

# Programação III

## Configuração do Ambiente de Desenvolvimento

2021/01

JDK

Wildfly








Eclipse IDE

Plugin Wildfly

Referências

# Java Development Kit (JDK)

1. Fazer o download do instalador em `https://www.oracle.com/br/java/technologies/javase-jdk15-downloads.html`. Neste exemplo será utilizada a versão 15.0.2.

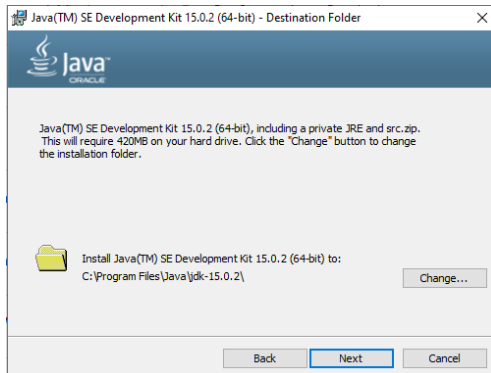
Linux x64 Debian Package	154.81 MB	 <a href="#">jdk-15.0.2_linux-x64_bin.deb</a>
Linux x64 RPM Package	162.03 MB	 <a href="#">jdk-15.0.2_linux-x64_bin.rpm</a>
Linux x64 Compressed Archive	179.35 MB	 <a href="#">jdk-15.0.2_linux-x64_bin.tar.gz</a>
macOS Installer	175.93 MB	 <a href="#">jdk-15.0.2_osx-x64_bin.dmg</a>
macOS Compressed Archive	176.51 MB	 <a href="#">jdk-15.0.2_osx-x64_bin.tar.gz</a>
Windows x64 Installer	159.71 MB	 <a href="#">jdk-15.0.2_windows-x64_bin.exe</a>
Windows x64 Compressed Archive	179.28 MB	 <a href="#">jdk-15.0.2_windows-x64_bin.zip</a>

# Java Development Kit (JDK)

2. Executar o instalador, observando o local de instalação da JDK.



# Java Development Kit (JDK)

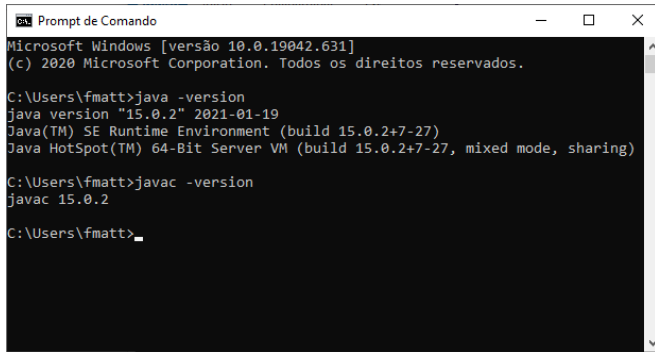


# Java Development Kit (JDK)



# Java Development Kit (JDK)

3. Confirme a instalação da JDK, digitando, em um prompt de comando os comandos “java -version” e “javac -version”.



```

C:\> Prompt de Comando

Microsoft Windows [versão 10.0.19042.631]
(c) 2020 Microsoft Corporation. Todos os direitos reservados.

C:\Users\fmatt>java -version
java version "15.0.2" 2021-01-19
Java(TM) SE Runtime Environment (build 15.0.2+7-27)
Java HotSpot(TM) 64-Bit Server VM (build 15.0.2+7-27, mixed mode, sharing)

C:\Users\fmatt>javac -version
javac 15.0.2

C:\Users\fmatt>_
  
```

# Servidor de Aplicações Wildfly

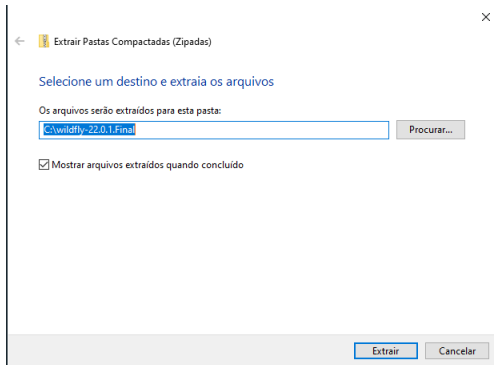
1. Fazer o download do arquivo zip em <https://www.wildfly.org/downloads/>. Selecione a distribuição “Jakarta EE Full & Web”. Neste exemplo, foi utilizada a versão 22.0.1.Final.

