TO:

FROM: ARND.SPIERING@AS-INFORMATIK.NET

SUBJECT: OPENFIRE UND SPARK INSTANT MESSAGING

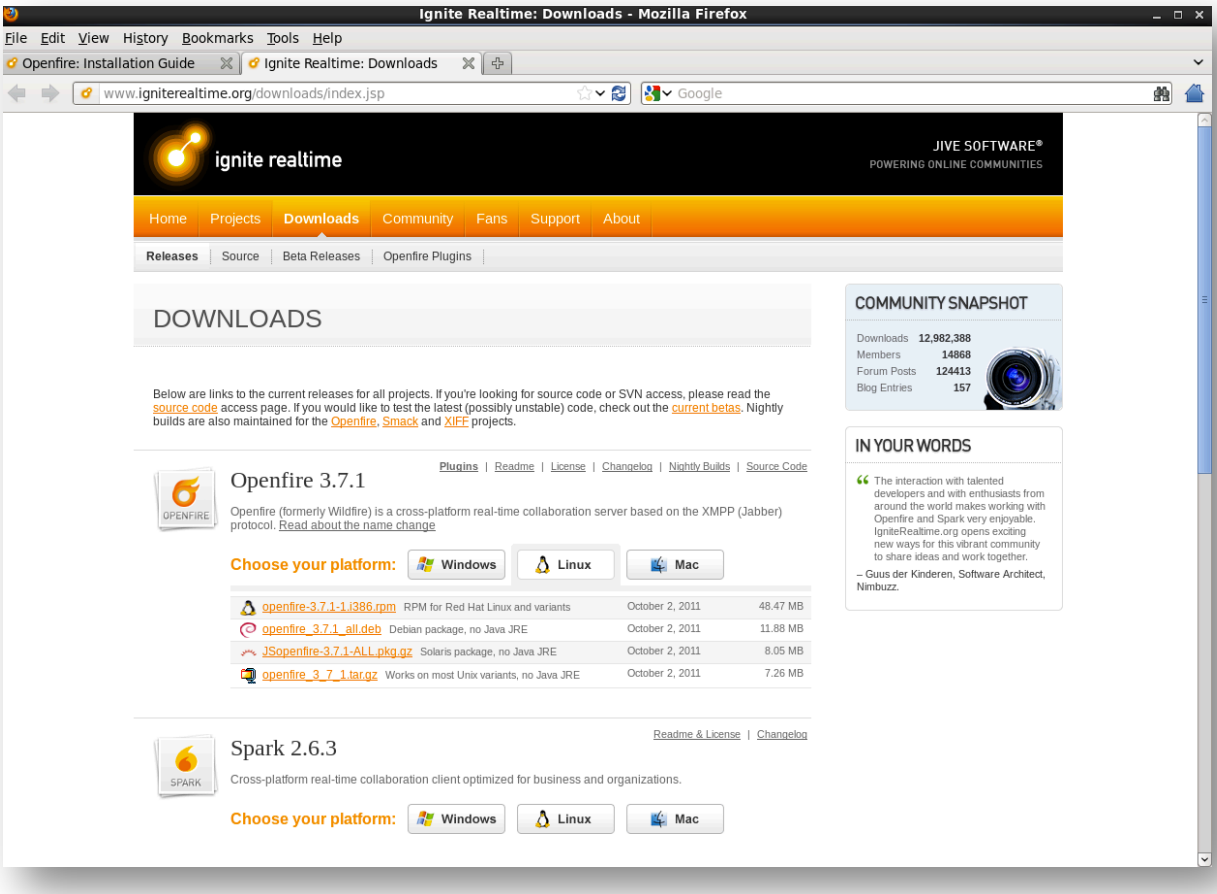
DATE: 01.02.2012

Inhalt

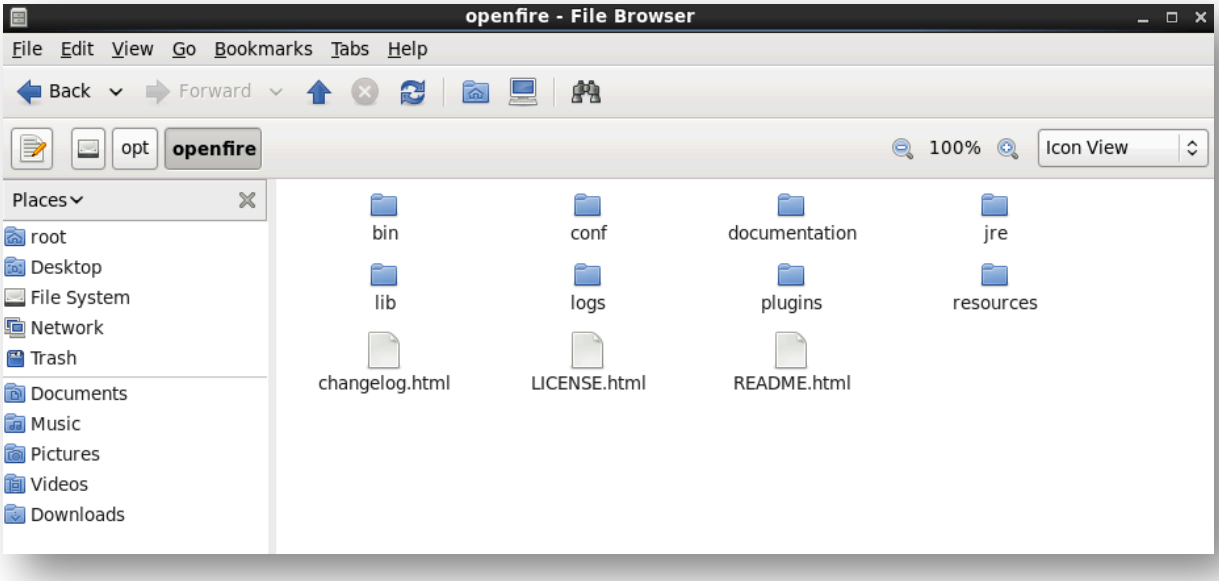
Dieses Dokument beschreibt die Installation und Konfiguration von OpenFire auf einem Centos 6.2 Server in einer Active Directory Umgebung.

