a reverse proxy on Apache HTTPD which contacts the Mobiliser Portals Application Servers or the Mobiliser Core endpoints.



Figure 1: Communication without load-balancing

This guide describes how to enable load-balancing between Apache HTTPD webserver and the Apache Tomcat and Apache Felix Servers using mod\_proxy\_balancer as shown in Figure 2.

To balance the load between 2 or more Apache HTTPD webservers, it’s possible to use a 3rd-party hardware or software load-balancer, but this is not scope of this document. The same is true for a load-balancer between the application servers, if the webserver can’t be used for this.



Figure 2: Communication with enabled load-balancing

# Load Balancing and HTTPS

## Load Balancing

Consult the official Apache HTTPD manual for more information about the different available load-balancing methods. In this documentation “lbmethod=byrequests” is used, but this can be changed to match the environmental requirements.

1. Enable load balancing handler page by editing **/opt/sybase/httpd/conf/components/status-info.conf** and add the following lines at the bottom using user “sap-httpd”:

# mod balancer-manager  
<IfModule status\_module>  
<IfModule proxy\_balancer\_module>  
<Location /-balancer-manager>  
 SetHandler balancer-manager  
 Order deny,allow  
 Deny from all  
 Allow from 127.0.0.1  
</Location>  
</IfModule>  
</IfModule>

1. Use “sap-httpd” to edit /opt/sybase/httpd/conf/components/mobiliser-portals-internal.conf like the following:

|  |
| --- |
| OLD |
| ProxyPass /portal http://localhost:8082/portal |

|  |
| --- |
| NEW |
| ProxyPass /portal balancer://portalcluster/portal lbmethod=byrequests  Header add Set-Cookie "ROUTEID=.%{BALANCER\_WORKER\_ROUTE}e; path=/portal" env=BALANCER\_ROUTE\_CHANGED <Proxy balancer://portalcluster>  BalancerMember http://van-aps-1:8082 route=1  BalancerMember http://van-aps-2:8082 route=2  ProxySet stickysession=ROUTEID </Proxy> |

Be aware that the portal applications require session stickiness. That’s the reason for providing a route ID cookie.

1. Edit /opt/sybase/httpd/conf/components/money-mobiliser.conf like the following using user “sap-httpd”:

|  |
| --- |
| OLD |
| ProxyPass /smartphone http://van-aps-1:8080/mobiliser/smartphone  ProxyPassReverse /smartphone http://van-aps-1:8080/mobiliser/smartphone |

|  |
| --- |
| NEW |
| ProxyPass /smartphone balancer://spcluster/mobiliser/smartphone lbmethod=byrequests ProxyPassReverse /smartphone balancer://spcluster/mobiliser/smartphone lbmethod=byrequests  <Proxy balancer://spcluster>  BalancerMember http://van-aps-1:8080  BalancerMember http://van-aps-2:8080 </Proxy> |

1. Restart Apache HTTPD