22.0.1.Final	FINAL	Feb 11, 2021	
	WildFly Preview EE 9 Distribution	LGPL	<a href="#">zip</a>   <a href="#">SHA-1</a> <a href="#">tgz</a>   <a href="#">SHA-1</a>
	Jakarta EE Full & Web Distribution	LGPL	<a href="#">zip</a>   <a href="#">SHA-1</a> <a href="#">tgz</a>   <a href="#">SHA-1</a>
	Servlet-Only Distribution	LGPL	<a href="#">zip</a>   <a href="#">SHA-1</a> <a href="#">tgz</a>   <a href="#">SHA-1</a>
	Application Server Source Code	LGPL	<a href="#">zip</a>   <a href="#">SHA-1</a> <a href="#">tgz</a>   <a href="#">SHA-1</a>
	Quick Start Source Code	AL	<a href="#">Source</a>
	Release Notes		<a href="#">Notes</a>



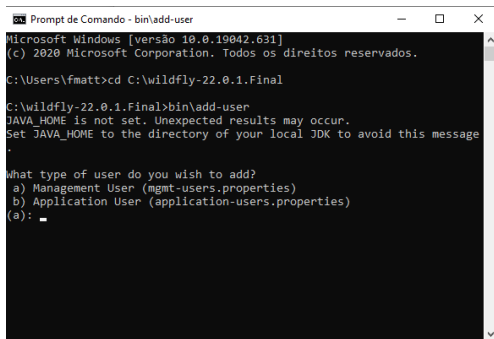
# Servidor de Aplicações Wildfly

2. Extrair o arquivo zip em um diretório. Neste exemplo, será extraído para o diretório C:.



# Servidor de Aplicações Wildfly

3. Configurar o usuário administrador do servidor Wildfly executando, em um prompt de comando, o utilitário bin add-user, a partir do diretório raiz do servidor. As opções de configuração são apresentadas a seguir.



```

Prompt de Comando - bin\add-user
Microsoft Windows [versão 10.0.19042.631]
(c) 2020 Microsoft Corporation. Todos os direitos reservados.

C:\Users\fmatt>cd C:\wildfly-22.0.1.Final

C:\wildfly-22.0.1.Final>bin\add-user
JAVA_HOME is not set. Unexpected results may occur.
Set JAVA_HOME to the directory of your local JDK to avoid this message
.

What type of user do you wish to add?
  a) Management User (mgmt-users.properties)
  b) Application User (application-users.properties)
(a): a
  
```

## Servidor de Aplicações Wildfly

What type of user do you wish to add?

> Selecionar a opção "(a) Management User"

Username:

> Informar o usuário "admin"

User 'admin' already exists and is disabled,  
would you like to...

> Selecionar a opção

"(a) Update the existing user password and roles"

Password:

> Informar e confirmar a senha do usuário admin

# Servidor de Aplicações Wildfly

What groups do you want this user to belong to?

> Deixar em branco (pressionar Enter)

Is this new user going to be used for one AS process to connect to another AS process?

> Informar "no".

# Eclipse IDE

1. Fazer o download do instalador em <https://www.eclipse.org/downloads/>.



# Eclipse IDE



Download

**Download from:** Brazil - C3SL - Federal University of Parana (https)

**File:** eclipse-inst-jre-win64.exe

SHA-512

>> [Select Another Mirror](#)

# Eclipse IDE

2. Executar o instalador e selecionar a opção “Eclipse IDE for Enterprise Java Developers”.



# Eclipse IDE

3. Verificar os diretórios de instalação da JDK e de destino do Eclipse e clicar em “Install”.





# Eclipse IDE

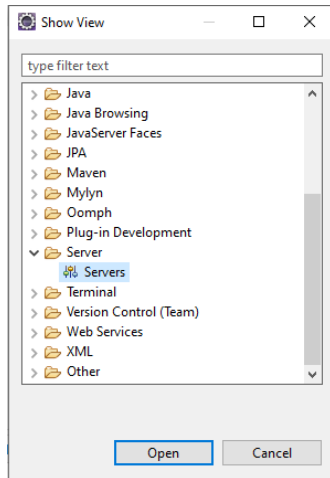
4. Verificar os diretórios de instalação da JDK e de destino do Eclipse e clicar em “Install”.