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

Installation OpenFire auf Centos 6.2

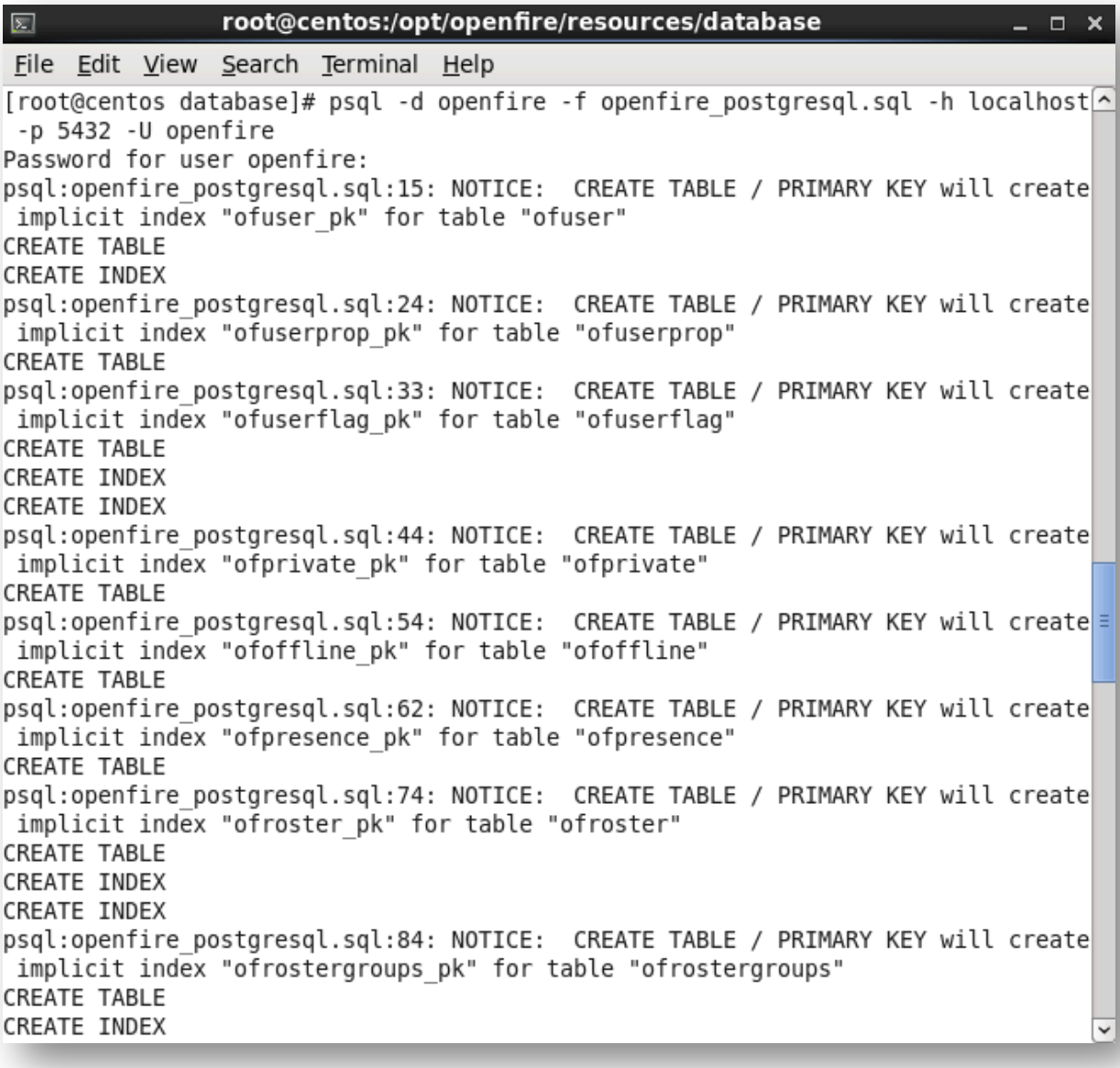


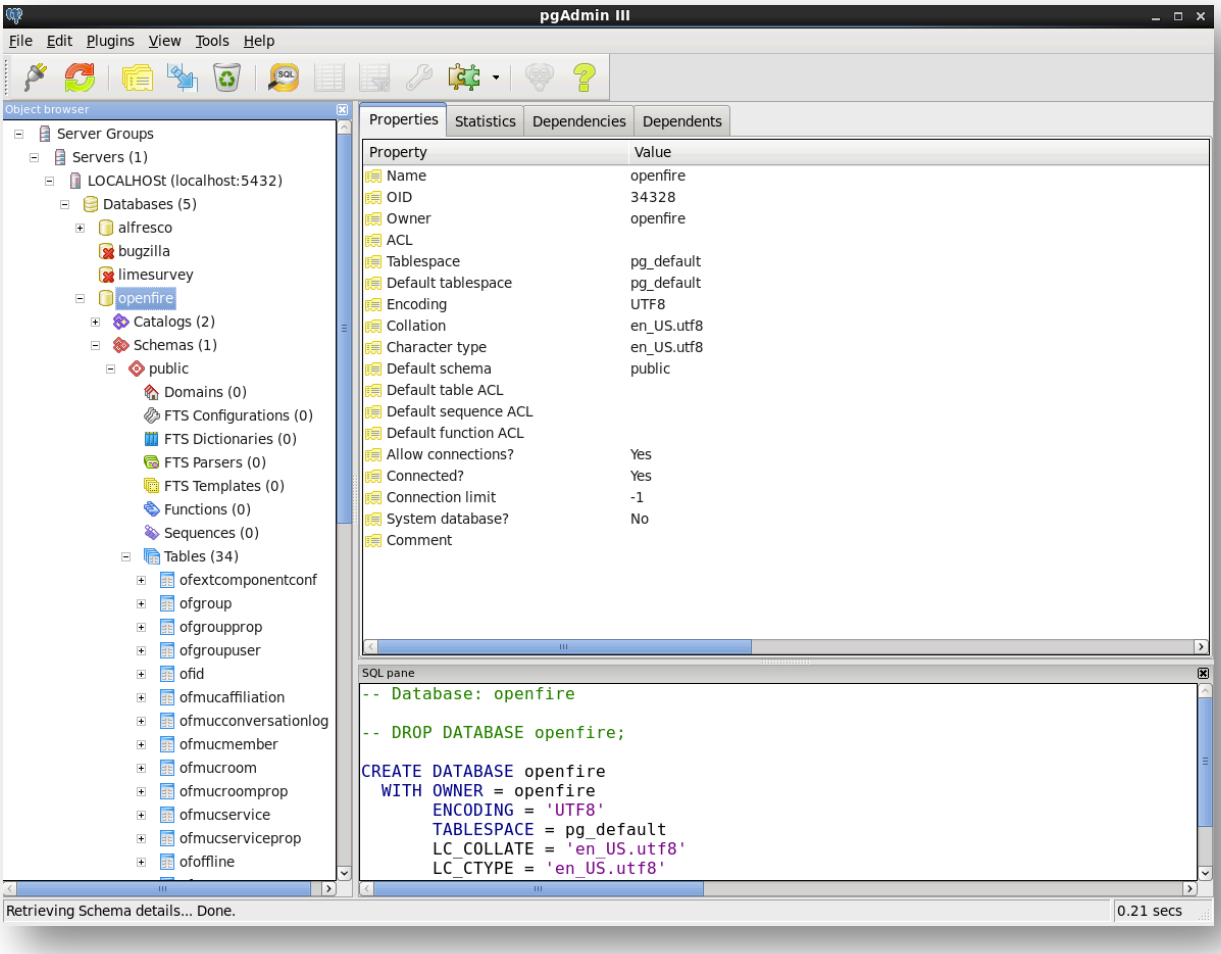
```
[root@centos ~]# cd Desk*
[root@centos Desktop]# ls
gnome-terminal.desktop  openfire-3.7.1-1.i386.rpm
[root@centos Desktop]# rpm -ivh openfire-3.7.1-1-i386.rpm
error: open of openfire-3.7.1-1-i386.rpm failed: No such file or directory
[root@centos Desktop]# rpm -ivh openfire-3.7.1-1.i386.rpm
