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Platform

User Guide

SDK

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- Introduction to Studio
 - What is Studio used for
 - Main features
 - Integration elements
- Integration with other components
 - Frontend Editor
 - Process Designer
 - Enablers Framework GUI
 - Marketplace



Introduction to Studio

1. What is Studio used for?
2. Main Features
3. Integration Elements



Introduction to Studio

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Studio is the Integrated Development Environment (IDE) used to develop EFPF applications (vApps)

The screenshot displays the Studio Dashboard interface. On the left is a dark sidebar with navigation options: Dashboard, Workspaces (2), Stacks, Factories, and Administration. Below these are 'RECENT WORKSPACES' with a '+ Create Workspace' button and two workspace entries: 'wmsp-aj5q' and 'wmsp-zjal'. The main content area is titled 'Dashboard' and features a 'Recent Workspaces' section with a 'Create Workspace' button and a table of workspace details.

Recent Workspaces				
Create Workspace				
● che/wksp-aj5q	512 MB	1 project	vfos	■ ⚙️ ⊞
● che/wksp-zjal	512 MB	3 projects	vfos	■ ⚙️ ⊞



Introduction to Studio

- In order make developers' life easier, Studio setups automatically the development environment
- Studio does that through a stack that is a recipe containing all the dependencies needed to be installed in a certain environment, such as NodeJS and NPM

The screenshot shows the 'SELECT STACK' interface in Studio. It features a navigation bar with tabs for 'All', 'Quick Start', 'Single Machine', and 'Multi Machine'. There are also buttons for 'Filters', 'Add Stack', and a search bar. The main content area displays a list of stacks with columns for 'NAME' and 'RAM'. The stacks listed are:

NAME	RAM
vf-OS <small>Default vf-OS environment to build vApps</small> <small>NodeJS NPM Gulp Bower Yeoman</small>	2 GB
java <small>Default Java Stack with JDK 8, Maven and Tomcat.</small> <small>Ubuntu JDK Maven Tomcat</small>	2 GB
java-MYSQL <small>Multi-machine environment with Default Java Stack and MySQL database</small> <small>Ubuntu JDK Maven Tomcat MySQL</small>	



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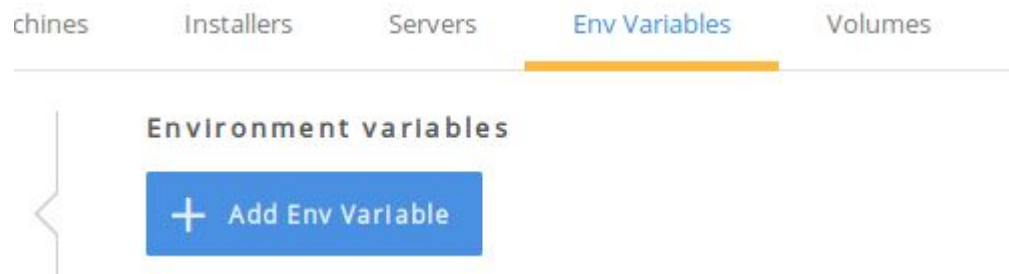
- Since the stack is already selected by default, the developer just needs to click on create button
- A new screen will be presented containing the workspace configuration
- A workspace is the developers' environment used to develop applications and store them



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- Studio uses environment variables to communicate with other components, such as Frontend Editor or Process Designer
- These variables are automatically configured, however, the developer is allowed to change them