# Plugin Wildfly

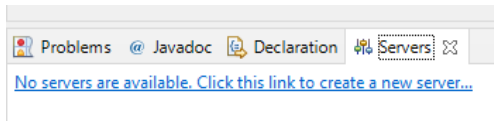
5. Após a instalação, executar o Eclipse e informar o diretório utilizado como workspace. No menu “Window” > “Show view”, selecione a opção “Other”, e em seguida a opção “Servers” > “Server”.

# Plugin Wildfly



## Plugin Wildfly

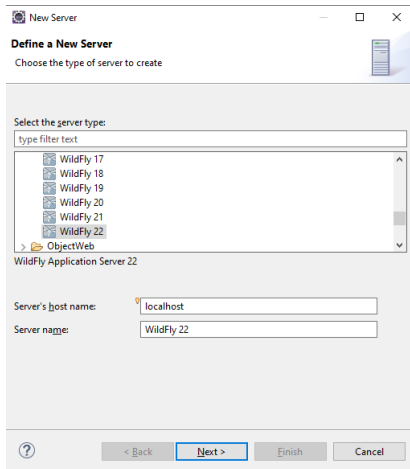
6. No painel inferior, na aba “Servers”, clicar na opção “No servers are available. Click this link to create a new server...”.
7. Na próxima janela, selecionar “Red Hat JBoss Middleware” e a opção “JBoss AS, Wildfly & EAP Server Tools. Clique em “Next” para iniciar o download, aceite as licenças e a instalação de software não assinado e prossiga com a instalação. Ao final da instalação, reinicie o Eclipse.



## Plugin Wildfly

8. Após reiniciar o Eclipse, clique novamente na opção para acrescentar um novo servidor, selecionando, agora, a opção “Wildfly 22” na categoria “JBoss Community”.

# Plugin Wildfly



# Plugin Wildfly

New Server

**Create a new Server Adapter**  
WildFly Application Server 22

A Server Adapter manages starting and stopping instances of your server. It manages command line arguments and keeps track of which modules have been deployed.

The server is: ☒ Local  
☐ Remote

Controlled by: ☒ Filesystem and shell operations  
☐ Management Operations

☐ Server lifecycle is externally managed.

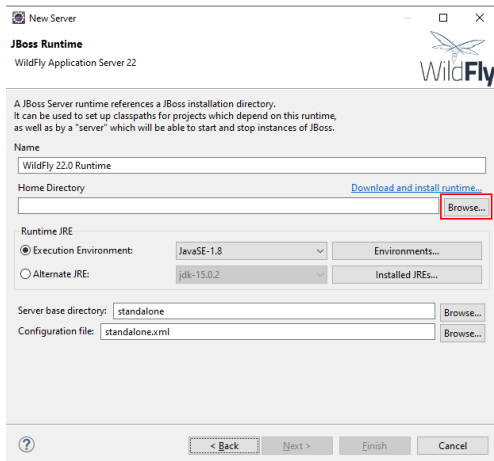
The selected profile requires a runtime.

☒ Assign a runtime to this server  
Create new runtime (next page) ▾

< Back Next > Finish Cancel

# Plugin Wildfly

- Na tela de configuração do “Runtime”, selecione o diretório de instalação do Wildfly.



**New Server**

**JBoss Runtime**  
WildFly Application Server 22

A JBoss Server runtime references a JBoss installation directory. It can be used to set up classpaths for projects which depend on this runtime, as well as by a "server" which will be able to start and stop instances of JBoss.

Name  
WildFly 22.0 Runtime

Home Directory [Download and install runtime...](#)  
Browse...

Runtime JRE  
☒ Execution Environment: JavaSE-1.8 Environments...  
☐ Alternate JRE: jdk-15.0.2 Installed JREs...

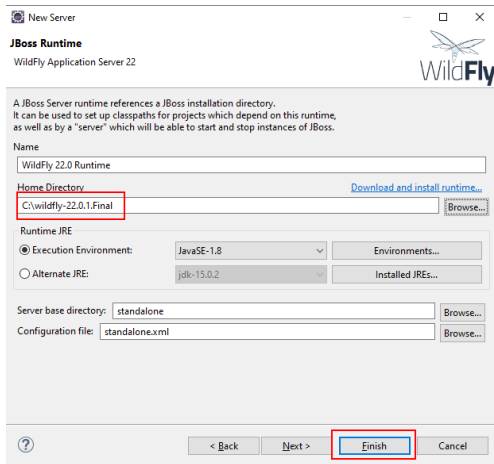
Server base directory: standalone Browse...

