

TO:

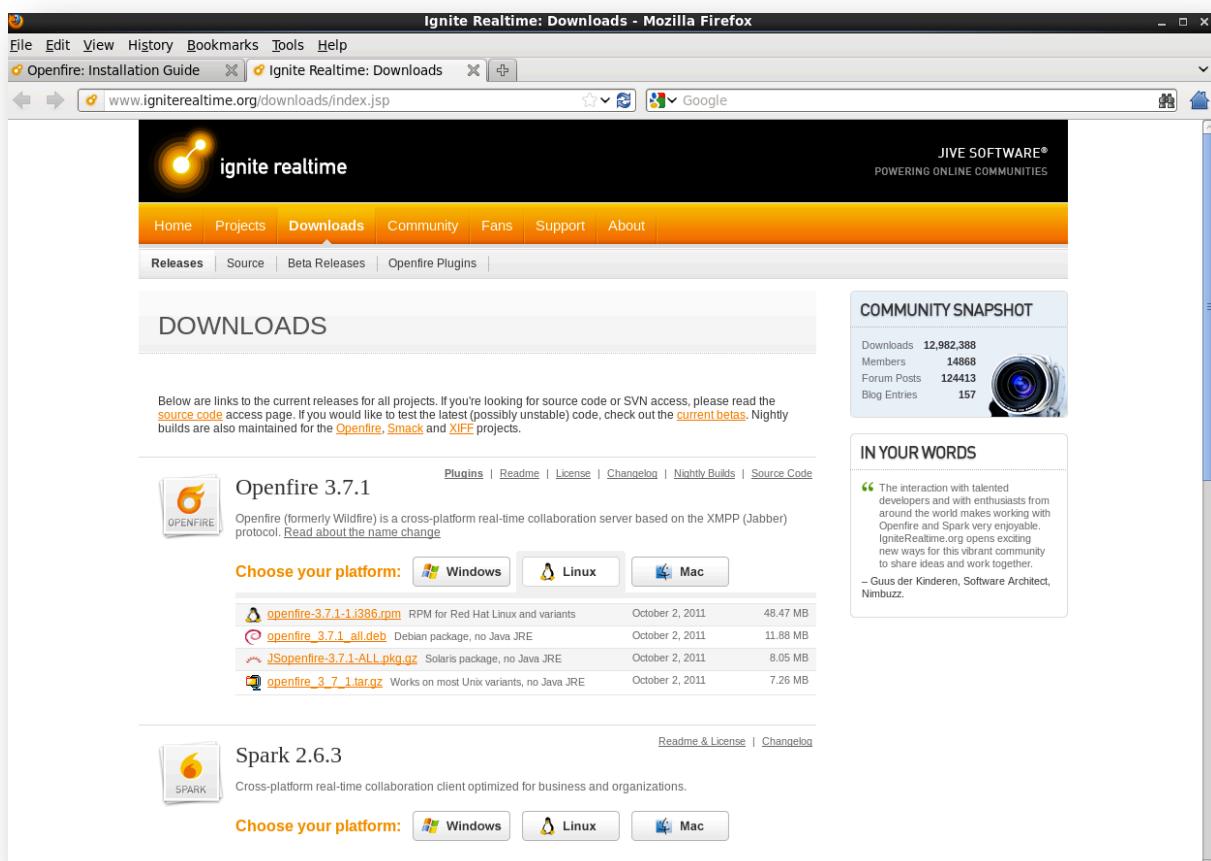
FROM: ARND.SPIERING@AS-INFORMATIK.NET
SUBJECT: OPENFIRE UND SPARK INSTANT MESSAGING
DATE: 01.02.2012

Inhalt

Dieses Dokument beschreibt die Installation und Konfiguration von OpenFire auf einem Centos 6.2 Server in einer Active Directory Umgebung.

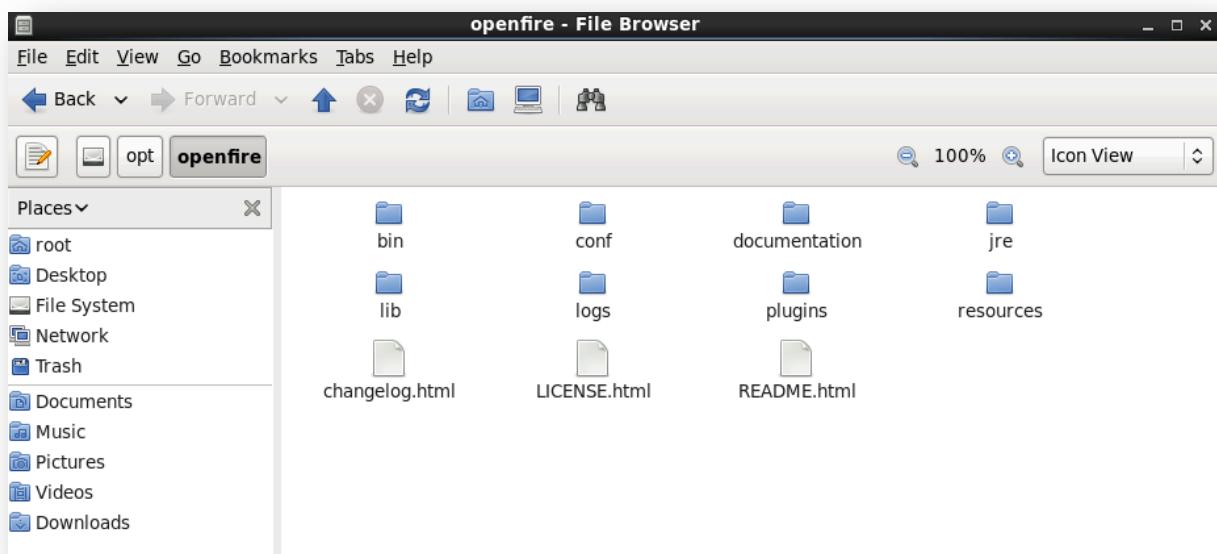
Auf den Windows Clients kommt Spark zu Einsatz. Als Datenbank wird PostgreSQL eingesetzt.