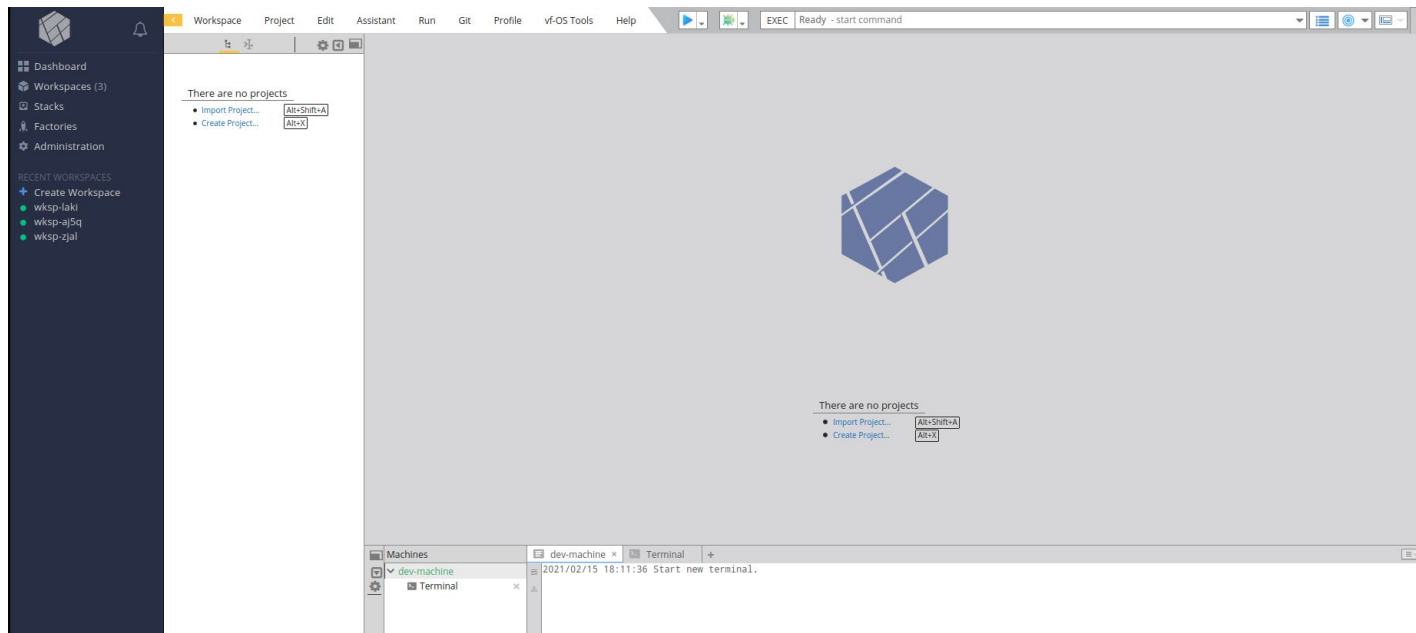




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- Then, the developer must tap the button “open” to instantiate the workspace, in the end, the development environment will be configured and launched





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- In order to create an application, we must click on “Create”, or “Workspace” and then “Create Project”.
- Both buttons will produce the same result, which is a window containing a set of project templates



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The screenshot shows the 'Create New Project' dialog box. On the left, there is a list of programming languages and frameworks with expandable dropdown menus:

- C
- C++
- CEYLON** (expanded): Ceylon
- GOLANG** (expanded): Golang
- JAVA** (expanded): Java
- NODE.JS** (expanded): Node JS
- PHP** (expanded): Composer, PHP
- PYTHON** (expanded): Python
- TYPESCRIPT** (expanded): TypeScript project
- VF-OS** (expanded): IO Component, vApp
- VF-OS SAMPLES** (expanded): vapp-template-sensor, vapp-template-storage

On the right side, there are configuration fields:

- Parent:** A text field containing the root directory symbol (/).
- Name:** A text field with the placeholder text 'Define the name of your project...'. A tooltip 'Create New Project' is visible above this field.
- Description:** A text field with the placeholder text 'Add a description to your project...'. A tooltip 'Create New Project' is also visible above this field.

At the bottom right, there are three buttons: 'Back', 'Next', and 'Create'. The 'Create' button is highlighted in blue.



