

Enable Private and Independent Communication Using XMPP Protocol

(Installation and Setup of OpenFire Server)



XMPP

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OpenFire is a Real-Time Collaboration (RTC) Server that is used for instant messaging. Openfire allows different users to work together, and see changes, in real time. This is especially useful for chat applications as it will display messages to all users as they are sent, received and processed in the server instead of using other methods, such as push and get, that sends and receives new changes over a specified period of time.

XMPP is a protocol that allows the exchange of data, and when used in conjunction with OpenFire, a chat application is formed.

The following are the steps to download, install and setup OpenFire:

Before we begin:

- It is assumed that the user is connected to a network. The connection is required to set up OpenFire
- The user has admin access to the device OpenFire is being installed onto.
- The user has internet access to download the program.
- At the time this tutorial was written the latest version of OpenFire is 4.3.2

Step 1: Download

- Browse to the Ignite Realtime website
(<https://www.igniterealtime.org/downloads/index.jsp#openfire>)
- Find the latest OpenFire Server. Current is OpenFire 4.3.x. Click on the correct platform.
- From the dropdown menu, select the correct option for your operating system. Note: OpenFire 64-bit is recommended

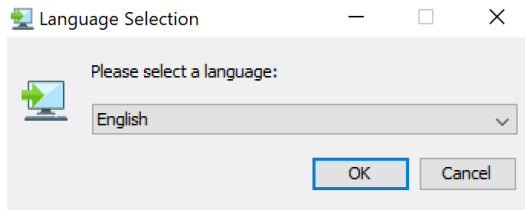
The screenshot shows the Ignite Realtime website's download page for OpenFire 4.3.2. The page has a navigation bar with tabs: Home, Projects, Downloads, Community, Fans, Support, and About. Below the navigation bar, there's a 'Downloads' section. Under 'Downloads', there's a table of download links for OpenFire 4.3.2. The first row, 'openfire 4 3 2 x64.exe' (64-bit, No Java JRE (recommended)), is highlighted with a red box. Other rows include 'openfire 4 3 2 bundledJRE x64.exe' (81.80 MB) and 'openfire 4 3 2.zip' (34.56 MB). To the right, there's a 'COMMUNITY SNAPSHOT' box showing 29,141,292 downloads, a 'SPECIAL THANK YOU!' box, and an 'INSTALL4J' button.

Download Link	Platform	Version	Size
openfire 4 3 2 x64.exe	64-bit, No Java JRE (recommended)	January 31, 2019	35.01 MB
openfire 4 3 2 bundledJRE x64.exe	64-bit, Includes 64-bit Java JRE	January 31, 2019	81.80 MB
openfire 4 3 2.zip	Does not include Java JRE	January 31, 2019	34.56 MB

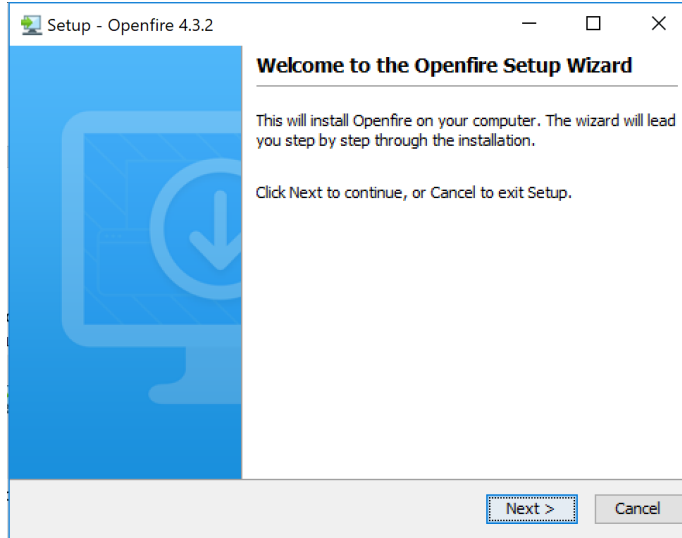
- Wait for the download to finish and run the program.