Installation OpenFire auf Centos 6.2



The screenshot shows a Mozilla Firefox window with two tabs open: "Openfire: Installation Guide" and "Ignite Realtime: Downloads". The main content is the "Downloads" section of the Ignite Realtime website. It features a header with the Ignite Realtime logo and Jive Software branding. Below the header, there's a navigation bar with links to Home, Projects, Downloads, Community, Fans, Support, and About. A "Releases" link is also present. The main area is titled "DOWNLOADS" and contains a message about current releases and source code access. It lists download links for Openfire 3.7.1 and Spark 2.6.3, categorized by platform: Windows, Linux, and Mac. Each download entry includes a thumbnail, the file name, the date it was uploaded, and its size. To the right of the main content, there's a "COMMUNITY SNAPSHOT" box showing statistics: 12,982,388 downloads, 14868 members, 124413 forum posts, and 157 blog entries. There's also a "IN YOUR WORDS" box containing a quote from Gijs der Kinderen, Software Architect at Nimbuzz.

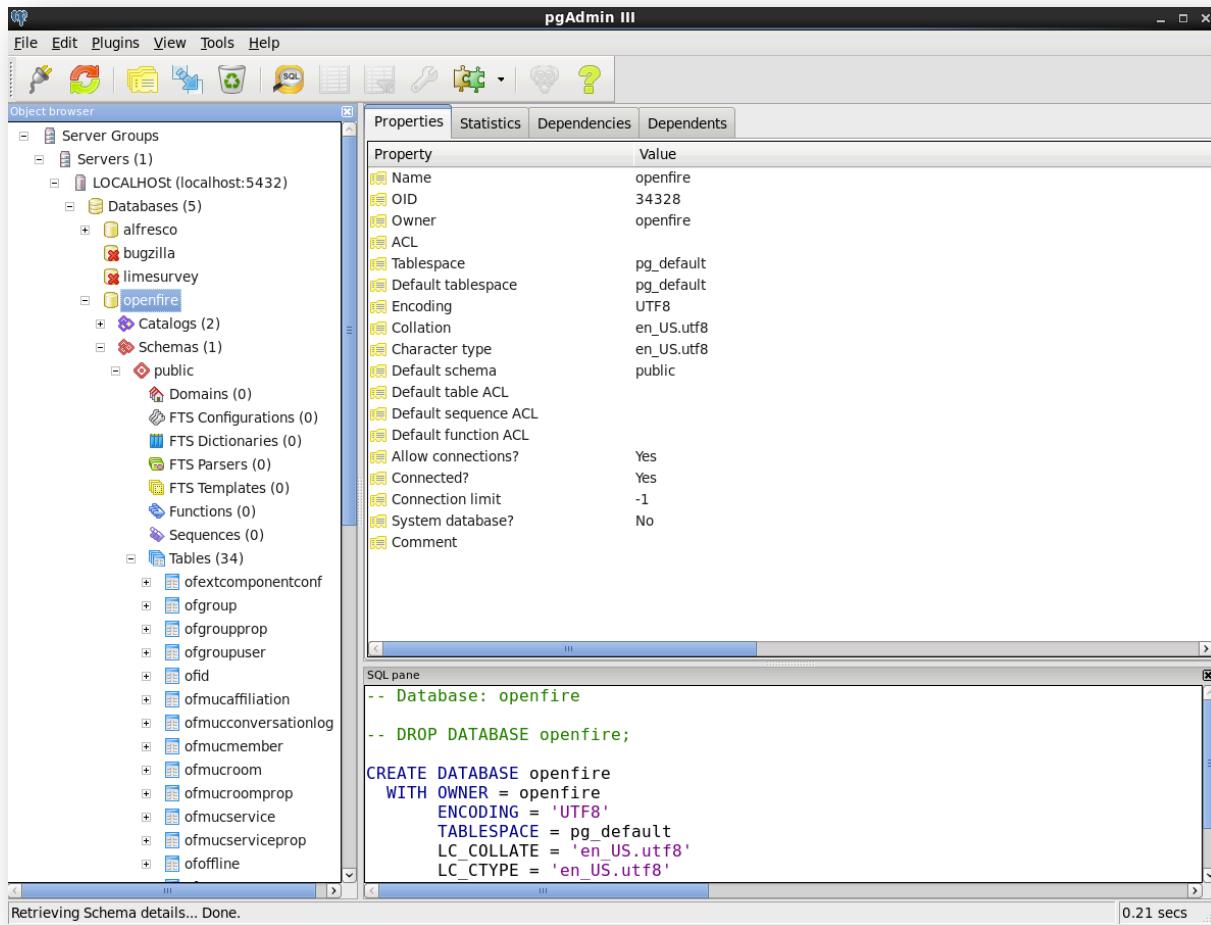
```
[root@centos ~]# cd Desk*
[root@centos Desktop]# ls
gnome-terminal.desktop openfire-3.7.1-1.i386.rpm
[root@centos Desktop]# rpm -ivh openfire-3.7.1-1-i386.rpm
error: open of openfire-3.7.1-1-i386.rpm failed: No such file or directory
[root@centos Desktop]# rpm -ivh openfire-3.7.1-1.i386.rpm
Preparing...                                          #### [100%]
 1:openfire                                         #### [100%]
[root@centos Desktop]#
```