Integration with other components

1. Frontend Editor
2. Process Designer
3. Enablers Framework GUI
4. Marketplace

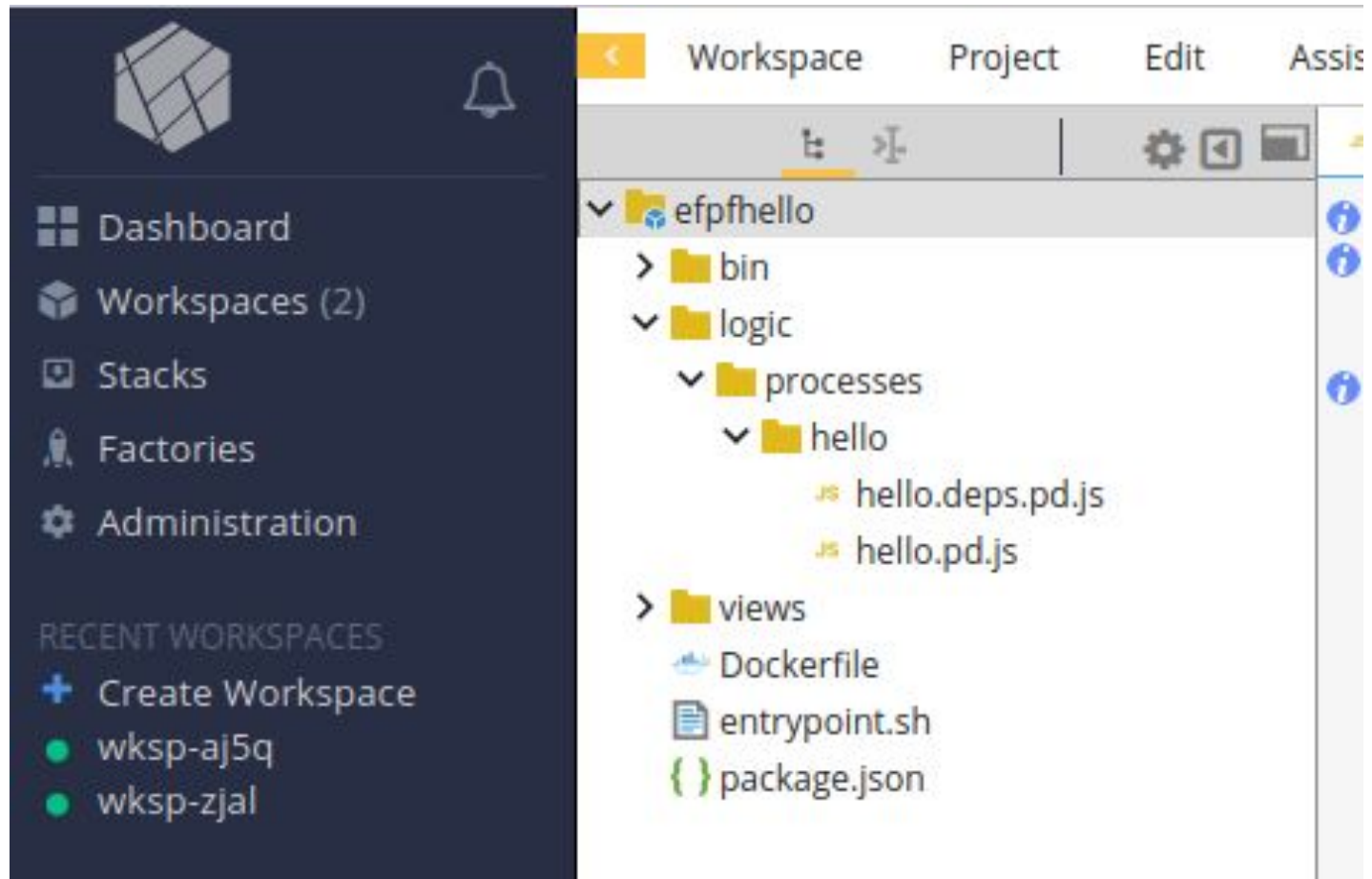


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- Each EFPF application contains three main folders:
 - bin - Place where configurations and libraries are being stored, **must not be changed**
 - logic - Folder where processes generated by Process Designer will be stored
 - views - Directory where Frontend Editor's output will be stored



