

FuegoBPM Express Server 5 Documentation

Fuego, Inc.

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by Fuego, Inc.

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Chapter 1. FuegoBPM Basics

Business Services Orchestration

The FuegoBPM (TM) Suite embraces and extends the concept of Business Process Management (BPM) through its vision of Business Services Orchestration (BSO.)

BPM is a discipline that includes many different types of tools and methodologies. A simple process modeling tool, such as Visio, can be considered a BPM utility. Business Intelligence tools can be considered BPM utilities. True, in today's market more people are starting to see BPM as a new category of software that **automates business processes**. The problem is: what do we really understand by automating business processes?

- For the creators of BPEL, it is the organization in time of web services invocation
- For EAI fans, it is a state server that coordinates messages on a proprietary bus
- For some ERP vendors, it is the business logic embedded in an ERP system
- For traditional workflow vendors, it is the organization of the collaboration between people

FuegoBPM can be used to fit in any of the above visions, but they fall short of what FuegoBPM was meant to do.

For FuegoBPM, automating business processes consists of **managing the behavior of people, systems and organizations to orchestrate a repeatable business service**.

Therefore,

- FuegoBPM sees organizing the invocation of web services as managing the behavior of systems, and not all systems: only those exposed as web services.
- FuegoBPM sees a state server to coordinate messages as managing the behavior of systems, and not all systems: only those that have adapters into a proprietary messaging bus.
- FuegoBPM sees the business logic embedded in an ERP system as a service that manages the behavior of organizations limited by the rules in the ERP system. This service can be reused in the context of a cross application enterprise process.
- FuegoBPM sees the organization of the collaboration between people as managing the behavior of people.

Fuego's vision of BPM includes all the above visions in one single holistic vision: Business Services Orchestration. FuegoBPM sees anything a person, system or organization does within an enterprise as a **Business Service**. FuegoBPM provides all the necessary tools to **Orchestrate** composite business services using existing ones, manages and measures the service levels of those composite business services and continuously improves them.

This is what we call *Full Lifecycle Management of Orchestrated Business Services*.

To be able to do this, FuegoBPM provides the full set of tools that enables companies to:

1. Model Processes.
2. Transform Process Models into executable designs.
3. Simulate the execution of designs to study the feasibility of a service level.

4. Harmonize and catalog business services from existing systems to be able to use them regardless of what technology is used to expose them.
5. Catalog the different services from people that can be rendered by the organization and their availability in time.
6. Expose composite services that orchestrate services from systems people and organizations to be reutilized.
7. Monitor the orchestration in production according to the parameters set forth in the simulation.
8. Measure the performance of the process from a historical perspective.
9. Use statistical data to refine future simulations.

FuegoBPM can be used to manage the full spectrum of business processes, from the mostly automated (like BPEL) to the more collaborative processes like those that involve specialized workers and creative activities.

When designing with FuegoBPM, it is critical to understand that the Server was conceived to manage **behavior** rather than just to pass data. When working with a business service, the invocation of the service provokes behavior, when presenting a user with a work portal, the Work Portal suggests the adequate behavior to the user. Obviously, the user is free to do as he or she wishes, but it is very convenient not to need to remember the adequate behavior in each intervention in each process in which a user is involved. And, whatever gets done in effect by people, systems and organizations is logged into a process log that allows the tracking, tracing and measuring of performance.

Without any doubt, Business Services Orchestration is the most complete way to automate the management of a business process designed, for example, as a result of a six sigma exercise, ISO

compliance exercise or BPR exercise. Why?

Because the FuegoBPM Enterprise Server will elicit behavior that otherwise would have implied months of training and convincing, and eons of application integration.

Moreover, Business Services Orchestration is the easiest way to build composite apps that integrate existing ones and expose them as web apps or web services.

To provide the ideal Orchestration platform FuegoBPM has centralized all the design and development tools in a single environment: FuegoBPM Studio. As well the design can be previously defined in the FuegoBPM Designer and the development can be completed using the FuegoBPM Studio.

The orchestrations created in Studio run on an orchestration server that comes in two categories: Express and Enterprise.

The Express category of servers is designed for quick deployment of departmental and small business orchestrations that will require no administration or for proof of concept projects in their pre-rollout stage.

The Enterprise category of servers is designed for full featured Enterprise security, scalability and failover capabilities as well as to run inner-departmental and inter-enterprise processes.

What's FuegoBPM

FuegoBPM is a full-life cycle development and runtime environment for managing business processes from a Business Services Orchestration (BSO) perspective. This means that FuegoBPM focuses on managing the behavior of people, systems and organizations (through a process metaphor) to fulfill a measurable and repeatable business service that may span departments, divisions and company boundaries.

The full-life cycle development environment is FuegoBPM Studio.

Studio provides all the necessary functionality for a BSO approach towards BPM.

The full-life cycle runtime environment is provided through two runtime server editions:

- FuegoBPM Express - an entry level server that requires zero administration, fit for self-contained business services or for proof-of-concept projects.
- FuegoBPM Enterprise - the full fledged enterprise edition to run processes that span departments, divisions and enterprises with all the scalability, security and flexibility features you would expect from an enterprise grade product.

FuegoBPM caters to the needs of our customers in terms of TCO (Total Cost of Ownership) and ROI (Return on Investment). This is why we can really improve the way businesses run. FuegoBPM helps businesses increase operational efficiencies, reduce costs and increase profitability with an agile BPMS that can adapt to any budget and manpower. FuegoBPM allows companies to take control and tangibly optimize enterprise assets—applications, people and core business functions – and how they work together. With FuegoBPM, companies can quickly fill the gap between business strategy and execution in order to gain immediate payback.