Step 2: Installation Process

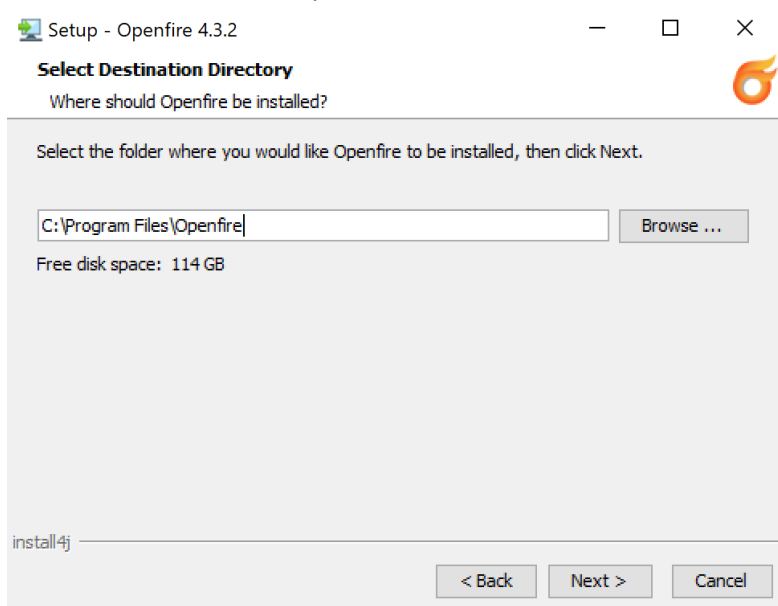
- Choose the installation language and click on the OK button



- Click next once the setup opens up



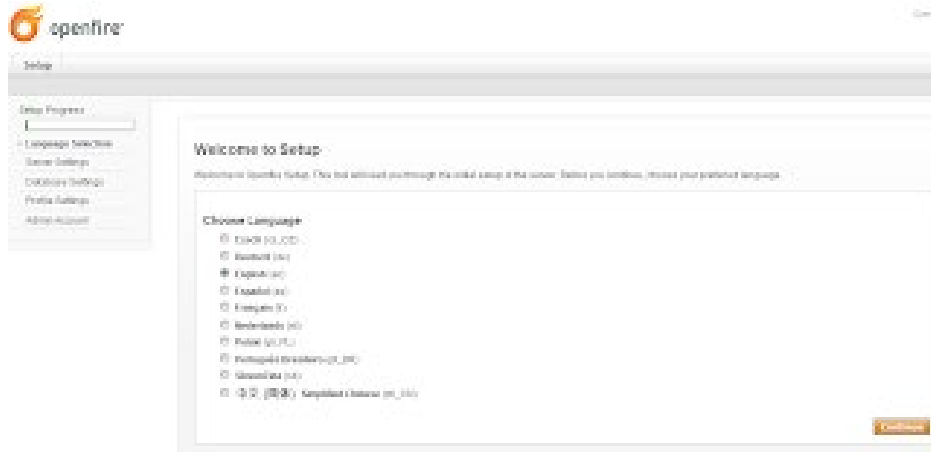
- Accept the terms and click on Next
- Select the folder where Openfire will be install and click next