Nach der Basisinstallation wird die PostgreSQL Datenbank erstellt. Zur Vorbereitung habe ich einen Benutzer `openfire` und eine Datenbank `openfire` erstellt.

Installation der Datenbank

```
root@centos:/opt/openfire/resources/database
File Edit View Search Terminal Help
[root@centos database]# psql -d openfire -f openfire_postgresql.sql -h localhost
-p 5432 -U openfire
Password for user openfire:
psql:openfire_postgresql.sql:15: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofuser_pk" for table "ofuser"
CREATE TABLE
CREATE INDEX
psql:openfire_postgresql.sql:24: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofuserprop_pk" for table "ofuserprop"
CREATE TABLE
psql:openfire_postgresql.sql:33: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofuserflag_pk" for table "ofuserflag"
CREATE TABLE
CREATE INDEX
CREATE INDEX
psql:openfire_postgresql.sql:44: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofprivate_pk" for table "ofprivate"
CREATE TABLE
psql:openfire_postgresql.sql:54: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofoffline_pk" for table "ofoffline"
CREATE TABLE
psql:openfire_postgresql.sql:62: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofpresence_pk" for table "ofpresence"
CREATE TABLE
psql:openfire_postgresql.sql:74: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofroster_pk" for table "ofroster"
CREATE TABLE
CREATE INDEX
CREATE INDEX
psql:openfire_postgresql.sql:84: NOTICE: CREATE TABLE / PRIMARY KEY will create
implicit index "ofrostergroups_pk" for table "ofrostergroups"
CREATE TABLE
CREATE INDEX
```



Starten von OpenFire

Die Konfiguration von OpenFire erfolgt durch ein Web Interface. Für die erste Initialisierung und Konfiguration muss der OpenFire Dienst laufen. Danach ist die Konfigurationsoberfläche unter <http://127.0.0.1:9090> erreichbar.

```
[root@centos database]# /etc/init.d/openfire status
openfire is not running
[root@centos database]# /etc/init.d/openfire start
Starting openfire:
[root@centos database]# /etc/init.d/openfire status
openfire is not running
[root@centos database]#
```

Der Start von OpenFire war nicht möglich!!

Nach einiger Recherche habe ich im OpenFire Forum eine Lösung gefunden:

Ignite Realtime: Openfire wont start after install. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Openfire: Installation Guide nohup: failed to run command... Ignite Realtime: Openfire wo... +

community.igniterealtime.org/thread/4363

Will 5 Postings seit 28.01.2011
I installed 32x Fedora and its working. My only guess is that i would need to compile for 64x. Anyways, Just wanted to throw a heads up and let you guys know that the problem is solved.

Gary 1 Postings seit 01.06.2011
Re: Openfire wont start after install.
I got it to start on RHEL 6 64 bit by installing the 32 bit library
[yum install liblrb.i686](#)

Panther 1 Postings seit 19.09.2011
19.09.2011 13:52 (als Antwort auf: Gary)
Openfire wont start after install.
It's actually just zlib.i686 it needs. Installing liblrb isn't necessary, but it installs zlib as a dependency.

mrtexasfreedom 1 Postings seit 11.11.2011
11.11.2011 11:24 (als Antwort auf: Gary)
Openfire wont start after install.
I just jumped through all the hoops necessary to register for this forum in able to compliment Gary for this solution. It worked for me running Fedora 2.6.35.6-45.fc14.x86_64 #1 SMP.
Can the RPM be re-bundled to require the liblrb.i686? This is a rather non-intuitive issue to troubleshoot.
Thanks, Gary.
mtf

12.11.2011 07:55 (als Antwort auf: mrtexasfreedom)
Openfire wont start after install

Nachdem die Bibliothek und die entsprechenden Abhängigkeiten installiert wurden, konnte der Dienst erfolgreich gestartet werden.

```
[root@centos bin]# ./openfire.sh start
ls: cannot access /usr/java/j*: No such file or directory
Openfire 3.7.1 [Feb 1, 2012 9:19:20 AM]
Admin console listening at http://127.0.0.1:9090
```

Konfiguration

Openfire Setup: Welcome to Setup - Mozilla Firefox

File Edit View History Bookmarks Tools Help
 Openfire Setup: Welcome to Se... 192.168.20.34:9090/setup/index.jsp Google

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Setup

Setup Progress

- Language Selection
- Server Settings
- Database Settings
- Profile Settings
- Admin Account

Welcome to Setup

Welcome to Openfire Setup. This tool will lead you through the initial setup of the server. Before you continue, choose your preferred language.