Preparing...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





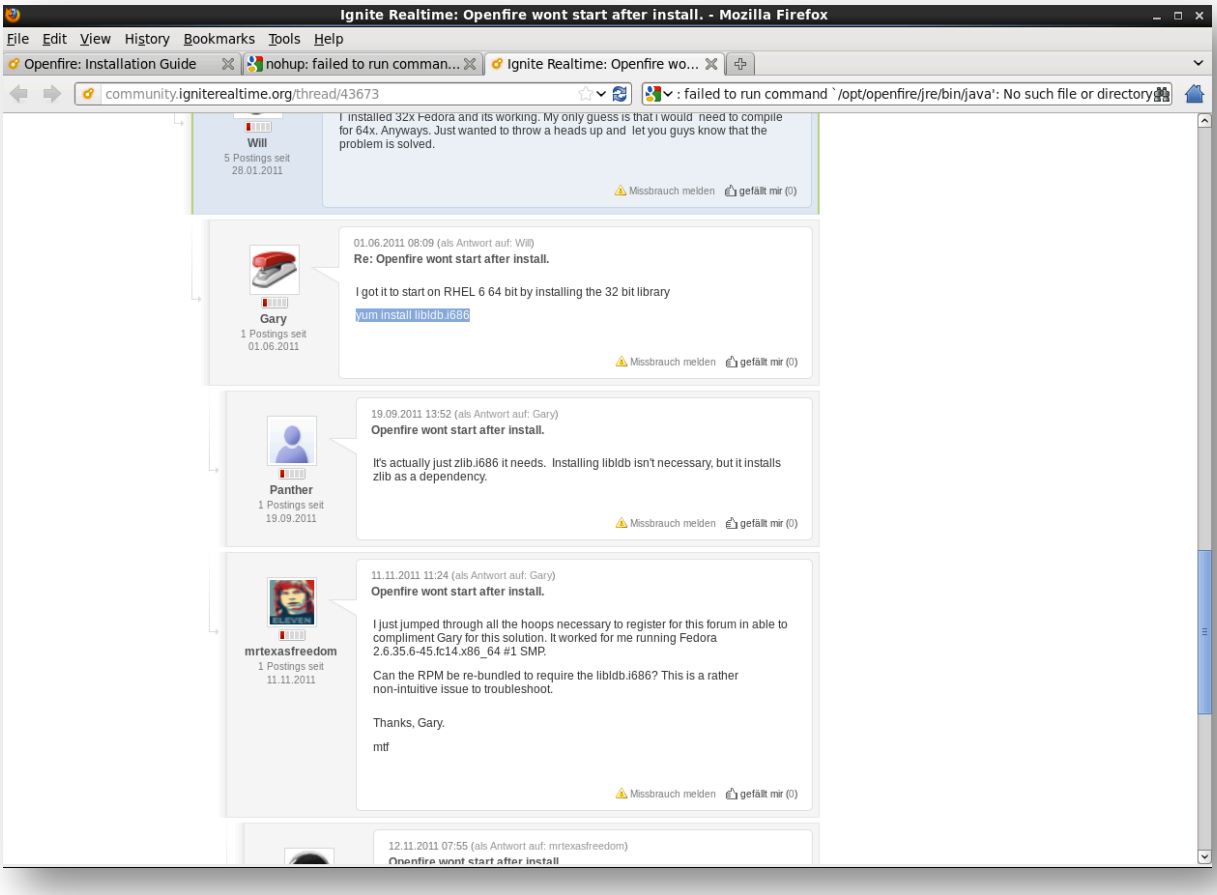
Starten von OpenFire

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!!

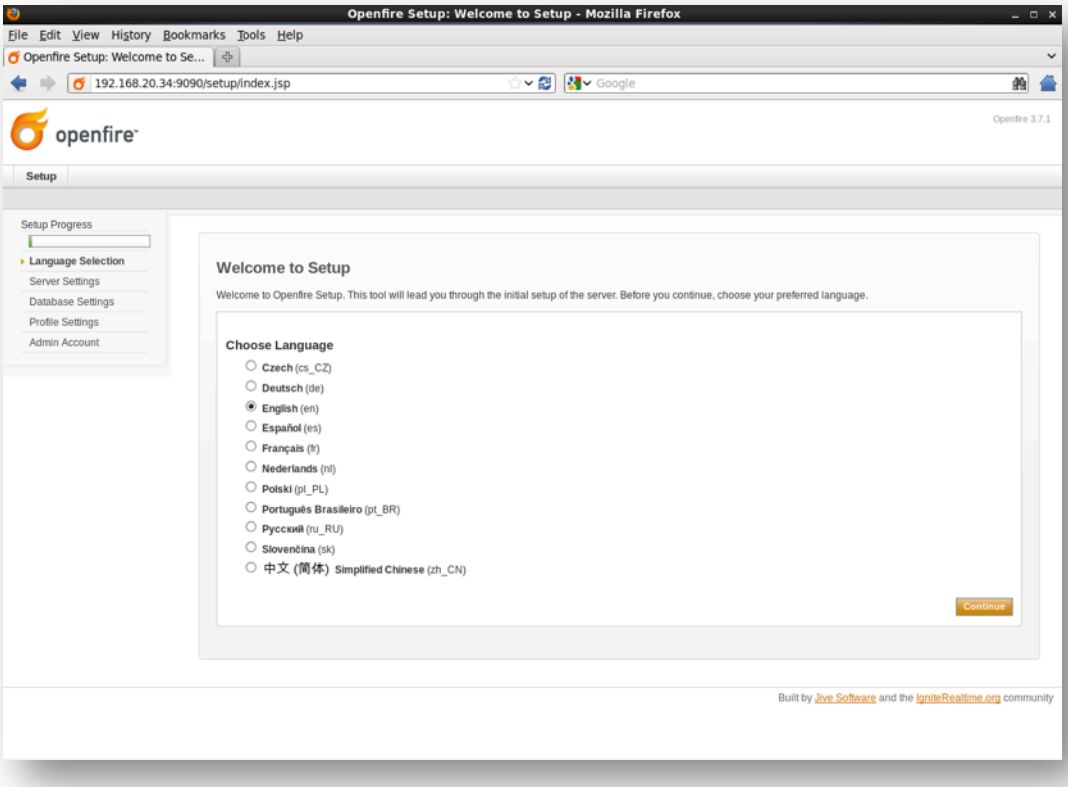
Nach einiger Recherche habe ich im OpenFire Forum eine Lösung gefunden:

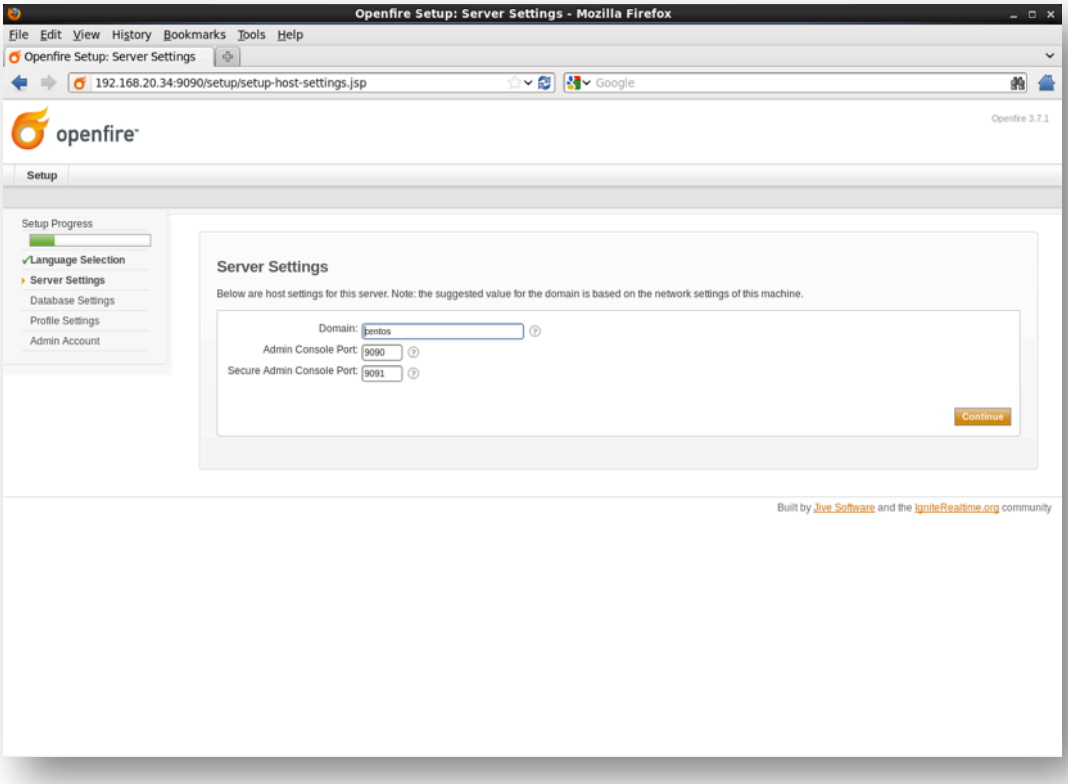


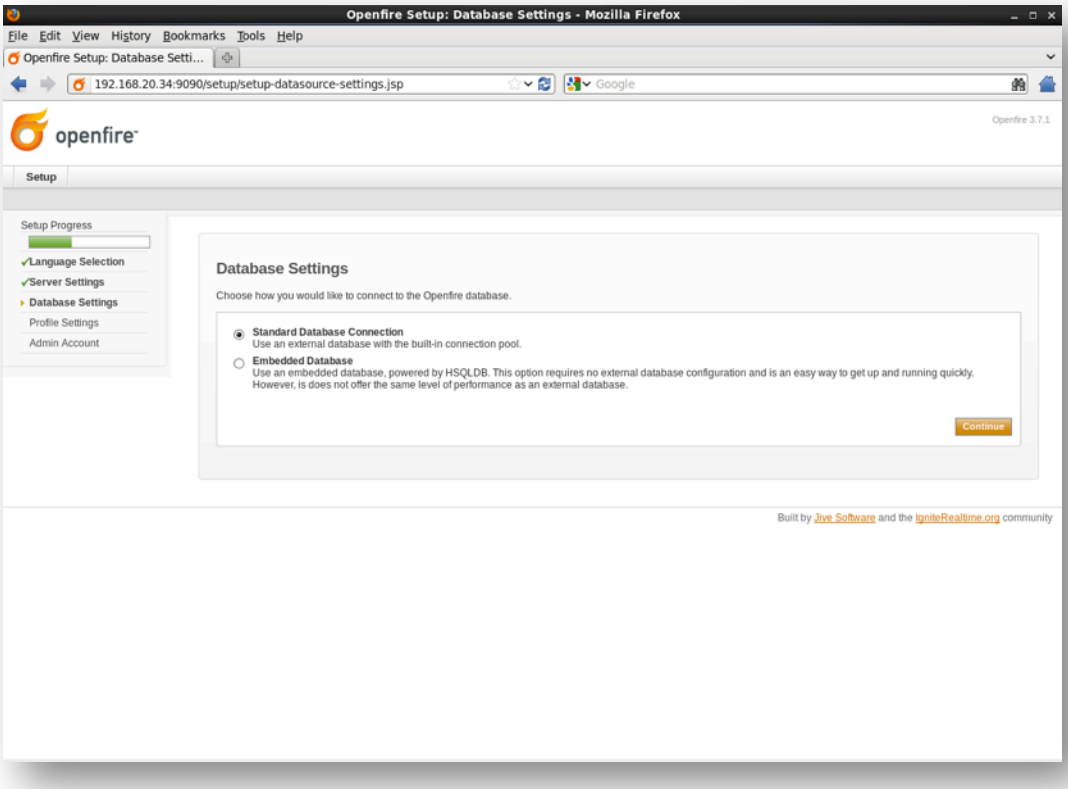
Nachdem die Bibliothek und die entsprechenden Abhängigkeiten installiert wurden, konnte der Dienst erfolgreich gestartet werden.