FuegoBPM provides a BMPS software that makes the critical enterprise assets work the way you do and change as you change. By orchestrating applications, people and partners into executable, end-to-end processes that can be exposed as new composite business services, FuegoBPM fills the gap between business strategy and business execution.

FuegoBPM shields the process logic from the differences that arise from location (timezone, holidays, vacations, language), from IT infrastructure (MS, Unix, Legacy), from IT strategy (J2EE, .NET, Websphere, CORBA) and from the applications that contain reusable

services (SAP, Peoplesoft, I2, Siebel, legacy, etc.). Therefore, allowing non-specialized business analysts to model, design and change processes with no need to be domain experts.

FuegoBPM reduces complexity, enhances productivity and makes any company as competitive as its creativity allows (not limiting process automation to that which their enterprise software vendors provide.)

Introducing FuegoBPM Express

Overview

FuegoBPM Express is simple to install. It is a self-contained edition of the FuegoBPM (TM) runtime environment that:

- Is fully functional.
- Does not require configuration.
- Does not require administration.
- Is limited in terms of volume, scalability, adaptability, availability and security.

FuegoBPM Express is best suited for small and medium companies, self-contained departmental solutions in large enterprises and first-time BPM users at an enterprise level for proof of concept. FuegoBPM Express **is not meant to be an enterprise grade orchestration engine.**

FuegoBPM Express Description

FuegoBPM Express is the most economical edition of the FuegoBPM runtime environment or FuegoBPM Engine. It provides the full functionality of the FuegoBPM runtime environment: it runs any

project created with the FuegoBPM Studio (Fuego's Orchestration IDE.)

The limitations of FuegoBPM Express are not imposed on what it can or cannot do from an orchestration perspective, but in the architecture of the engine itself. FuegoBPM Express was designed for orchestrating business services in small and medium companies, for creating cost-effective, intra-departmental services, or for creating proofs-of-concept that need to go into limited production for a period of time before they are rolled out enterprise-wide.

For the above purposes, FuegoBPM Express was designed in so that:

- It is self-contained and installs from a single installation object.
- It does not require early intervention of IT specialists such as the DBA, the security expert, the Webmaster and other specialists to configure the engine correctly.
- It does not require a dedicated BPMA (Business Process Manager Administrator) to tune and control an engine or an engine farm.
- It does not require a dedicated system administrator to manage users, roles, etc.

At the same time, some limitations conducive towards the above-mentioned were necessary:

- It provides no utilities for administration.
- It is limited to a maximum of one project of no more than 16 processes per engine.
- It is limited to a maximum of 50 users per engine.
- It provides no failover capability.

- The engine itself cannot be configured using the company's infrastructure (RDBMS, Web Farm, App Server, LDAP, etc.) even though all of these can be used as components that are accessed by an orchestration.
- Scalability is limited to the capability of the internal RDBMS and web server.
- It does not support single sign-on.

System Requirements

System Requirements for FuegoBPM Studio (Development Environment)

Operating Systems

FuegoBPM Studio runs on the following operating systems:

Windows

- NT 4.0 Workstation (Service Pack 3 or higher)
- NT 4.0 Server (Service Pack 3 or higher)
- NT 4.1 Workstation
- NT 4.1 Server
- 2000 Professional or Adv. Server
- Windows XP
- Win 2003

UNIX

- Sun Solaris ver. 2.6 or higher (Java 1.4.2 support)
- Linux RedHat distribution ver. 6.x or higher
- Linux SUSE distribution ver. 6.0 or higher
- Compaq Tru64 (Java 1.4.2 support)
- UNIX (Java 1.4.2 support)
- HP-UX 11.00 (Java.1.4.2 support)

Disk Space and RAM

Successful installation of the FuegoBPM Express in a development environment requires the following:

- 350 MB of free disk space.
- 256 MB RAM minimum. 512 MB recommended.

System Requirements for FuegoBPM Express (Production Environment)

Successful installation of FuegoBPM Express runtime environment requires:

- 350 MB of free disk space.
- 256 MB RAM minimum. 512 MB recommended.

Introduction to the FuegoBPM Express

Administration Guide

FuegoBPM Express Installation

FuegoBPM **Express** installation makes it easy to deploy your projects in a production environment.

After installing FuegoBPM Express some directories are generated. The most relevant ones are:

bin directory

This directory contains all the executable files to run FuegoBPM. The most important one is the *fuegoexpress* executable that runs FuegoBPM Studio

log directory

All FuegoBPM internal log files are saved in this directory. Fuego support team might require these log files while providing you support.