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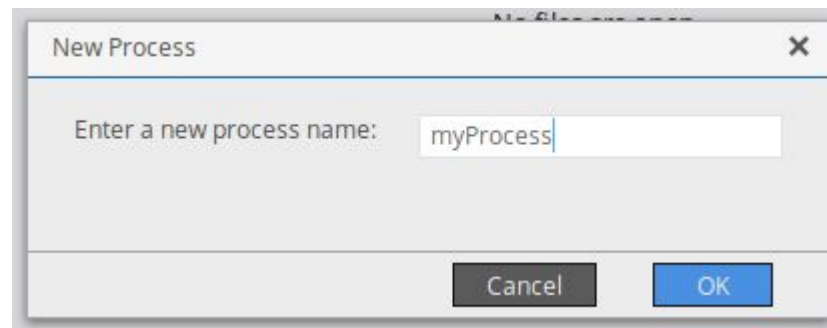
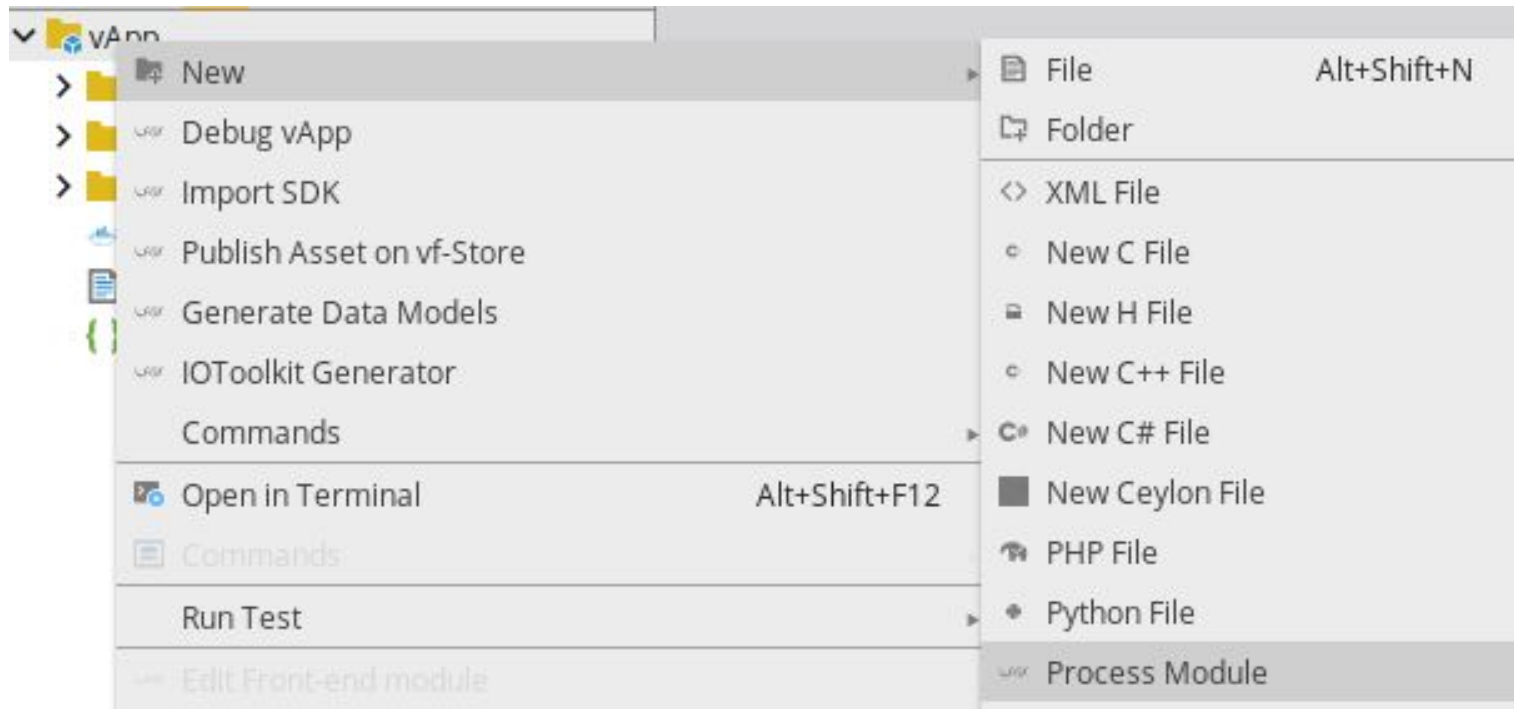