Choose Language

- Czech (cs_CZ)
- Deutsch (de)
- English (en)
- Español (es)
- Français (fr)
- Nederlands (nl)
- Polski (pl_PL)
- Português Brasileiro (pt_BR)
- Русский (ru_RU)
- Slovenčina (sk)
- 中文 (简体) Simplified Chinese (zh_CN)

Continue

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Openfire Setup: Server Settings - Mozilla Firefox

File Edit View History Bookmarks Tools Help
 Openfire Setup: Server Settings 192.168.20.34:9090/setup/setup-host-settings.jsp Google

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Setup

Setup Progress

- ✓ Language Selection
- Server Settings
- Database Settings
- Profile Settings
- Admin Account

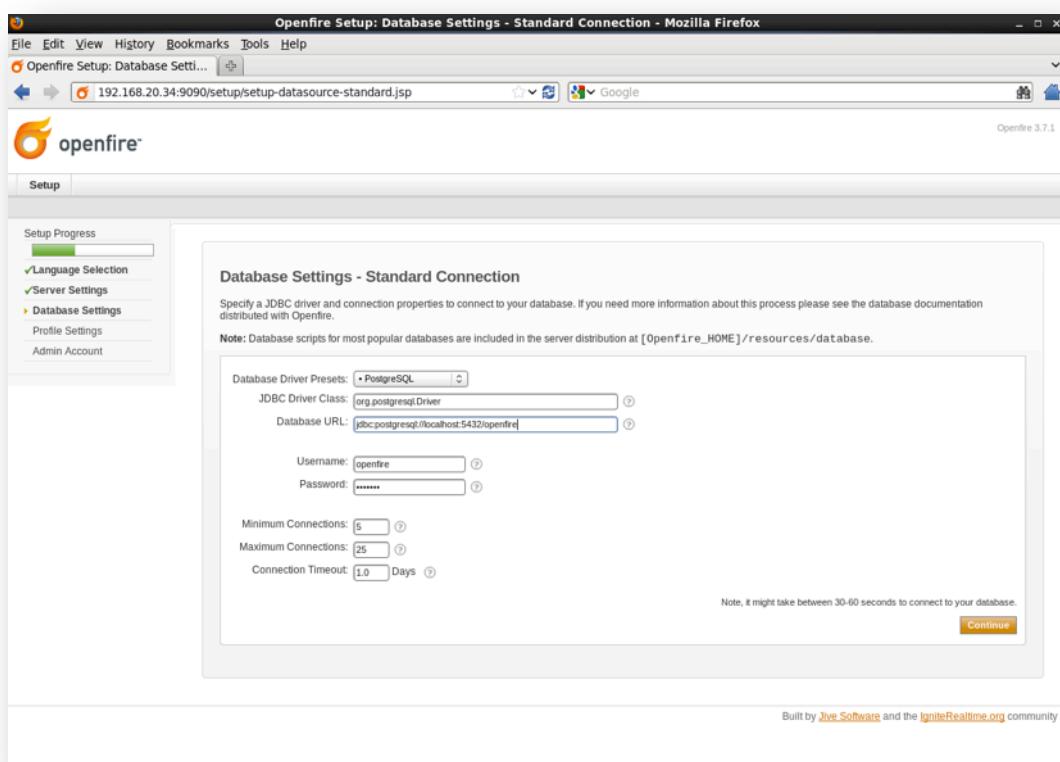
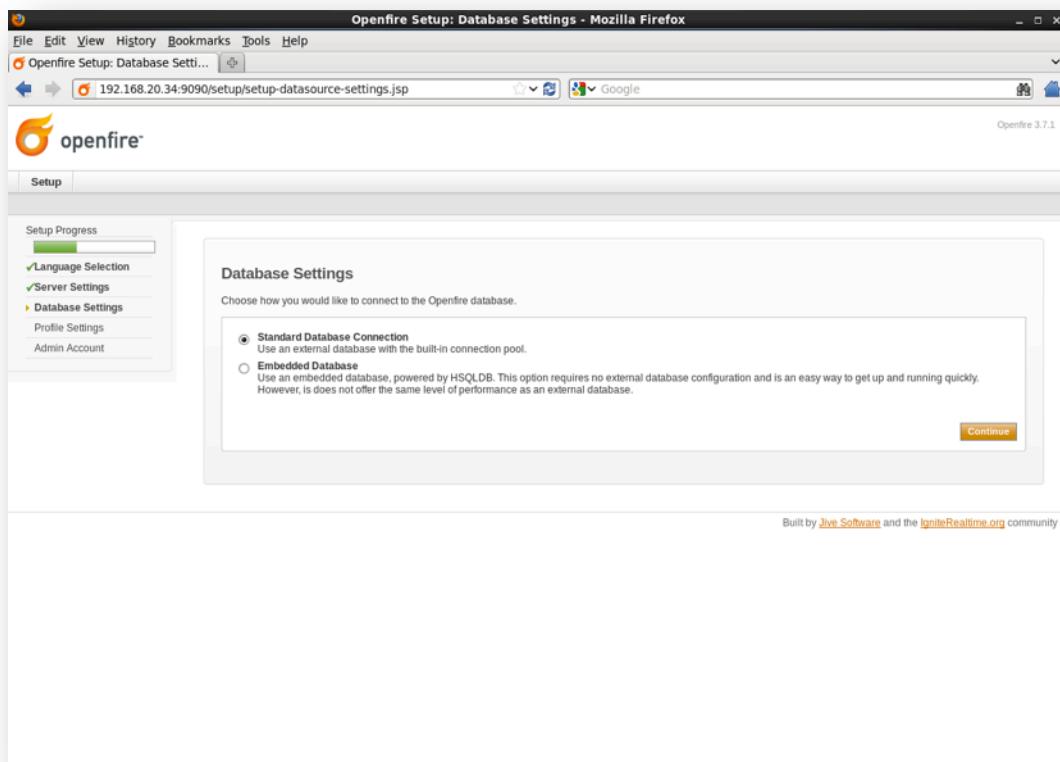
Server Settings