```
[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: Database Settings - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Database Setti...
192.168.20.34:9090/setup/setup-datasource-settings.jsp
Google
openfire
Openfire 3.7.1
Setup
Setup Progress
✓Language Selection
✓Server Settings
Database Settings
Profile Settings
Admin Account
Database Settings
Choose how you would like to connect to the Openfire database.
Standard Database Connection
Use an external database with the built-in connection pool.
Embedded Database
Use an embedded database, powered by HSQLDB. This option requires no external database configuration and is an easy way to get up and running quickly. However, is does not offer the same level of performance as an external database.
Continue
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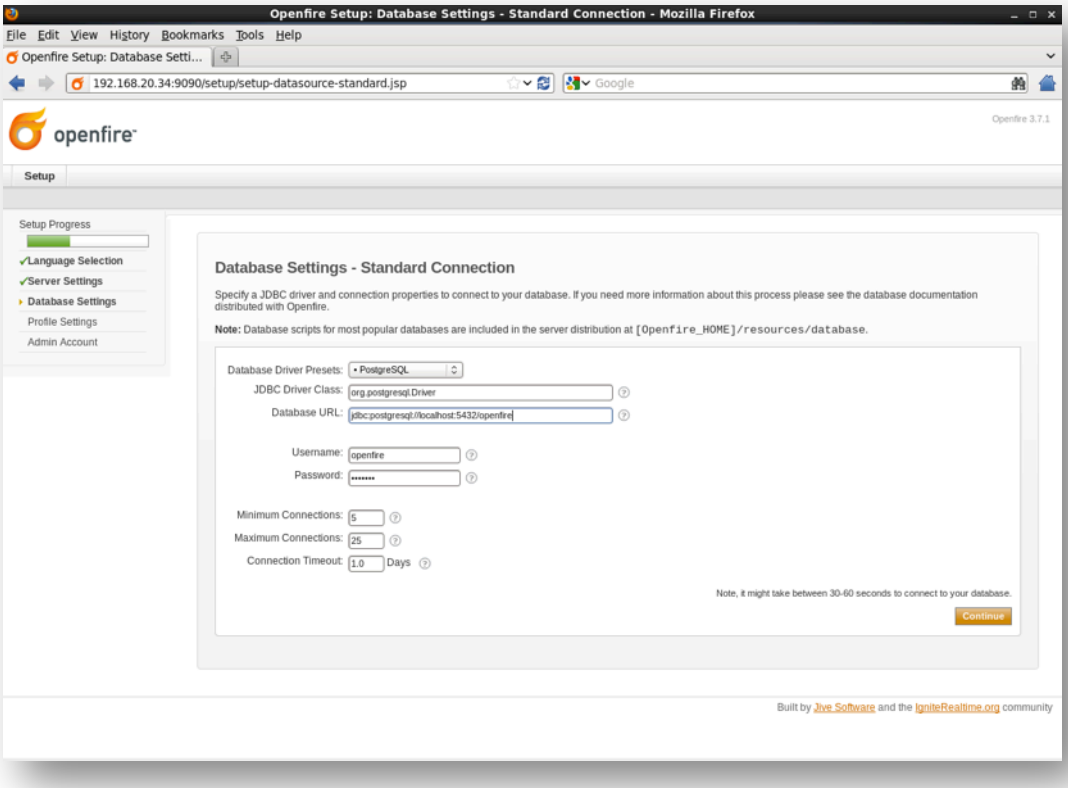
Openfire Setup: Database Settings - Standard Connection - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Database Setti...