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- In order to develop an application we will start by the backend which is developed by Process Designer
- In order to access it, we must do a right click on project and then select “New” -> “Process Module”



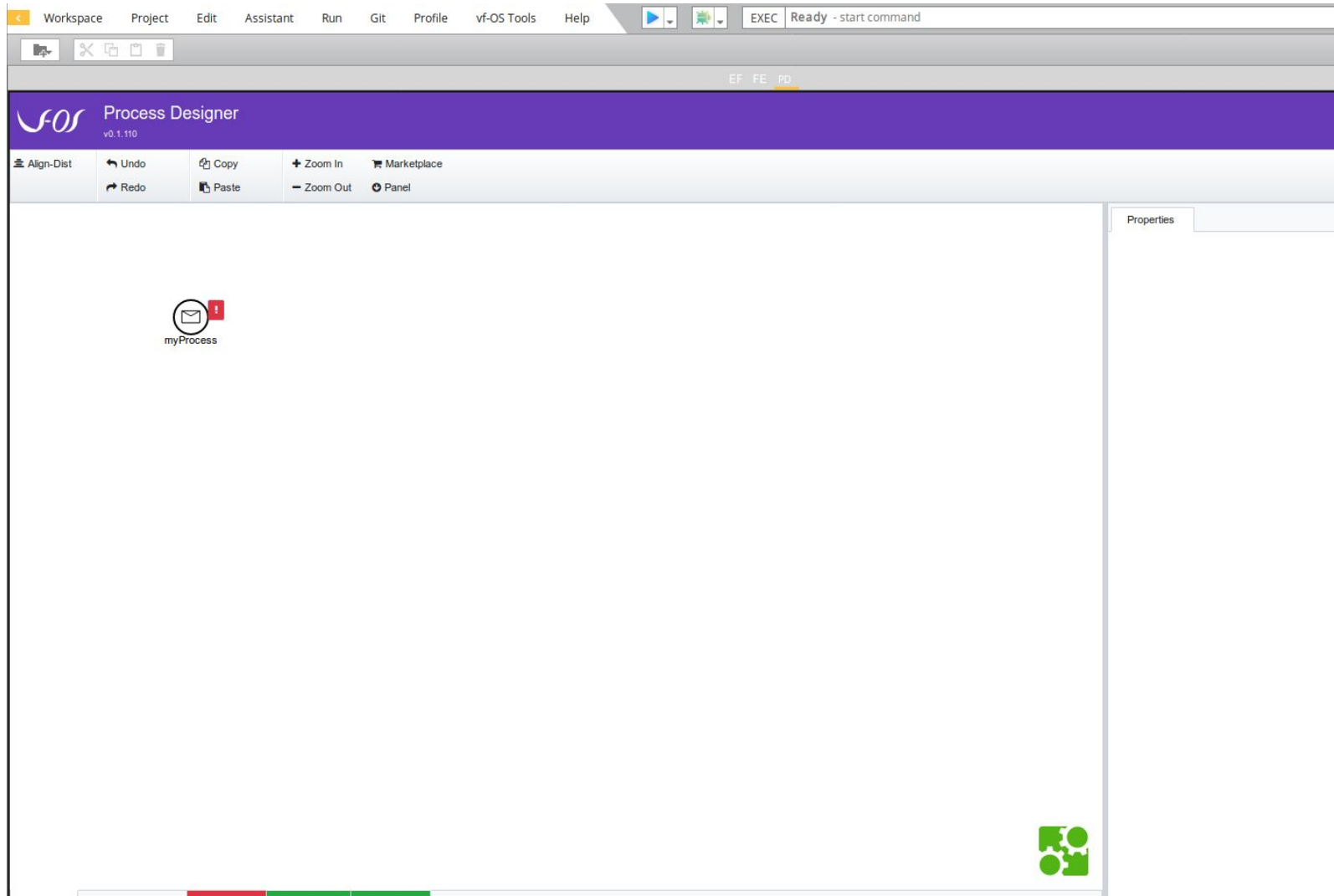
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Introduction to Studio