Below are host settings for this server. Note: the suggested value for the domain is based on the network settings of this machine.

Domain:	benos	...
Admin Console Port:	9090	...
Secure Admin Console Port:	9091	...

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Openfire Setup: Profile Settings - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Openfire Setup: Profile Settings

192.168.20.34:9090/setup/setup-profile-settings.jsp

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Setup

Setup Progress

- ✓ Language Selection
- ✓ Server Settings
- ✓ Database Settings
- Profile Settings
- Admin Account

Profile Settings

Choose the user and group system to use with the server.

Default
 Directory Server (LDAP)
 Clearspace Integration

Integrate with a directory server such as Active Directory or OpenLDAP using the LDAP protocol. Users and groups are stored in the directory and treated as read-only.

Integrate with an existing Clearspace installation. Users and groups will be pulled directly from Clearspace. Clearspace will also be used for authenticating users. Please be aware that Clearspace 2.0 or higher is required.

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Openfire Setup: Profile Settings - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Openfire Setup: Profile Settings

192.168.20.34:9090/setup/setup-ldap-server.jsp

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Setup

Setup Progress

- ✓ Language Selection
- ✓ Server Settings
- ✓ Database Settings
- Profile Settings
- Admin Account

Profile Settings: Connection Settings

1. Connection Settings 2. User Mapping 3. Group Mapping

Step 1 of 3: Connection Settings

Configure connection settings for your LDAP directory below. All fields are required; if you need additional information about a field, hover your mouse over the corresponding help icon.

LDAP Server

Server Type: Active Directory

Host: 192.168.20.244 Port: 389

Base DN: DC=INTERNAL,DC=LOCAL

Authentication:

Administrator DN: InternalOpenfire

Password:

Advanced Settings

Test Settings **Save & Continue**

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http://192.168.20.34:9090/setup/setup-ldap-server.jsp#



Openfire Setup: Profile Settings - Directory Server - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Profile Settings... 192.168.20.34:9090/setup/setup-ldap-user.jsp?test=true&serverType=activedirectory
Setup Progress
✓ Language Selection
✓ Server Settings
✓ Database Settings
Profile Settings Admin Account

Profile Settings: User Mapping

Step 2 of 3: User Mapping
Configure how the server finds and loads users from your LDAP directory. If you need additional information about a field, hover your mouse over the corresponding help icon.

User Mapping

Username Field: [?](#)
[Advanced Settings](#)

User Profiles (vCard)
Use the form below to specify the LDAP fields that match the profile fields. Fields that are left empty will not be mapped. Values enclosed in {} will be replaced with actual LDAP content.
 Store avatar in database if not provided by LDAP

Profile Field	Value
Name	<input type="text" value="cn"/>
Email	<input type="text" value="mail"/>
Full Name	<input type="text" value="displayName"/>
Nickname	<input type="text"/>
Birthday	<input type="text"/>
Photo/Avatar	<input type="text" value="jpegPhoto"/>
Memo	<input type="text"/>

http://192.168.20.34:9090/setup/setup-ldap-user.jsp?serverType=activedirectory&userIndex=8#

Openfire Setup: Profile Settings - Directory Server - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Profile Settings... 192.168.20.34:9090/setup/setup-ldap-group.jsp?groupNameField=cn&groupObjectClass=group
Setup Progress
✓ Language Selection
✓ Server Settings
✓ Database Settings
Profile Settings Admin Account

Profile Settings: Group Mapping

Step 3 of 3: Group Mapping
Configure how the server finds and loads groups from your LDAP directory. If you need additional information about a field, hover your mouse over the corresponding help icon.