192.168.20.34:9090/setup/setup-datasource-standard.jsp
Google
openfire
Openfire 3.7.1
Setup
Setup Progress
✓Language Selection
✓Server Settings
Database Settings
Profile Settings
Admin Account
Database Settings - Standard Connection
Specify a JDBC driver and connection properties to connect to your database. If you need more information about this process please see the database documentation distributed with Openfire.
Note: Database scripts for most popular databases are included in the server distribution at [Openfire_HOME]/resources/database.
Database Driver Presets: PostgreSQL
JDBC Driver Class: org.postgresql.Driver
Database URL: jdbc:postgresql://localhost:5432/openfire
Username: openfire
Password:
Minimum Connections: 5
Maximum Connections: 25
Connection Timeout: 1.0 Days
Note, it might take between 30-60 seconds to connect to your database.
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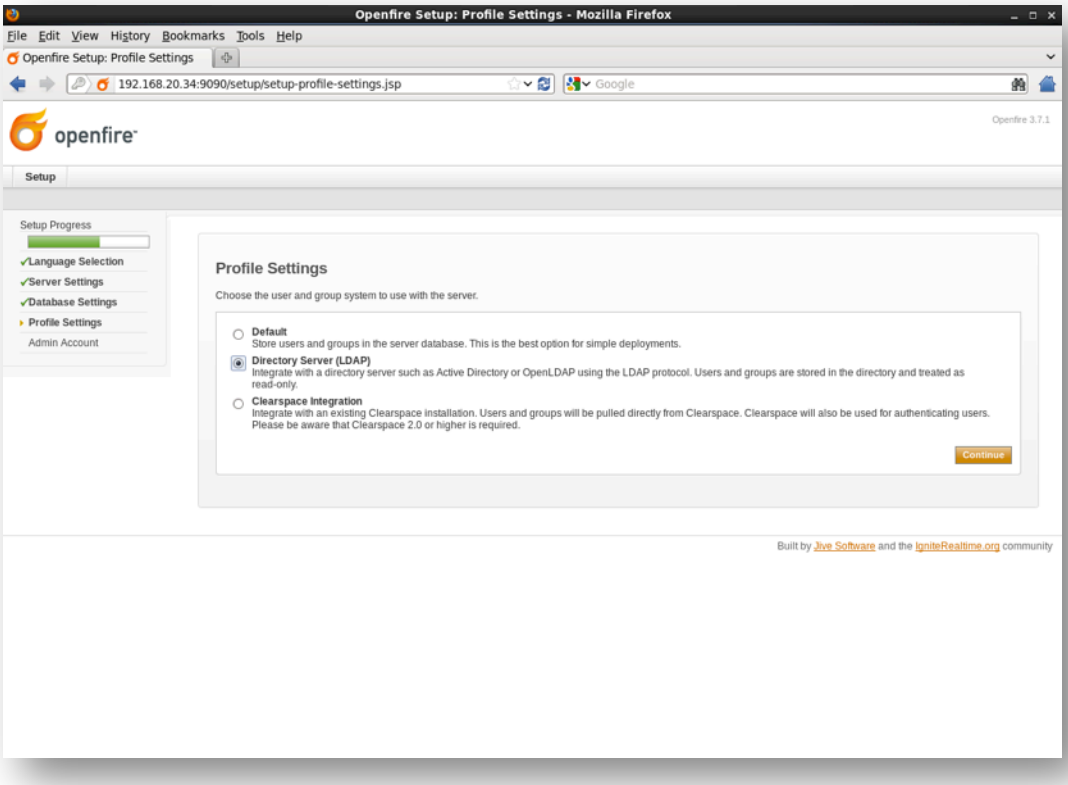
Openfire Setup: Profile Settings - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Profile Settings
192.168.20.34:9090/setup/setup-profile-settings.jsp
openfire
Openfire 3.7.1
Setup
Setup Progress
✓Language Selection
✓Server Settings
✓Database Settings
Profile Settings
Admin Account
Profile Settings
Choose the user and group system to use with the server.
Default
Store users and groups in the server database. This is the best option for simple deployments.
Directory Server (LDAP)
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.
Clearspace Integration
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.
Continue
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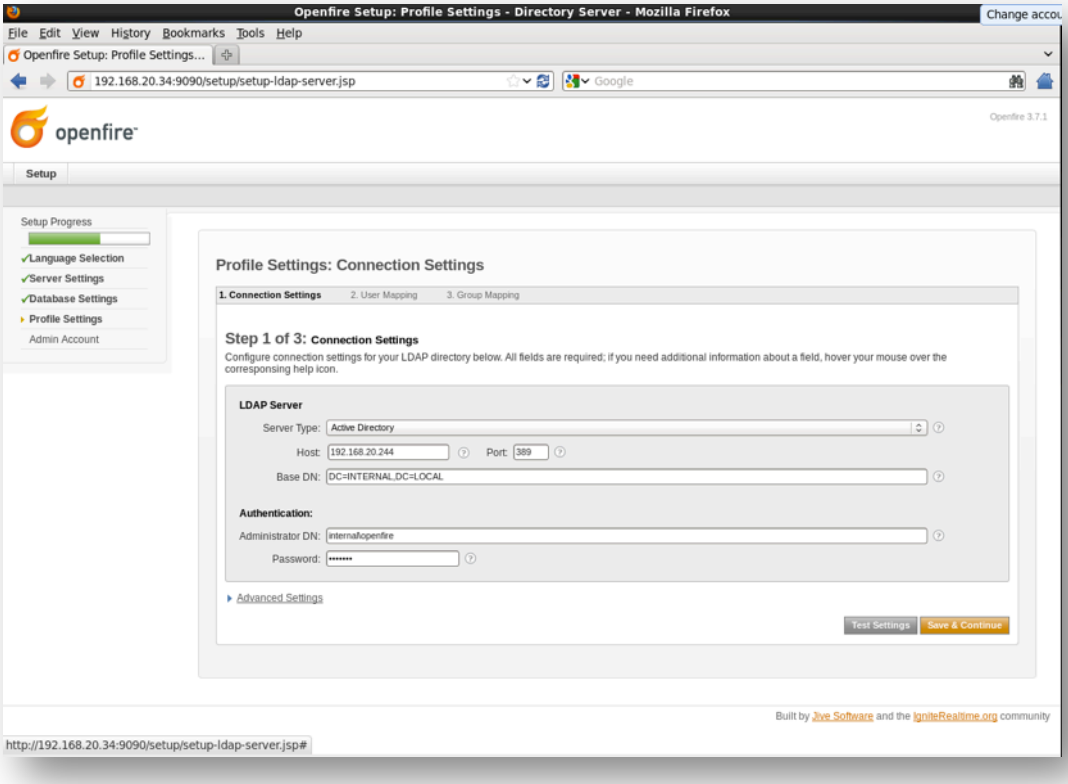
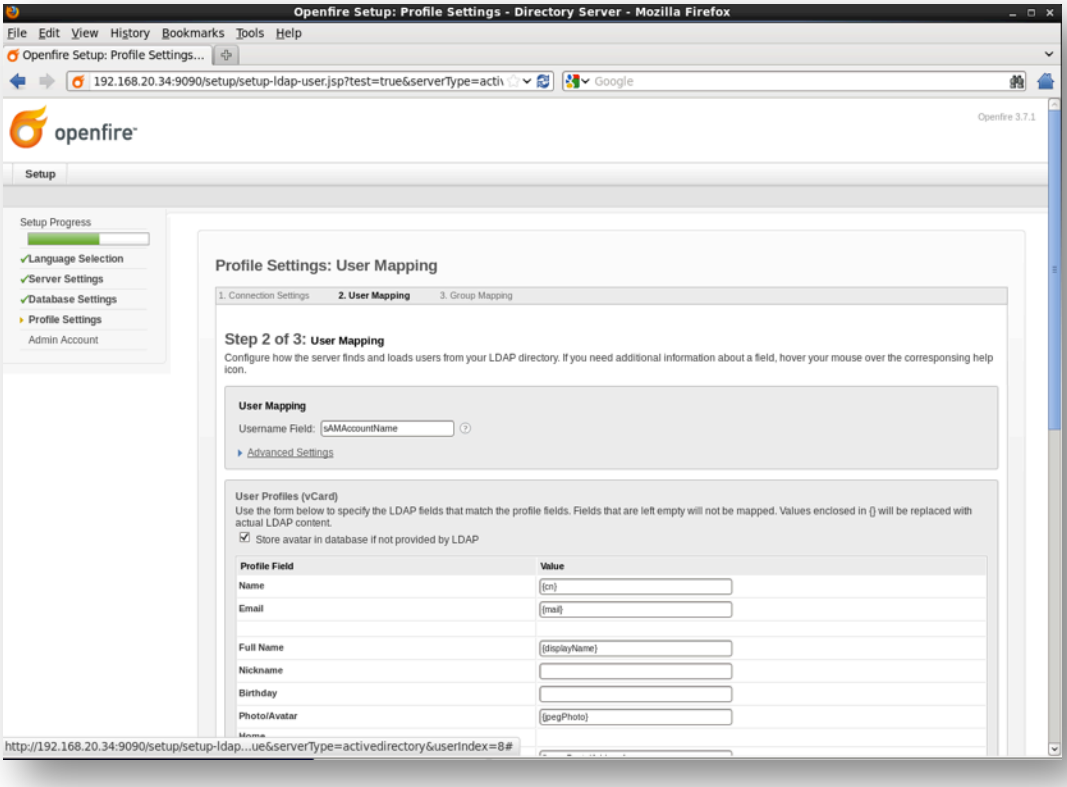
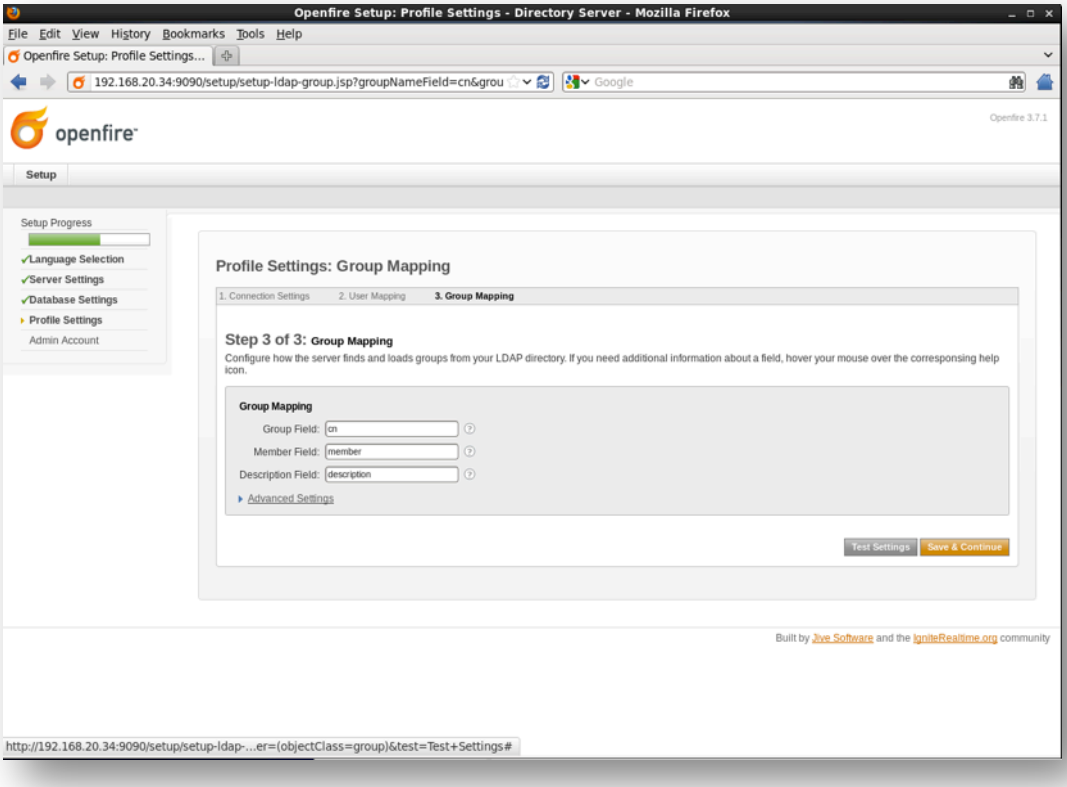
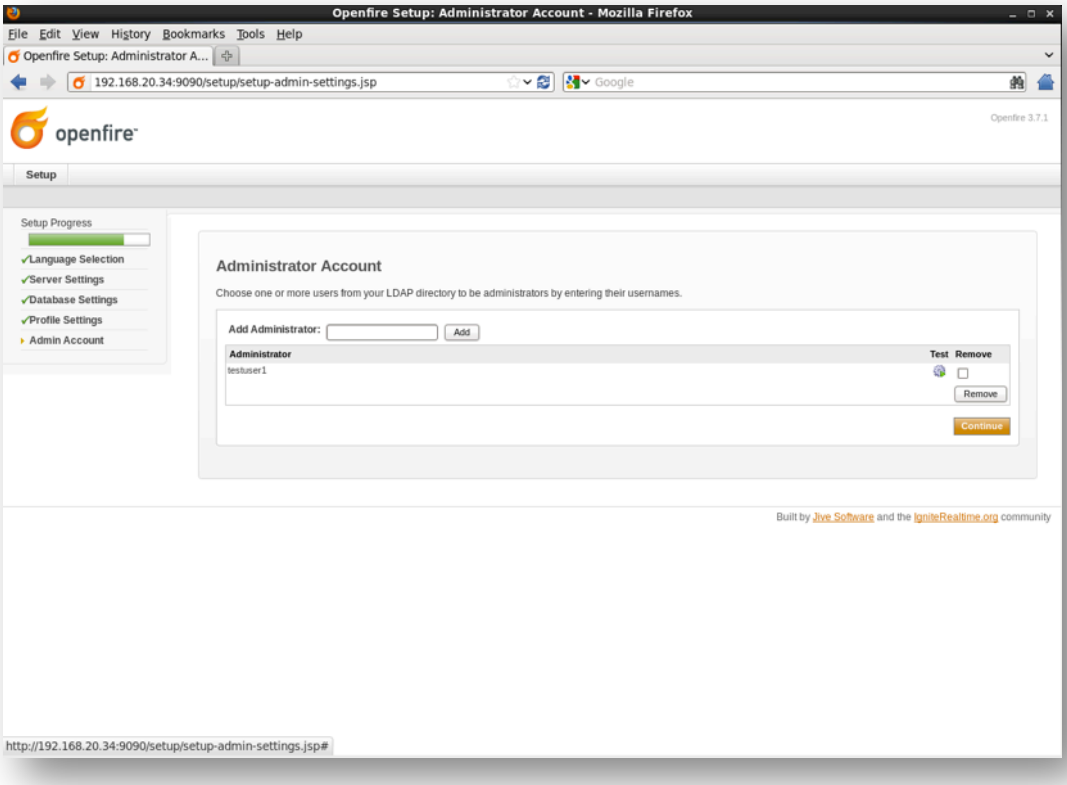
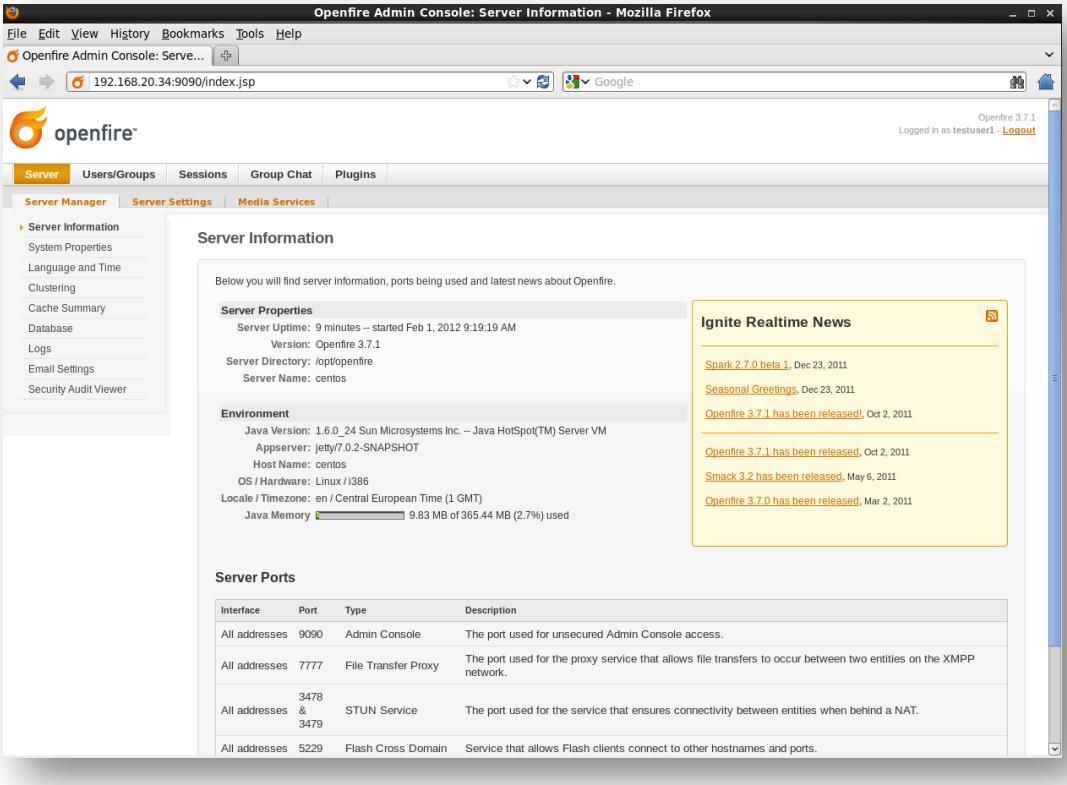