The following files can be found in this directory:

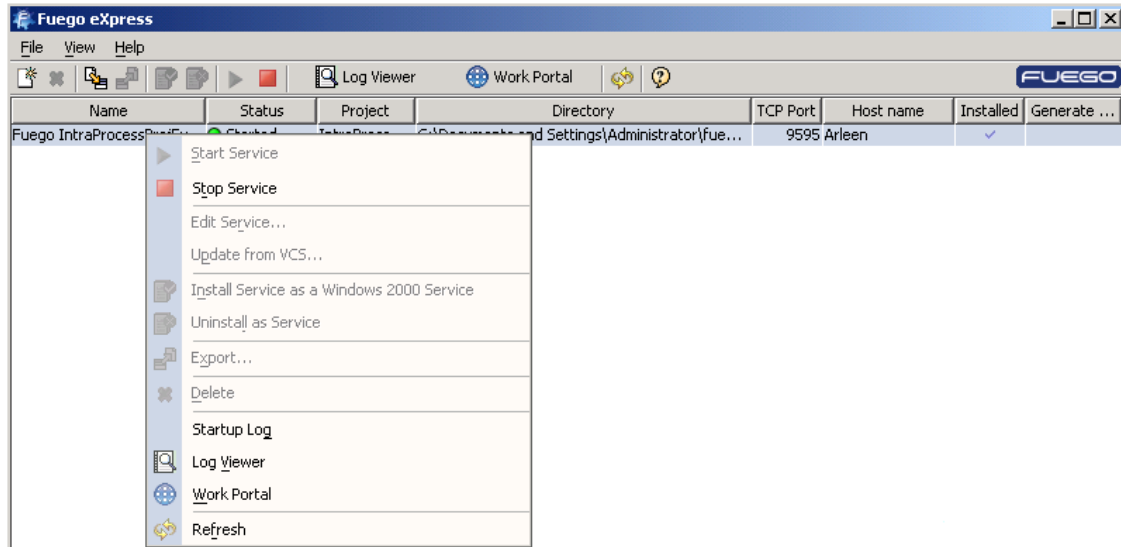
- **eXpressStdout.log, eXpressStderr.log** : these are the console output of the Express. These files are overwritten each time Express is started.
- **Fuego_eXpress_5.0_InstallLog.log**: is the log file generated during installation.

To deploy your projects in the production environment, you need to install them in the FuegoBPM Express tool.

Starting a service

Once you have started a service, a **Startup log** is generated.

Right click on the started project and select the **Startup log** option.



This file might be required from the Fuego support team while providing you support.

JSP Support

Using Fuego Objects from JSP pages

If you are using Fuego Objects from JSP pages you must:

1. Copy the *catalog.jar* file to the *\$INST_DIR/webapps/portal/WEB-INF/lib* directory.
2. Copy the *jsp* file to the *\$INST_DIR/webapps/portal/customjsp* directory.
3. Deploy the project.
4. Launch FuegoBPM Work Portal.

If the service was up, you must stop it and restart it again. Otherwise, the copied jar is not available.

Architecture

FuegoBPM is a full-life cycle development and runtime environment that provides the complete functionality to achieve a seamless solution to integrate, design, deploy and evolve your most important enterprise activities.

FuegoBPM Designer is the entry point to start developing your business processes. Process designers begin creating a project and model the processes but they don't have to focus on the technical issues to implement them.

FuegoBPM Studio is another entry point to start developing your business processes by creating a project.

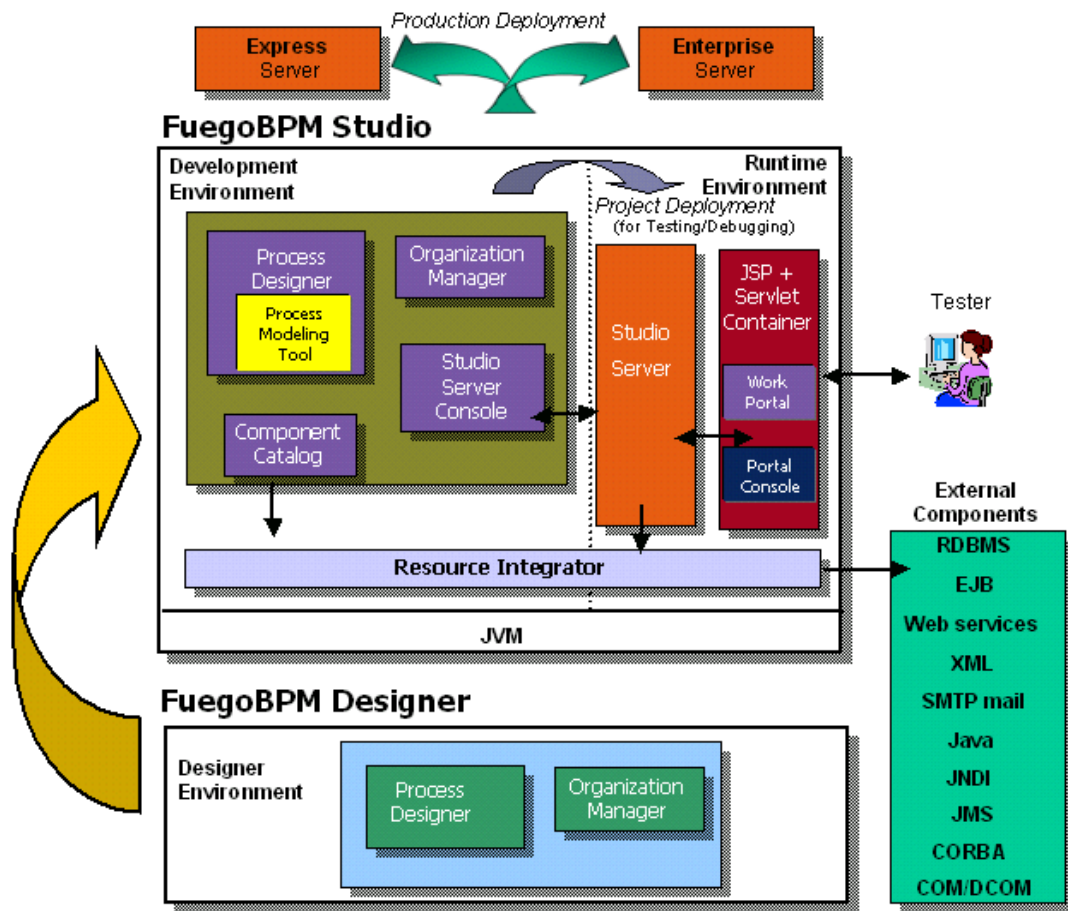
It can be easily installed and provides the most complete **development environment** that allows developers to model processes.