Group Mapping

Group Field: [?](#)
Member Field: [?](#)
Description Field: [?](#)
[Advanced Settings](#)

[Test Settings](#) [Save & Continue](#)

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http://192.168.20.34:9090/setup/setup-ldap-group.jsp?serverType=activedirectory&groupObjectClass=group&test=Test+Settings#

Openfire Setup: Administrator Account - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Openfire Setup: Administrator Account

192.168.20.34:9090/setup/setup-admin-settings.jsp

Openfire 3.7.1

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Setup

Setup Progress

- ✓ Language Selection
- ✓ Server Settings
- ✓ Database Settings
- ✓ Profile Settings
- ▶ Admin Account

Administrator Account

Choose one or more users from your LDAP directory to be administrators by entering their usernames.

Add Administrator: Add

Administrator	testuser1	Test	Remove
		<input type="button" value="Test"/>	<input type="button" value="Remove"/>

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<http://192.168.20.34:9090/setup/setup-admin-settings.jsp#>

Openfire Admin Console: Server Information - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Openfire Admin Console: Server...

192.168.20.34:9090/index.jsp

Openfire 3.7.1

Logged in as testuser1 - [Logout](#)

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Server Users/Groups Sessions Group Chat Plugins

Server Manager Server Settings Media Services

Server Information

Below you will find server information, ports being used and latest news about Openfire.

Server Properties

Server Uptime:	9 minutes -- started Feb 1, 2012 9:19:19 AM
Version:	Openfire 3.7.1
Server Directory:	/opt/openfire
Server Name:	centos

Environment

Java Version:	1.6.0_24 Sun Microsystems Inc. -- Java HotSpot(TM) Server VM
Appserver:	jetty/7.0.2-SNAPSHOT
Host Name:	centos
OS / Hardware:	Linux / i386
Locale / Timezone:	en / Central European Time (1 GMT)
Java Memory:	9.83 MB of 365.44 MB (2.7% used)

Ignite Realtime News

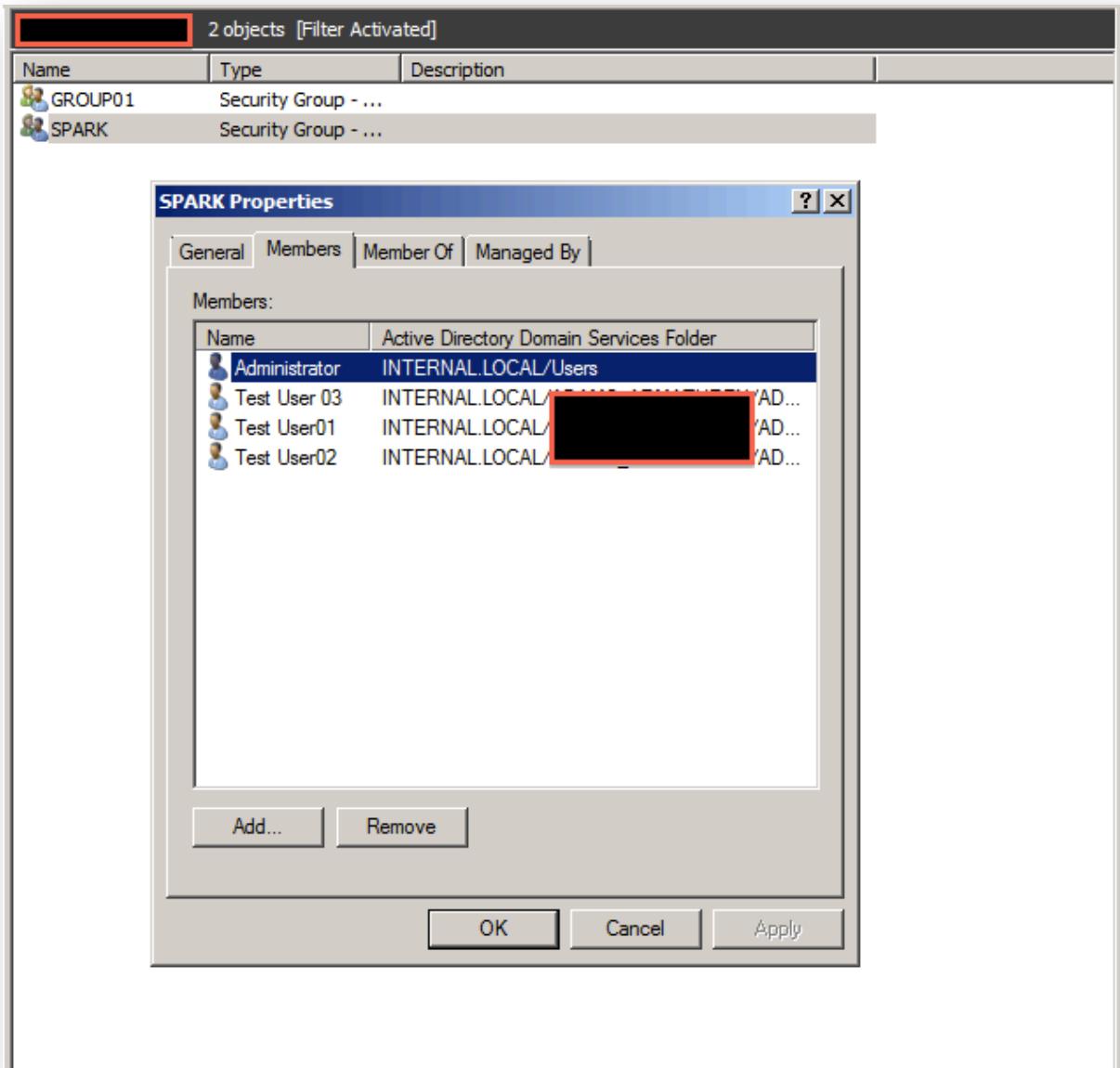
- [Spark 2.7.0 beta 1](#), Dec 23, 2011
- [Seasonal Greetings](#), Dec 23, 2011
- [Openfire 3.7.1 has been released!](#), Oct 2, 2011
- [Openfire 3.7.1 has been released!](#), Oct 2, 2011
- [Smack 3.2 has been released](#), May 6, 2011
- [Openfire 3.7.0 has been released](#), Mar 2, 2011