Configuration file: standalone.xml Browse...

< Back Next > Finish Cancel



# Plugin Wildfly



**New Server**

**JBoss Runtime**  
WildFly Application Server 22

A JBoss Server runtime references a JBoss installation directory. It can be used to set up classpaths for projects which depend on this runtime, as well as by a "server" which will be able to start and stop instances of JBoss.

Name  
WildFly 22.0 Runtime

Home Directory [Download and install runtime...](#)  
C:\wildfly-22.0.1.Final [Browse...](#)

Runtime JRE  
☒ Execution Environment: JavaSE-1.8 [Environments...](#)  
☐ Alternate JRE: jdk-15.0.2 [Installed JREs...](#)

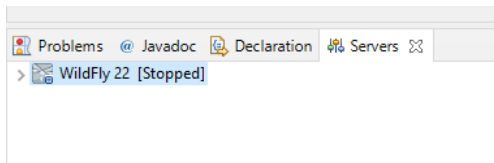
Server base directory: standalone [Browse...](#)

Configuration file: standalone.xml [Browse...](#)

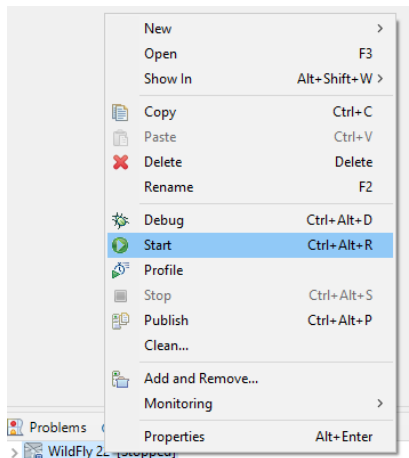
[? < Back](#) [Next >](#) [Finish](#) [Cancel](#)

## Plugin Wildfly

10. No painel “Servers”, clique com o botão direito no servidor Wildfly e selecione a opção “Start”.



# Plugin Wildfly



## Plugin Wildfly

11. Para testar a inicialização, verifique a presença das seguintes mensagens na aba “Console”:

```
WildFly Full 22.0.1.Final  
(WildFly Core 14.0.1.Final) started in ...  
Http management interface  
listening on http://127.0.0.1:9990/management
```

## Plugin Wildfly

12. Finalmente, utilizando um navegador acesse os endereços `http://localhost:8080` (raiz do servidor) e `http://localhost:9990` (administração) para confirmar a execução do servidor.

# Plugin Wildfly



## Welcome to WildFly

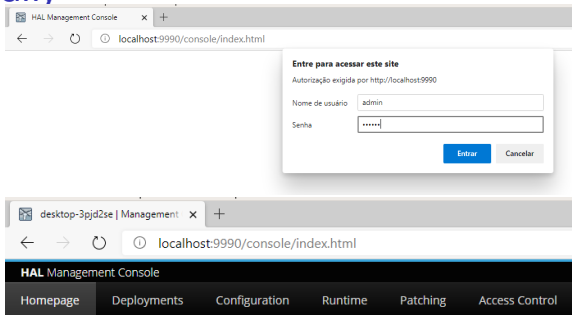
Your WildFly instance is running.

[Documentation](#) | [Quickstarts](#) | [Administration Console](#)

[WildFly Project](#) | [User Forum](#) | [Report an issue](#)

**JBoss Community**

# Plugin Wildfly



## HAL Management Console



### Deployments

Add and manage deployments

[Deploy an Application](#) | [Start](#)

Deploy an application to the server

1. Use the 'Add Deployment' wizard to deploy the application
2. Enable the deployment

## Referências

- ▶ Bond, M., et al. *Aprenda J2EE em 21 dias*. São Paulo, Pearson Education do Brasil, 2003.
  
- ▶ Deitel, P.; Deitel, H. *Java: como programar*, 8ª edição. São Paulo, Pearson Prentice Hall, 2010.