Openfire Setup: Profile Settings - Directory Server - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Profile Settings...
192.168.20.34:9090/setup/setup-ldap-server.jsp
openfire
Openfire 3.7.1
Setup
Setup Progress
✓Language Selection
✓Server Settings
✓Database Settings
Profile 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 corresponsing help icon.
LDAP Server
Server Type: Active Directory
Host: 192.168.20.244
Port: 389
Base DN: DC=INTERNAL,DC=LOCAL
Authentication:
Administrator DN: internal\openfire
Password:
Advanced Settings
Test Settings
Save & Continue
Built by Jive Software and the IgniteRealtime.org community
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=acti
Google
openfire
Openfire 3.7.1
Setup
Setup Progress
Language Selection
Server Settings
Database Settings
Profile Settings
Admin Account
Profile Settings: User Mapping
1. Connection Settings
2. User Mapping
3. Group 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 corresponsing help icon.
User Mapping
Username Field: sAMAccountName
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
{cn}
Email
{mail}
Full Name
{displayName}
Nickname
Birthday
Photo/Avatar
{jpegPhoto}
http://192.168.20.34:9090/setup/setup-ldap...ue&serverType=activedirectory&userIndex=8#

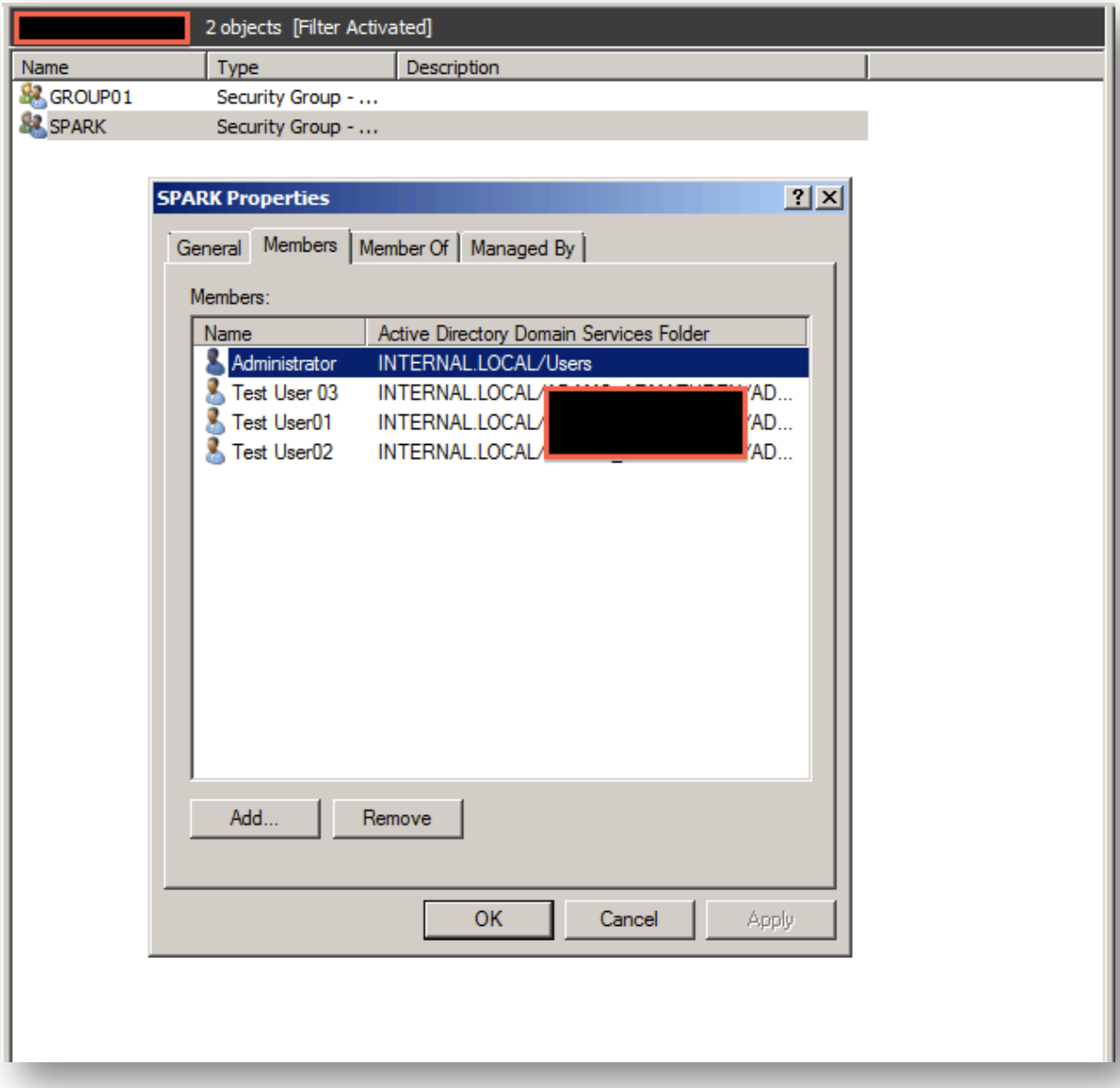

Openfire Setup: Profile Settings - Directory Server - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Profile Settings...
192.168.20.34:9090/setup/setup-ldap-group.jsp?groupNameField=cn&grou
Google
openfire
Openfire 3.7.1
Setup
Setup Progress
Language Selection
Server Settings
Database Settings
Profile Settings
Admin Account
Profile Settings: Group Mapping
1. Connection Settings
2. User Mapping
3. 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 corresponsing help icon.
Group Mapping
Group Field: cn
Member Field: member
Description Field: description
Advanced Settings
Test Settings
Save & Continue
Built by Jive Software and the IgniteRealtime.org community
http://192.168.20.34:9090/setup/setup-ldap-...er=(objectClass=group)&test=Test+Settings#


Openfire Setup: Administrator Account - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Openfire Setup: Administrator A...
192.168.20.34:9090/setup/setup-admin-settings.jsp
Google
openfire
Openfire 3.7.1
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
Test
Remove
testuser1
Remove
Continue
Built by Jive Software and the IgniteRealtime.org community
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: Serve...
192.168.20.34:9090/index.jsp
Google
openfire
Openfire 3.7.1
Logged in as testuser1 - Logout
Server
Users/Groups
Sessions
Group Chat
Plugins
Server Manager
Server Settings
Media Services
Server Information
System Properties
Language and Time
Clustering
Cache Summary
Database
Logs
Email Settings
Security Audit Viewer
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