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- The Frontend Editor is the tool responsible to design user interfaces.
- In order to access it, we must do a right click on project and then select “New” -> “Frontend Module”



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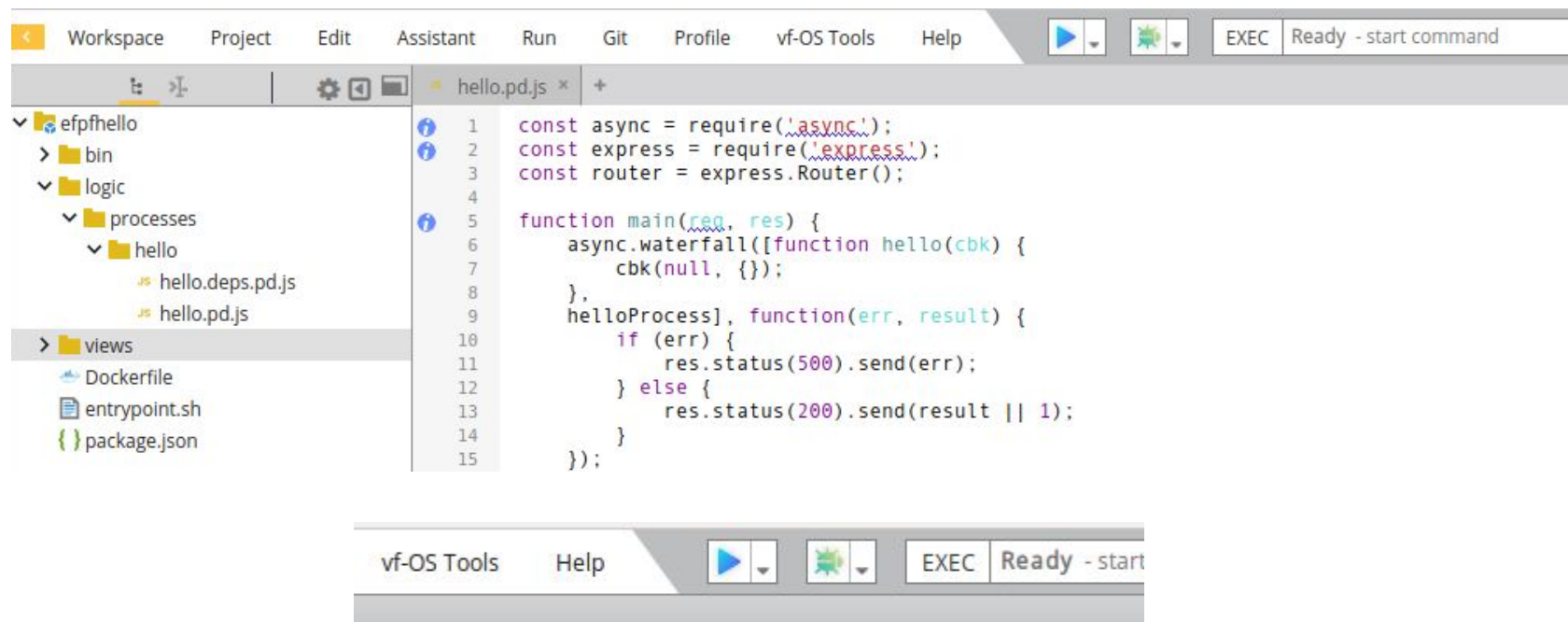
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The screenshot displays the Studio application interface. At the top, there is a menu bar with options: Workspace, Project, Edit, Assistant, Run, Git, Profile, vf-OS Tools, and Help. Below the menu bar is a toolbar containing icons for play, refresh, and execution, along with a status indicator showing 'EXEC Ready - start command'. The main workspace is a large, empty white area. On the right side, there is a vertical sidebar with a list of widget options: Add Data Source, layout, Header, Horizontal Tabs, Vertical Tabs, Horizontal Line, Footer, controls, text, tables, bar charts, line charts, radial charts, point charts, and samples. At the bottom right of the workspace, there are two circular icons: one with a trash can and another with a cloud. The version number 'v1.06' is visible in the bottom right corner of the interface.