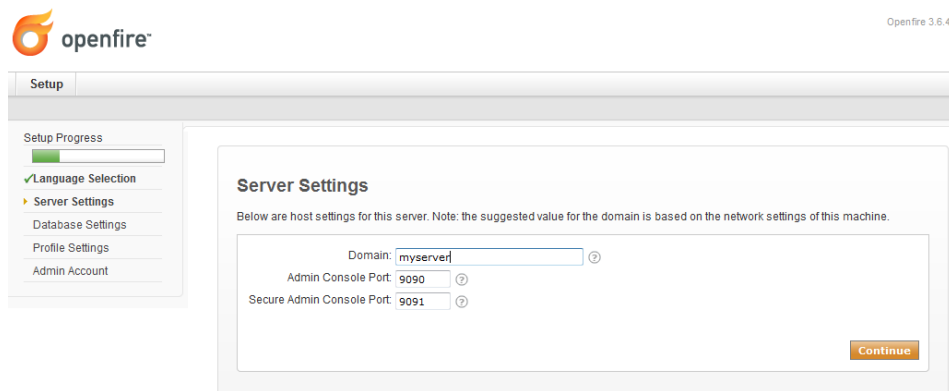
- Select the shortcuts wanted to install and click next
- Wait for the application to finish installing and click on Finish

Step 3: Setting up OpenFire

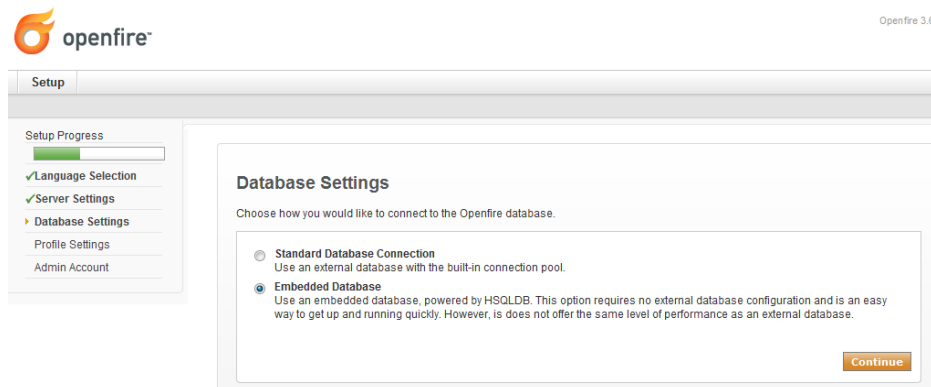
- Open the internet browser and type the server name. By default the server name is "localhost:9090"
- Choose a language and click Continue



- In the next screen, leave the default Server Settings values



- In the next screen, the Database Settings screen, Select the Embedded Database option



- In the Profile Settings screen, select Default as the option and click continue

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

- In the final step, in the Administrator Account step. Enter a valid email address and a password. Make a note of the created password and click on continue

Setup

Setup Progress

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

Administrator Account

Enter settings for the system administrator account (username of "admin") below. It is important to choose a password for the account that cannot be easily guessed -- for example, at least six characters long and containing a mix of letters and numbers. You can skip this step if you have already setup your admin account (not for first time users).

Admin Email Address:
A valid email address for the admin account.

New Password:

Confirm Password:

Skip This Step
Continue

- The Setup Complete screen will show. Click on the button Login to the admin console. This will redirect you to the login screen.

Setup

Setup Progress

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

Setup Complete!

This installation of Openfire is now complete. To continue:

Login to the admin console

- For the login, enter admin as the username and enter the password created. Click Login



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Administration Console

username

password

Openfire, Version: 4.3.2

Step 4: Configuring the test users

- Once logged in, click on users/groups



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Server

Users/Groups

Sessions

Group Chat

Plugins

- Click on Create New User and enter the credentials for the test user. Make sure the “Is Administrator?” option is unchecked unless an admin user is being created.

Server

Users/Groups

Sessions

Group Chat

Plugins

Users

Groups

User Summary

► Create New User

User Search

Advanced User Search

Create User

Use the form below to create a new user.

Create New User

Username: *

Name:

Email:

Password: *

Confirm Password: *

Is Administrator? ☐ (Grants admin access to Openfire)

* Required fields

- Repeat step 4 to create as many users as needed.
- Openfire server is now setup and ready to use.

Work Cited

[1] <https://www.igniterealtime.org/projects/openfire/>