Once the project has been developed, with no additional installation steps or third party products needed, it can be deployed in a **runtime environment**.

FuegoBPM Express provides the full-life cycle runtime environment through a runtime server edition that requires zero administration. It is tailored for self-contained business services or for proof of concept projects.

FuegoBPM Enterprise the full fledged enterprise edition to run processes that span departments, divisions and enterprises with all the scalability, security and flexibility features you would expect from an enterprise grade product.

The following graph shows the environment elements and the interaction between them.



The designer environment

FuegoBPM Designer capabilities allow a **business analyst** to create a project to model the appropriate business processes, including their activities, the transitions between each activity and the roles associated to each of them. No scripting tool is needed at this point.

To manage process participants, FuegoBPM Designer allows you to define the **Organization**, any divisions or organizational units, process roles, users and any calendar rules that may apply. This enables organizations to manage what people participate in a process, when they participate, and the scope of authority they have. For processes that span corporate boundaries, directory service referrals are performed.

The development environment

FuegoBPM Studio has the same capabilities to create a project to model the appropriate business processes as the FuegoBPM Designer.

As part of its development environment, for each activity within the process, the business analyst uses **Methods**, a simple scripting tool, to define the appropriate business rules.

FuegoBPM Studio also manages process participants, and allows you to define the **Organization**.

For processes requiring integration with applications, FuegoBPM processes communicate with these underlying application services through components. Components are also cataloged for use through **FuegoBPM Studio**. Separately licensed "technology adapters" are used to connect to common industry standard technologies such as Java, EJB, COM, CORBA/IDL, JDBC/ODBC, XML, JMS and other middleware. The technology adaptors connect to this standard technology instead of a particular application. This allows the component **Catalog** to connect to any object. It has the ability to introspect any object technology and read its methods and properties to create a "wrapper" that directly interfaces with it.

The runtime environment

FuegoBPM Express is a runtime environment designed in such a way that:

- It is self-contained and installs from a single installation object,
- It doesn't require early intervention of IT specialists such as the DBA, the security expert, the webmaster and others to configure the server correctly,
- It does not require a dedicated BPMA (Business Process Manager Administrator) to tune and control a server,

- It does not require a dedicated system administrator to manage users, roles, etc.

FuegoBPM Enterprise is the full runtime environment designed to run processes that span departments, divisions and enterprises.

Once the project modeling stage is complete, the project can be published and installed in the **runtime environment** where the modeled processes start executing.

The runtime environment runs over a different Java Virtual Machine to keep project execution isolated and separated from development changes.

The runtime environment is initiated when the Server is started or when a **Publish & Deploy** operation is performed. From that moment on, to keep the runtime environment updated with the last changes made to the project model, FuegoBPM provides functions that synchronize the **runtime environment** with the **FuegoBPM Studio development environment**.

When the project is **Published and Deployed**, the business rules written in **Fuego Business Language (FBL)** are transferred into Java classes. The business process model is interpreted by the Server directly.

The resultant Java classes are the executable business processes referred to as *supervisory applications*. Then, processes are deployed to the **FuegoBPM Server**, which ensures that each process is executed. The Server communicates with the directory service to determine which processes it will run, which participants will be involved and which components it will use.

When the FuegoBPM Server is started, it is ready to run the supervisory applications to perform the business process by connecting process participants, third party applications and data.

The FuegoBPM Server maintains the state of each executing process

instance, regardless of whether it runs for a few minutes or for months at a time.

When a process activity requires human participation, the FuegoBPM Server *pushes* work to the Organization Participants in charge of doing the job. Participants will have access to the pending work and may access Work Portal through any Internet browser. Work Portal enforces the roles and permissions as defined in the Organization settings and only displays activities relevant to the participant who is currently logged into Work Portal. Additionally, users may interact with or start a process from third-party applications.

FuegoBPM Server and **FuegoBPM Work Portal** execute in the **runtime environment**. All changes to the project model are applied to this environment during Publish and Deploy and every time the server is started.

Changes made to the Organization settings are applied to the **runtime environment** provided that **Refresh Server Data** option is performed from **FuegoBPM Studio**. This function also forces all the changes made to FuegoBPM Work Portal Views to be applied with no delay to the runtime environment in all FuegoBPM Work Portal sessions.

Internationalization

FuegoBPM supports multiple languages for **FuegoBPM Studio** or **FuegoBPM Designer** as well as for the **project definition and design**. The internationalization (i18n) follows the standards to internationalize software.

FuegoBPM Studio and FuegoBPM Designer

You can configure FuegoBPM Studio and FuegoBPM Designer either in English or Spanish (default languages). The language is set at installation time.

If any other language is required, contact your Fuego representative.