Introduction to Studio

- The procedure to deploy an application locally is pretty easy, the developer just need to click on the play button.





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- The deployment process can be followed on the terminal, until it ends when the message “Done” is printed

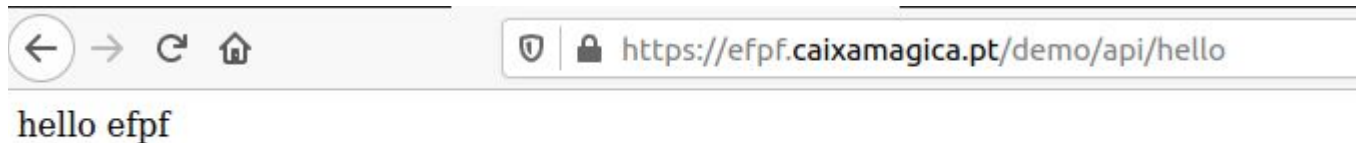
The screenshot shows the Studio interface with a terminal window open for the 'dev-machine'. The terminal output displays the following sequence of messages:

```
e1a110c0-f5ac-11e9-b4f2-f5a992ec748f
building
.....
e1a110c0-f5ac-11e9-b4f2-f5a992ec748f
local_install
.
e1a110c0-f5ac-11e9-b4f2-f5a992ec748f
done
.
```



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- In the end, the vApp will be available on:
 - `<platform hostname>/<AppName>`
- On this case, since we are running the vApp locally, will be:
 - `localhost/App/`
- Then, processes generated by Process Designer are available though
 - `<platform hostname>/<AppName>/api/<ProcessName>`





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- Enablers Framework GUI is available from vf-Studio like Frontend Editor or Process Designer. In order to access it, the developer needs to click on “vf-OS Tools”.