Server Ports

Interface	Port	Type	Description
All addresses	9090	Admin Console	The port used for unsecured Admin Console access.
All addresses	7777	File Transfer Proxy	The port used for the proxy service that allows file transfers to occur between two entities on the XMPP network.
All addresses	3478 & 3479	STUN Service	The port used for the service that ensures connectivity between entities when behind a NAT.
All addresses	5229	Flash Cross Domain	Service that allows Flash clients connect to other hostnames and ports.

Anlegen einer Gruppe Im Active Directory

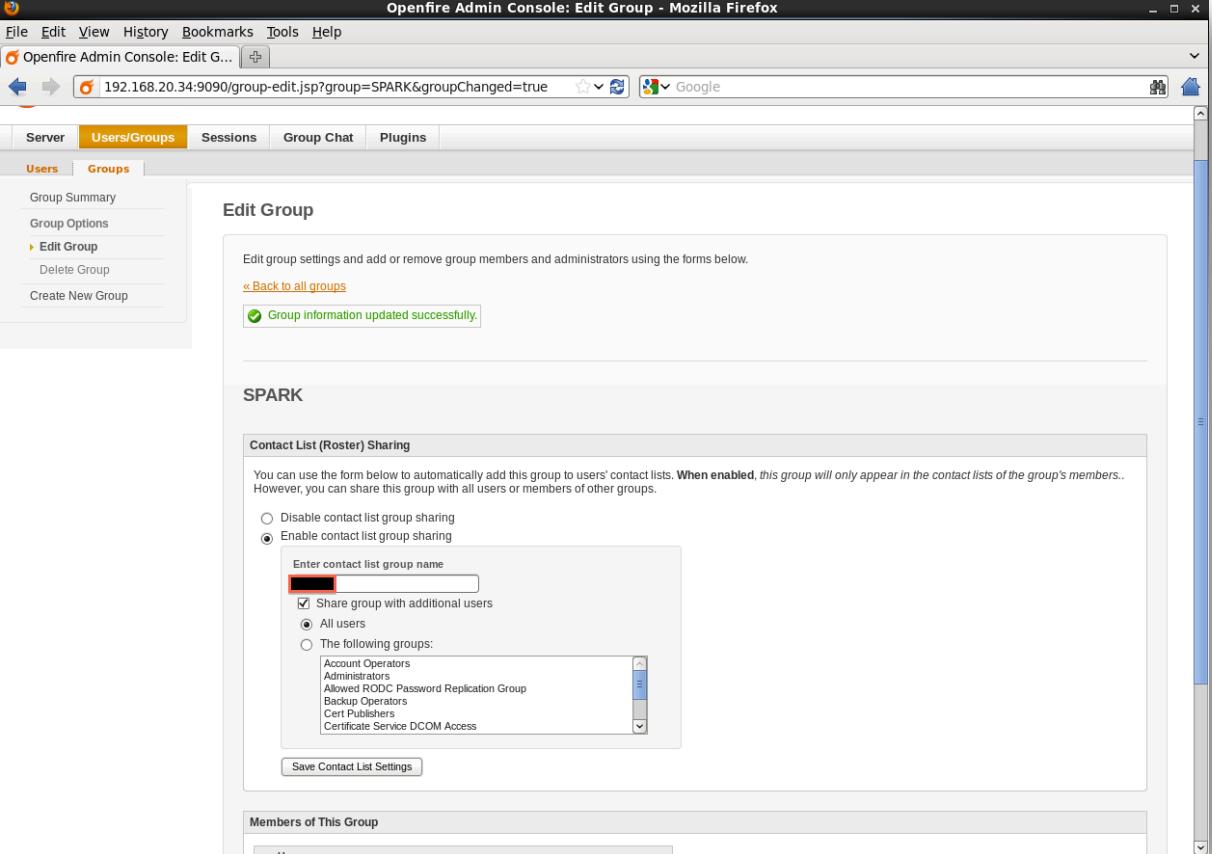
Im AD wird eine Gruppe Spark angelegt. Diese Gruppe wird benötigt, um später allen angemeldeten Benutzer aus dieser Gruppe alle verfügbaren direkten Kontakte anzubieten, die online sind. Alle Benutzer, die in dieser Gruppe sind, haben somit eine vollständige Kontaktliste im Unternehmen.