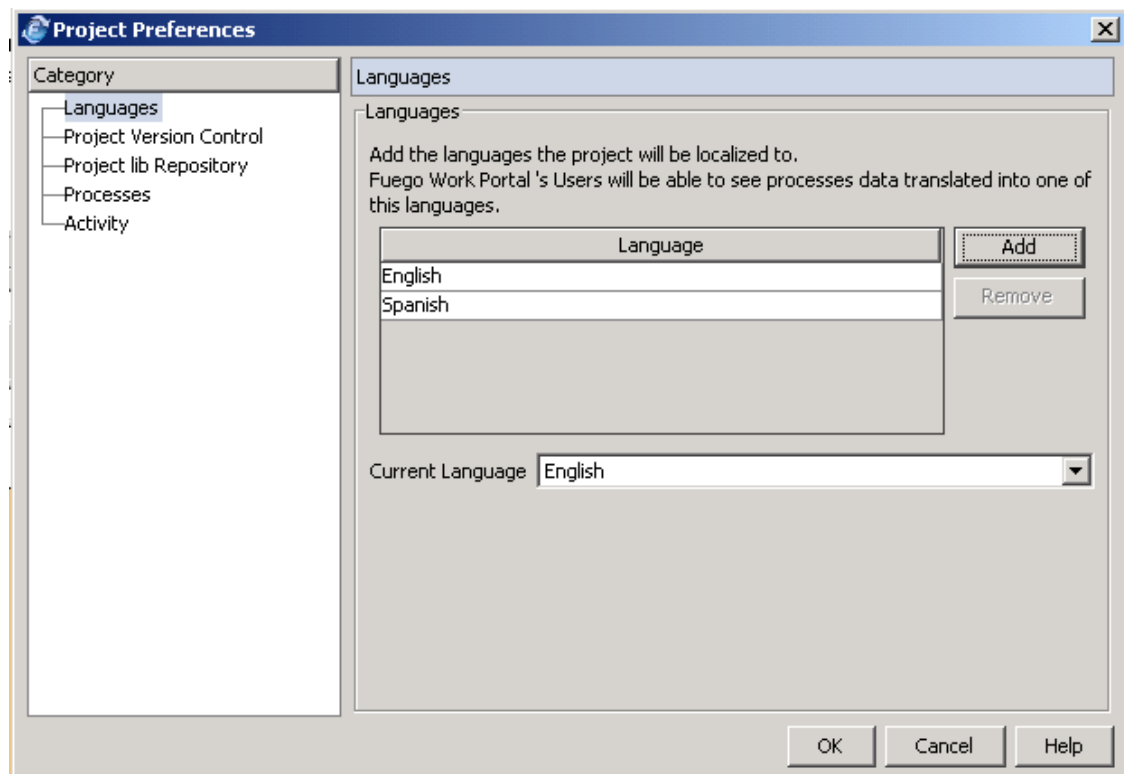
Once FuegoBPM Studio or FuegoBPM Designer are installed, if you want to switch between languages, select from the **View** menu, the **Language** option.

The project languages

In FuegoBPM Studio/Designer, the project can be internationalized; this means that you can write information in different languages. For example, for a *process* you can internationalize the label, description, documentation, use cases, as well as for *Activities* and their corresponding documentation.

The available languages for internationalization are those enabled in the **Project Preferences, Languages** category.

You have to add all the languages in which the designers need to localize all definitions.



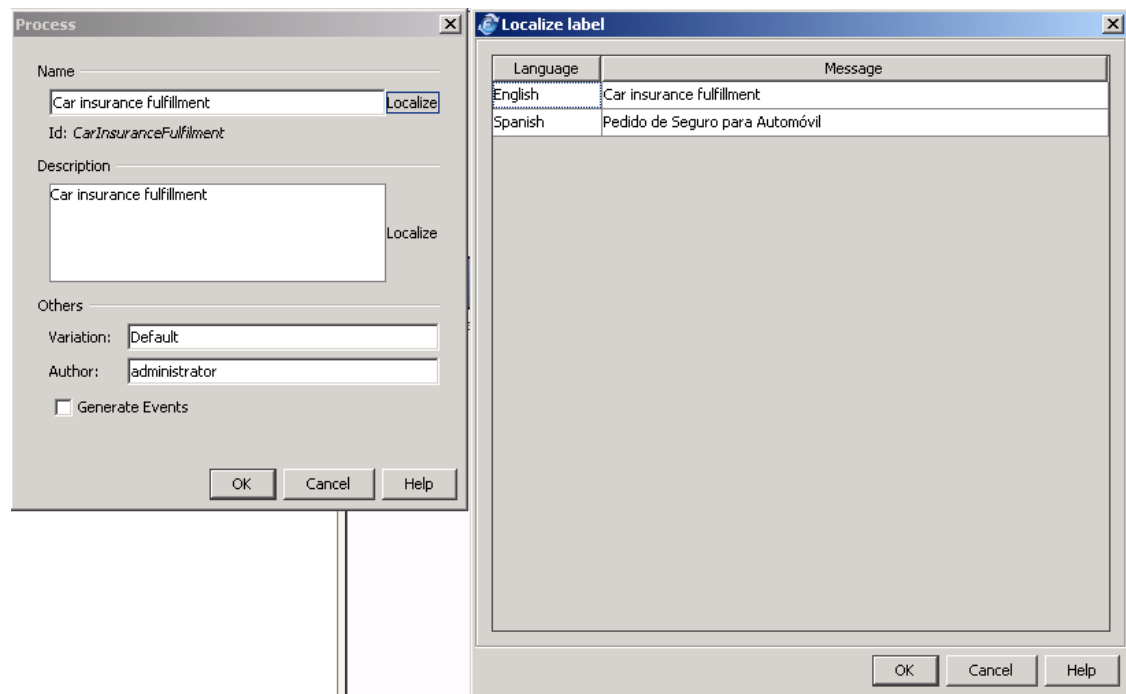
The **Default Language** indicates which language will be used to display labels and information on the developer workspace.