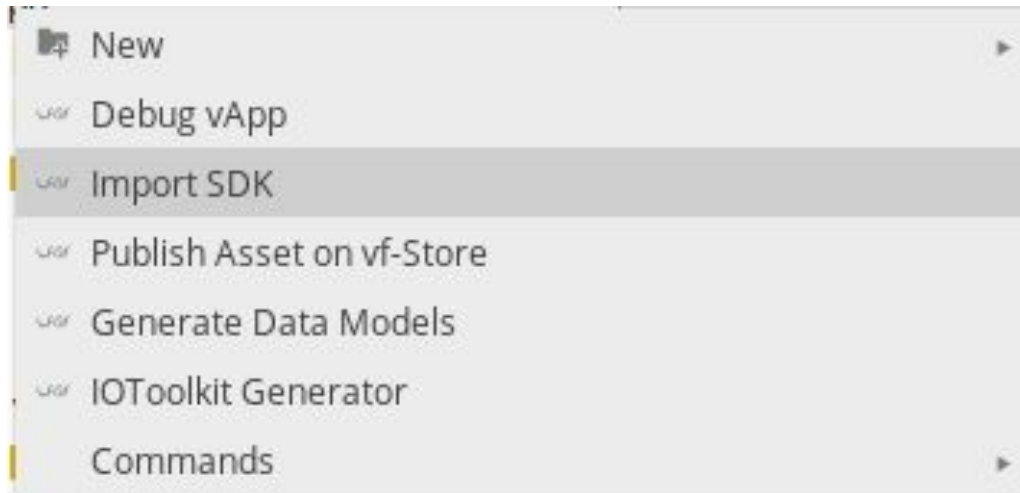
Name	Actions	Versions
keyrock	Edit Delete	Versions
notification	Edit Delete	Versions
orion	Edit Delete	Versions



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- In order to make the applications consume less resources, some libraries are not being imported by default such as pub / sub.
- If the developer wants to import them, they are accessible on “Import SDK” option.

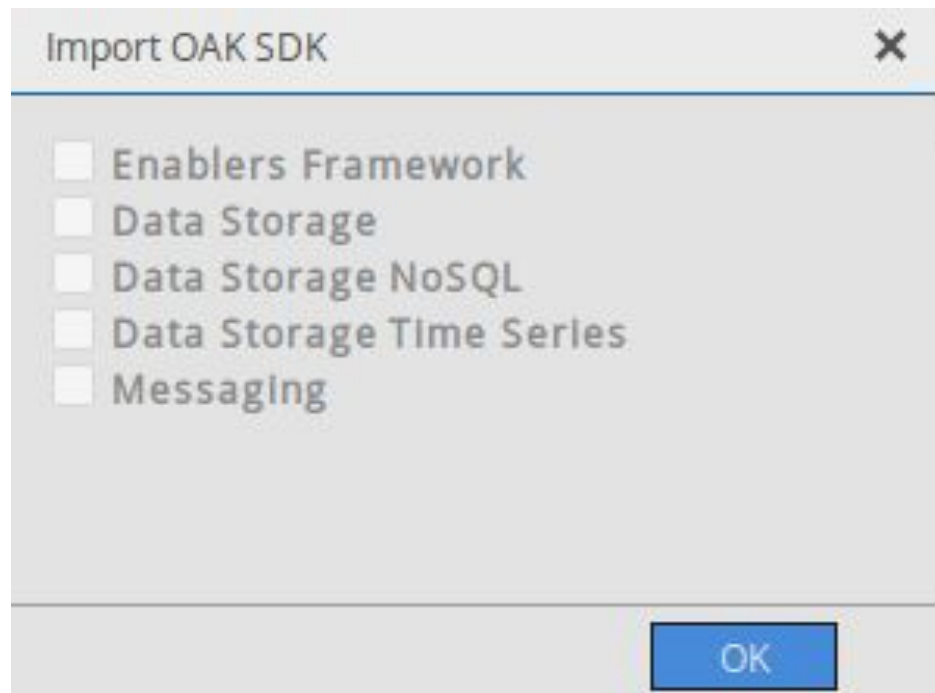




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- A new window is presented asking the developer to choose which libraries should be imported





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- Studio allows the developer to publish his applications on the Marketplace through the option “Publish Asset on vf-Store”
- A form will be presented asking for some information about the application.
- ProductID field is not mandatory to publish a new application. However, is needed to update an application.



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Publish Asset on vf-Store ✕

Username:

Password:

Asset Name:

Product ID:

Major:

Price:

Version:



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Thanks