

# FTP Server Realization

The FTP Server functionality is implemented within the E2E Bridge using the [Java Services](#) mechanism: The Java based Apache FtpServer as integrated into the bridge as a frontend. The below describes how this import has been done for the presented example. For an easier example to use the Java Frontend please refer to chapter [Java Services](#).

To realize the presented example, some preparations have to be done on Java side and on Bridge side. The full Java source code is included in the example jar files.

## On this Page:

- [Preparations on Java side](#)
- [Preparations on Bridge side](#)

## Preparations on Java side

1. Implement the Java Interface "BridgeJavaService".

```
public class FtpService implements
BridgeJavaService<FtpServerCallback> {
    private FtpServer server;

    public void initialize(FtpServerCallback ftpServerCallback) {
        ...
        ...
    }
}
```

2. Provide an Interface to be Implemented by the Bridge.

```
public interface FtpServerCallback extends BridgeJavaCallback {
    public CallbackReply afterCommand(BridgeUser user, String command,
String argument, CallbackReply reply);

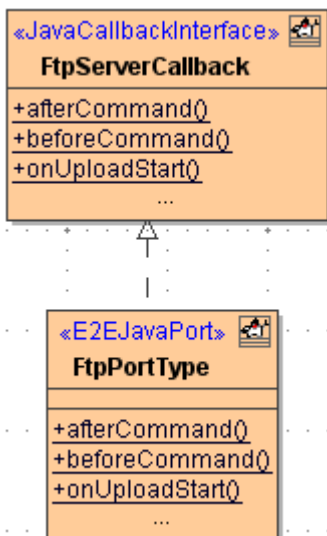
    public CallbackReply beforeCommand(BridgeUser user, String command,
String argument);

    public CallbackReply onUploadStart(BridgeUser user, String
uploadFile);
    ...
    ...
}
```

3. Prepare JAR-Files.

## Preparations on Bridge side

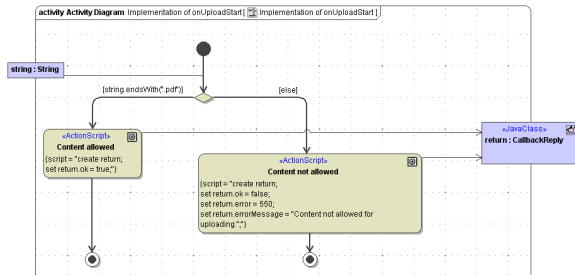
1. Import the Prepared JAR File.
2. Define an E2EJavaPort Implementing the Offered Interface.  
*Figure: FtpPortType implements the interface defined in Java*



The class `FtpPortType` needs to contain all the operations defined in the interface. For the presented FTP functionality scope, only a few of these operations are actually used. Some of them are implemented by a specifying activity diagram, others by an action script. Those operations that are not needed in the example and thus have no implementation are marked as abstract.

### 3. Implement Operations by Assigning Activity Diagrams.

Figure: Implementation of the operation `onUploadStart`



### 4. Run Component and Deployment wizards.

After completing the component and deployment wizards, the model is ready to be deployed.