Whenever you see a **localize** option, you will be able to write in the languages defined in the project.

For each project, you need to define what languages the people using the project will require and enable such languages in the project preferences.

For example, if you have Spanish-speaking participants you need to add Spanish to this list.

If enabled, as the designer defines names, descriptions, and so on, they can be **localized**. The list of all enabled languages populate and they can be completed in the different languages.



Elements that can be localized are the ones that are visible for participants in the Work Portal. When a participant changes his or her language in the Portal, all elements are displayed in the corresponding language. This is why it is very important to localize all the elements of the project for all participants.

For example, you set your language option in the Work Portal to English:

Options		Help
User Information		
Full Name:	fuegouser	
Login Name:	fuegouser	
E-mail:		
Browser settings		
Enable Flash version menu:	<input type="checkbox"/>	
Enable DHTML support:	<input checked="" type="checkbox"/>	
Settings		
Sort instances by:	Received	
Instances order:	Ascending	
Instances date format:	10:40 AM, 8 Oct, 8 Oct 1980	
Show hidden views:	<input type="checkbox"/>	
Follow the Instance:	<input type="checkbox"/>	
Notify me by e-mail when new instances arrive:	<input type="checkbox"/>	
Keep instance view:	<input type="checkbox"/>	
Enable applet for attachment management:	<input type="checkbox"/>	
Enable remote scripting for FuegoObject presentations:	<input checked="" type="checkbox"/>	
Show applications:	In a folder	
User Working Directory:	/temp/	
	(Including last path separator, ie.: 'c:\temp\').	
Maximum number of searches in history:	10	
Display options		
Number of instances:	10	
Language:	English	
Country:		
TimeZone:	GMT-03:00	
<input type="button" value="Save"/> <input type="button" value="Close"/>		
FuegoBPM™ - Work Portal		

Therefore, all the activities names as well as the process name appear in English in your WorkPortal:

FUEGO Work Portal Welcome, fuegouser Search - Options - Help - Logout

Applications

Description	Process	Documentation
New request	Car insurance fulfilment	

FuegoBPM™ - Work Portal

Now, if you change the language to **Spanish**:

Display options

Number of instances: 10

Language: **español**

Country:

TimeZone: GMT-03:00

Save Close

Then the Work Portal is shown in **Spanish** as well as all the design elements that you localized during project development. In the example below the activity name was changed from **New request** to **Nuevo pedido** as well as the **process name**:

FUEGO Work Portal Bienvenido, fuegouser Buscar - Opciones - Ayuda - Salir

Aplicaciones

Descripción	Proceso	Documentación
Nuevo pedido	Seguro de Automóvil	

FuegoBPM™ - Work Portal

Chapter 2. Working with FuegoBPM Express

FuegoBPM Express Production Environment

Once the Development phase using **FuegoBPM Studio** is finished, FuegoBPM **Express** installation makes it easier to deploy your projects in a Production Environment.

FuegoBPM Express provides an application that allows for quickly deployment of your project either from a local file or from a Version Control Repository.

As a result of using **FuegoBPM Express** for deployment, your project can be configured to start automatically when the operative system starts.

There are two stages when deploying a new project. The project is first **registered** when it is created. Then, it can be **installed**.

Note



FuegoBPM Studio and FuegoBPM Express manage their own databases so instances created using the Studio will not be available in the FuegoBPM Express environment