Spark Installation auf den Clients

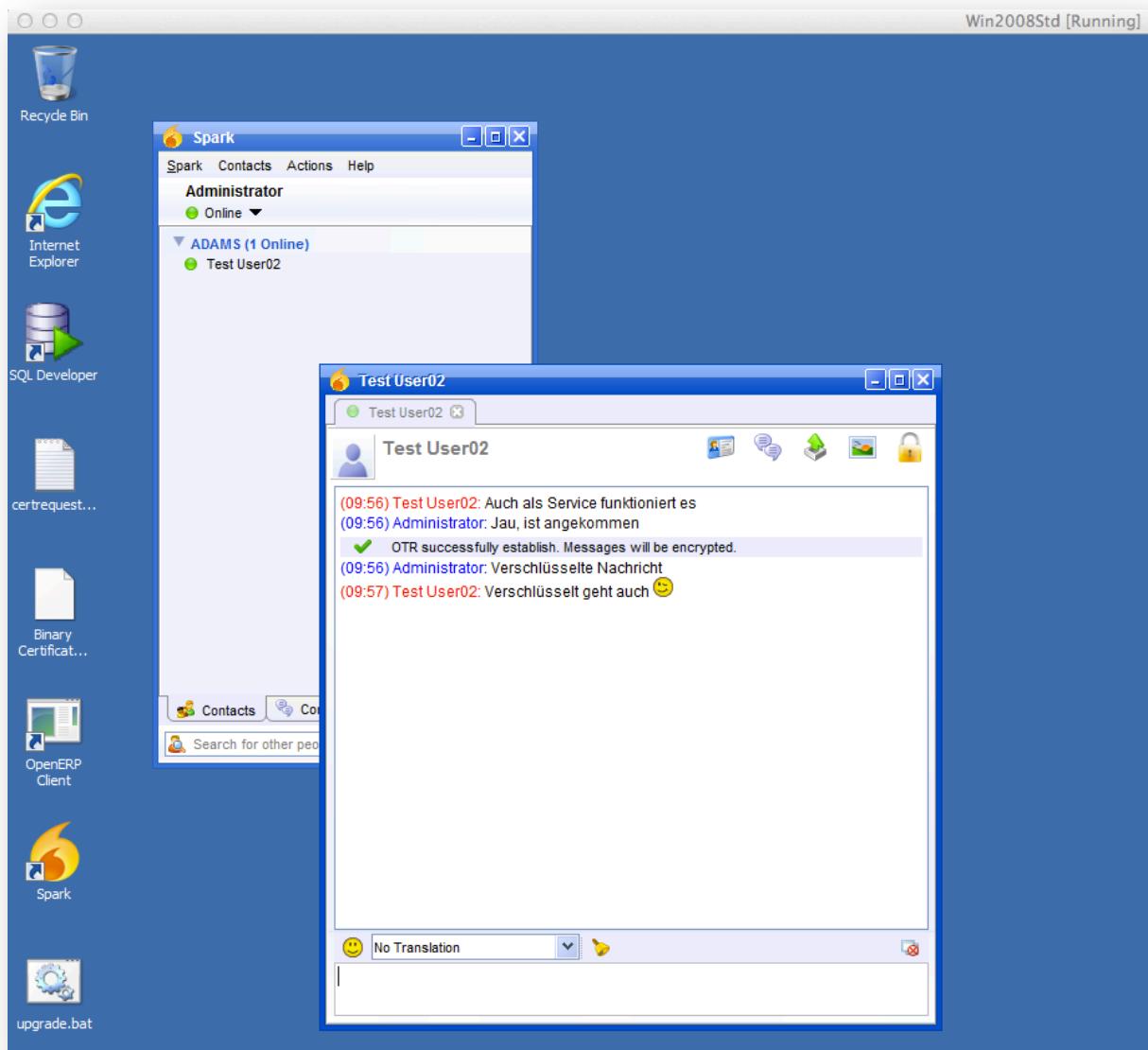
Auf den Clients wurde die Spark Version 2.6.3 installiert. Die Authentifizierung wird auf die SSO Active Directory Authentifizierung eingestellt.

Gruppe Spark den Anwendern zur Verfügung stellen



The screenshot shows the 'Edit Group' page in the Openfire Admin Console. The URL in the address bar is `192.168.20.34:9090/group-edit.jsp?group=SPARK&groupChanged=true`. The left sidebar has 'Groups' selected. The main content area shows the 'Edit Group' form for the 'SPARK' group. A success message 'Group information updated successfully.' is displayed. The 'Contact List (Roster) Sharing' section includes options for sharing with 'All users' or specific groups like 'Account Operators' and 'Administrators'. A 'Save Contact List Settings' button is at the bottom of this section.

Test der Konfiguration



So kann mit reinen OpenSource Produkten in einer Windows Umgebung ein Instant Messaging System aufgebaut und genutzt werden, ohne eine doppelte Benutzerverwaltung einzurichten!