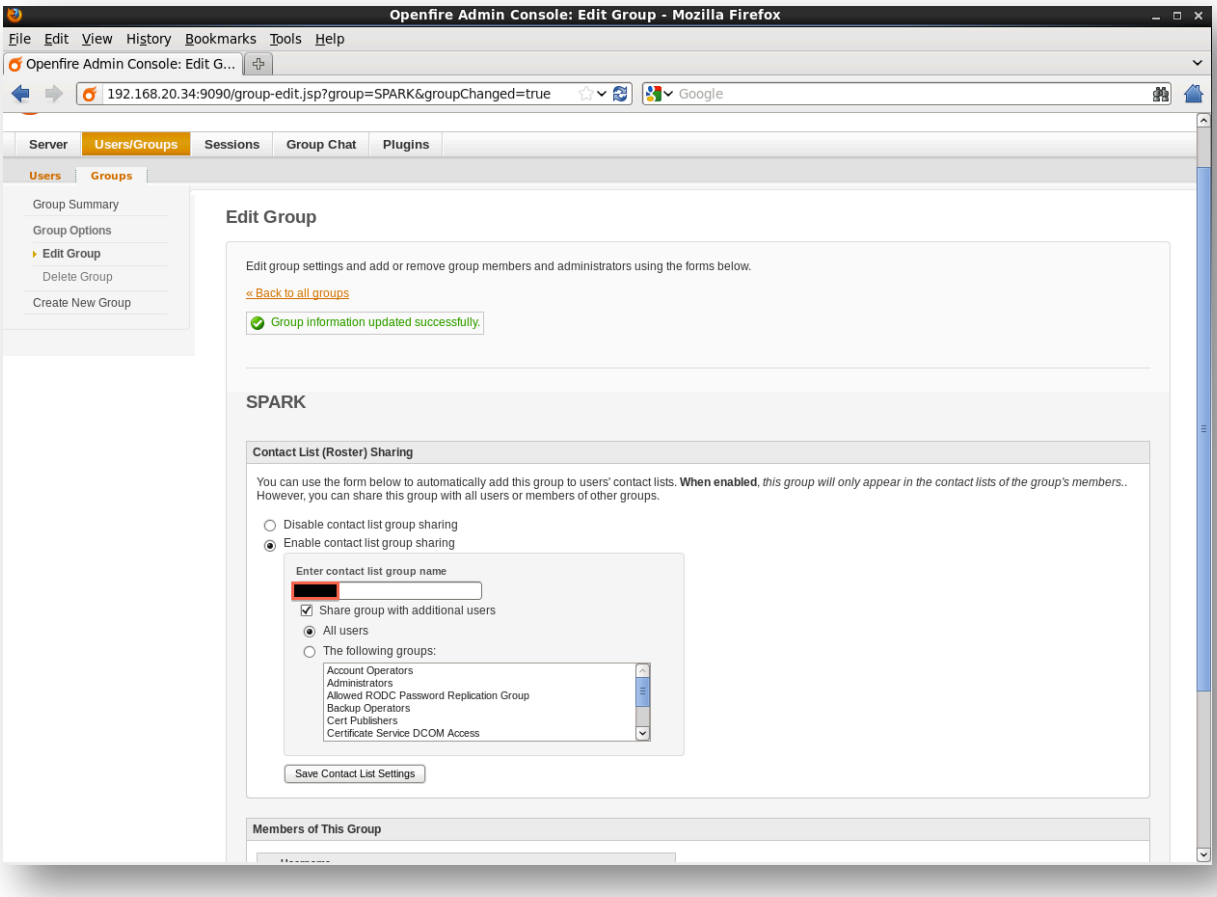
Im AD wird eine Gruppe Spark angelegt. Diese Gruppe wird benötigt, um später allen angemeldeten Benutzer aus dieser Gruppe alle verfügbaren direkten Kontakte anzubieten, die online sind. Alle Benutzer, die in dieser Gruppe sind, haben somit eine vollständige Kontaktliste im Unternehmen.



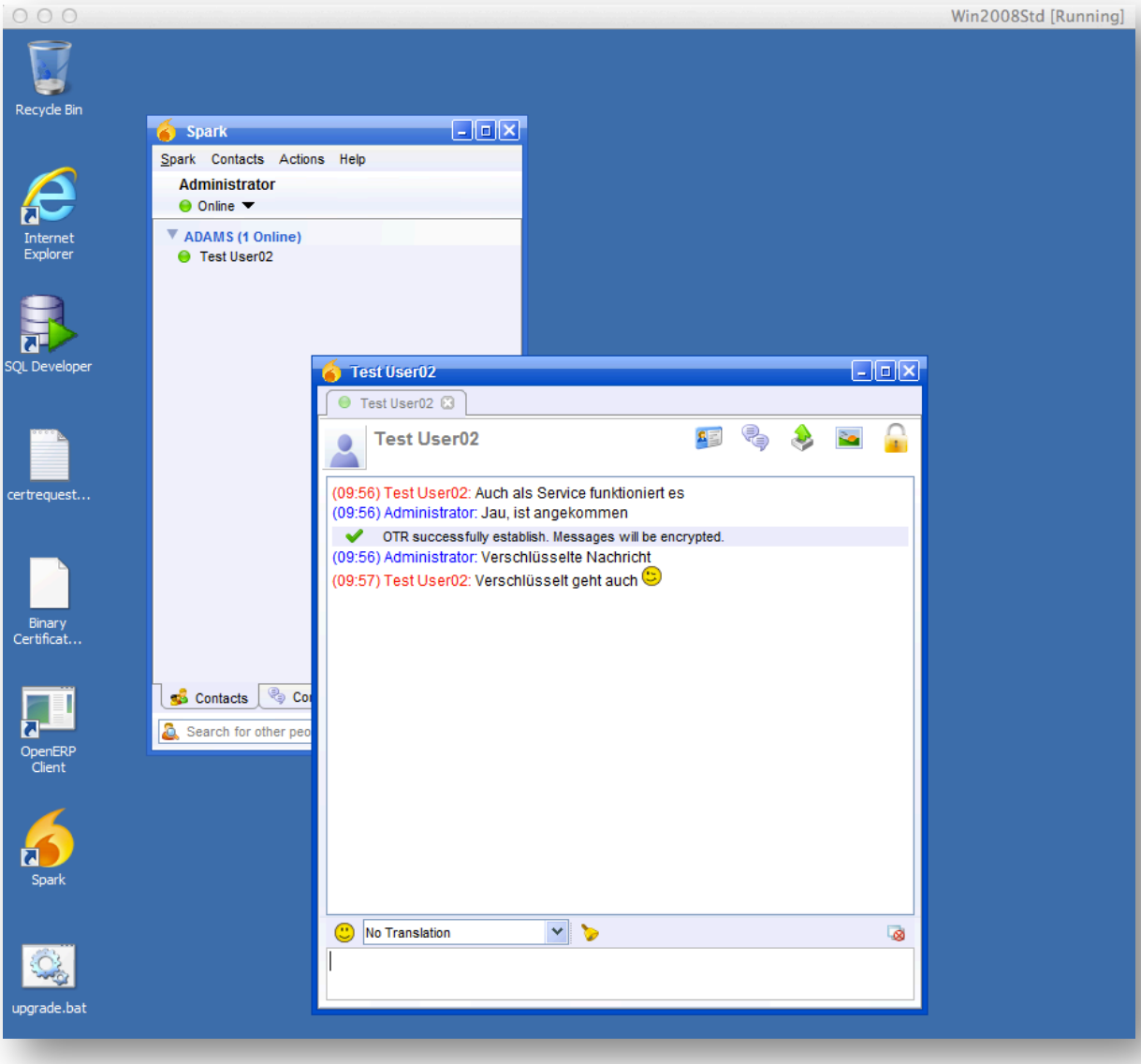
Spark Installation auf den Clients

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



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!