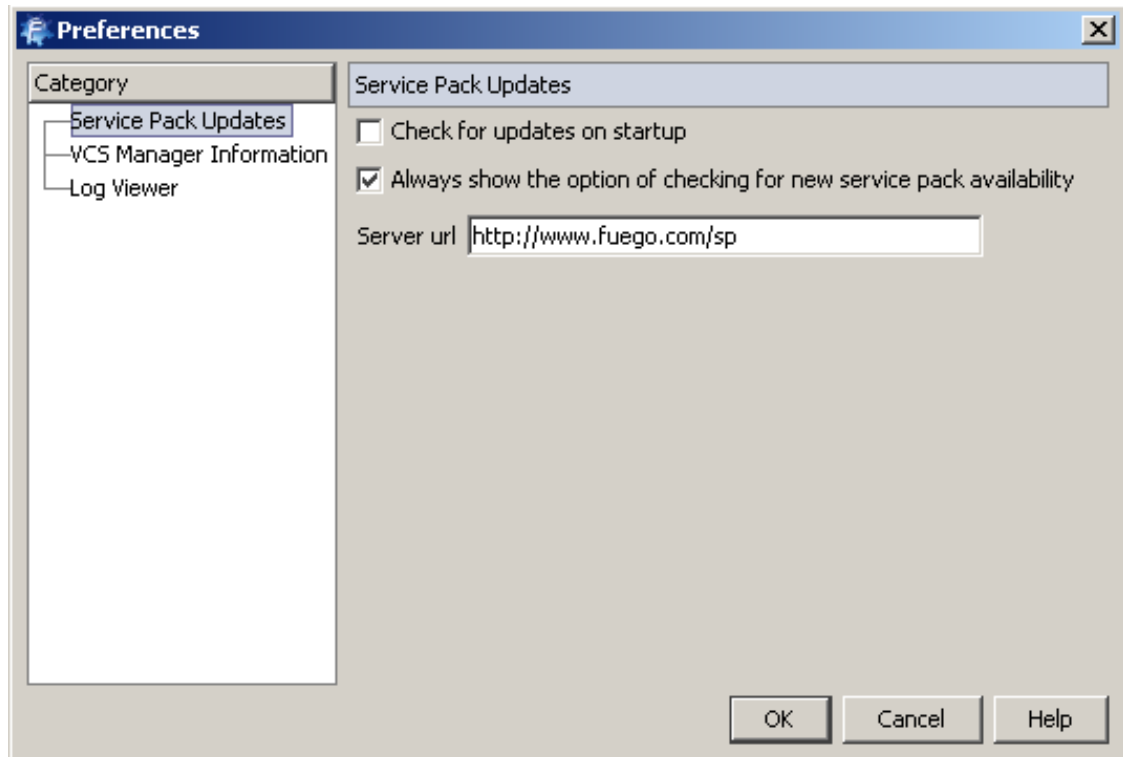
Setting FuegoBPM Express preferences

To set FuegoBPM Express preferences, open the **Preferences** option from the *File* menu.

Service Pack Updates

Select the *Service Pack Updates* category and set the corresponding

values.



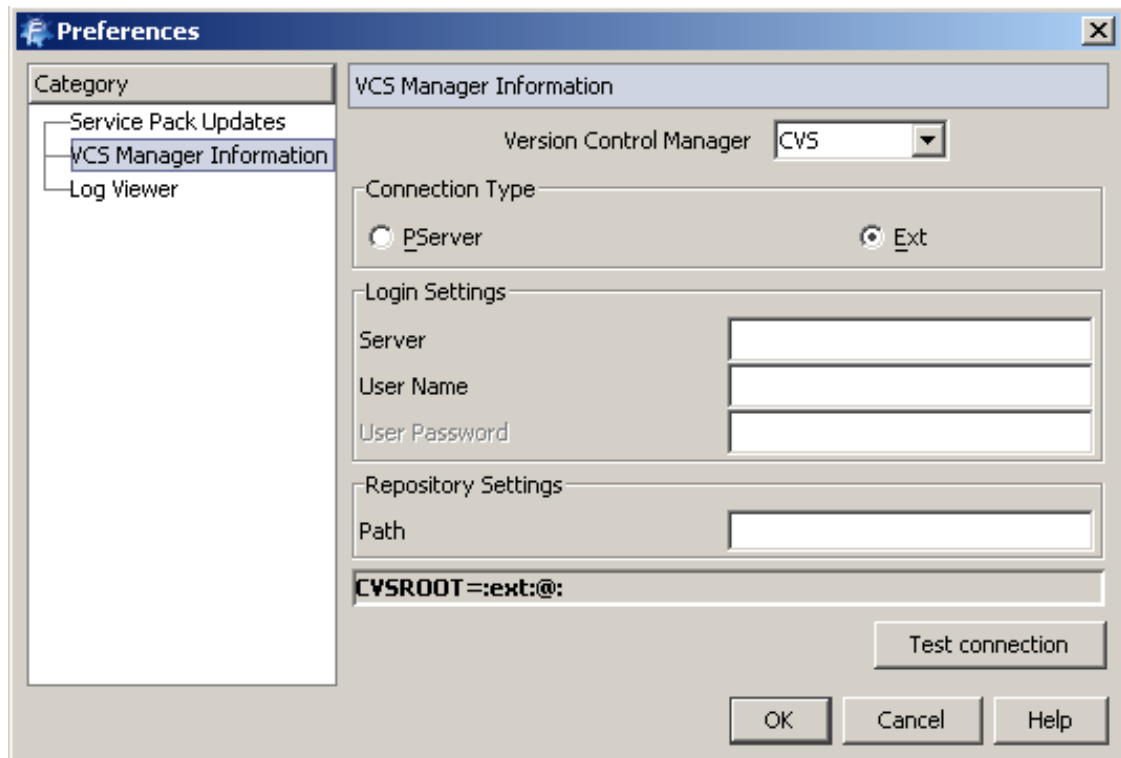
Check for updates on start up: You can set the Studio to automatically check for new updates each time you launch the product. The updates are downloaded from the URL defined below. If any problem arises with such URL, a log is posted to log/studio.log

Always show the option of checking for new service pack availability: If this option is enabled, when starting the FuegoBPM Studio, you are invited to check for updates.

Server URL: Indicates the URL from where new updates are downloaded.

VCS Manager Information

Select the *Project Version Control* category and set the corresponding values.



Using CVS as Repository

General Description of CVS

CVS is one of the version control systems you can use as a repository.

The CVS repository stores a complete copy of all the files and directories which are under version control.

Normally, you never have direct access to any of the files in the repository. Instead, you use CVS commands to get your own copy of the files into a working directory and then work on that copy.

When you have finished a set of changes, you check (or commit) them back into the repository. The repository now contains the changes you have made. It also records exactly what you have changed, when you have changed it and other similar information. Note that the repository is not a subdirectory of the working

directory, or vice versa; they should be in separate locations.

Implementing the repository with CVS

This section explains how to configure and use the CVS implementation.

After selecting the CVS as the VCS provider, you must configure the CVS properties:

About the Manager for CVS:

- **Connection Type**

- *PServer*: Available.
- *Ext*: Available.

- **Login Settings**

- *Server*: Name of the server where the CVS Repository is running.
- *User Name*: Name of the user in repository.
- *User Password*: Password for the user in the repository.

- **Repository Settings**

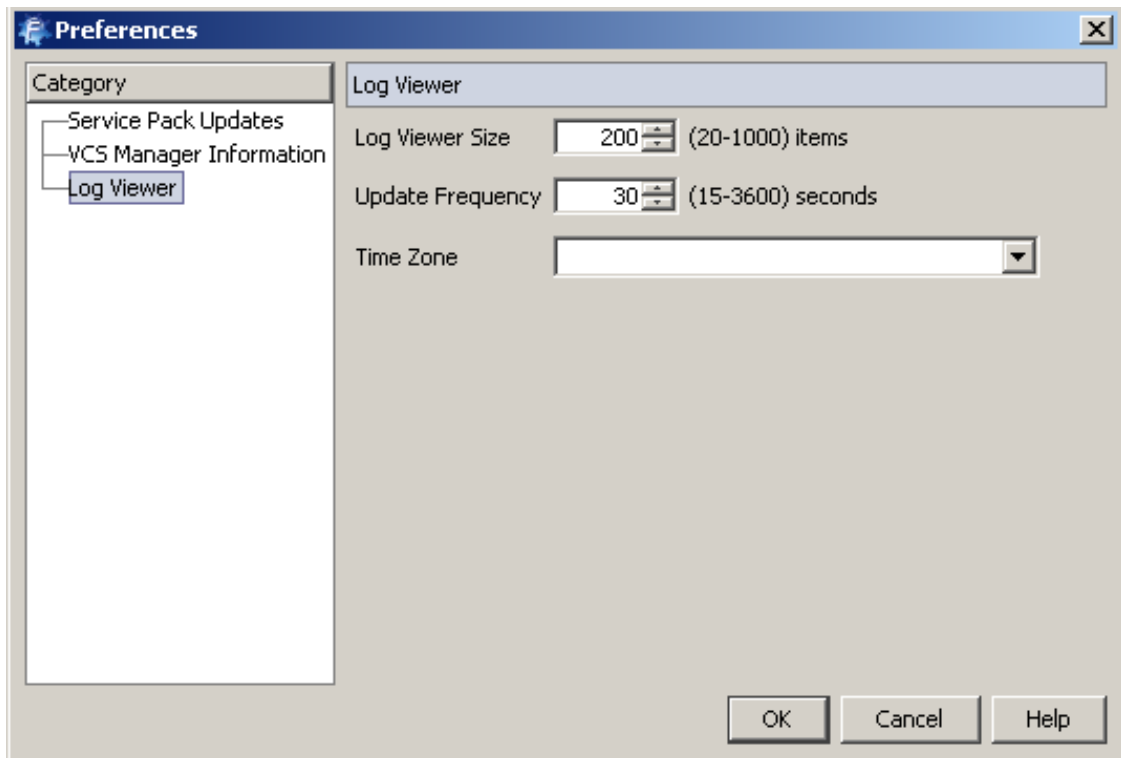
- *Path*: Here you have to indicate the root path of the repository. Under this path, the catalog and processes directories will be placed.

All the above information will form the **CVSROOT** variable.

Once you have configured the CVS connection settings, test the connection by clicking the **Test** button to ensure that the configuration is correctly done.

Log Viewer

Select the *Log Viewer* category and set the corresponding values.



1. In the **Log viewer size** field, type the number of items in the log viewer size field. This indicates the number of items or rows that will be shown in the viewer.
2. Type the **Update frequency** rate. This number indicates the frequency with which the viewer will be updated. The server is constantly writing information to the log file. The viewer will be updated automatically at the interval that is specified in this field.
3. In the **Time zone** field, choose the Time zone with which you

want to view the log files. Time zone impacts on how you see date and time of log items. If you don't specify any Time zone, Log Viewer gets the default TimeZone for the host where FuegoBPM Studio is running.

Express Service Pack Update

FuegoBPM Express Service Pack Update

Express local update

FuegoBPM Express is automatically updated through Service Pack version releases.

To update FuegoBPM Express

1. Download the Service Pack (*.upd* extension) to your computer.
2. Launch FuegoBPM Express.
3. Select **Express local update** from the **File** menu. Once the file is selected and confirmed, the upgrade takes place.

Checking for updates

You can set the FuegoBPM Express preferences to automatically check for new updates each time you launch the program. If you prefer to check for updates manually, you can select **Check for Updates** at any time from the **File** menu.

Chapter 3. Project and Services in FuegoBPM Express

Register and Install a Project

Registration of a project makes it possible for the project to be executed for testing purposes. But it is not an Operative System service yet. Therefore, it cannot be configured to start automatically.

Any user is able to **register** a project irrespectively of the privileges he or she has. Projects that are registered but not installed can be executed provided that **FuegoBPM Express** application is running. When **FuegoBPM Express** is shut down, the registered projects are also stopped.

While the project is registered but it has not been installed, it is only visible for the user who has created it.

Users who register a project can fully test the execution of all the project's components. Once the test stage is complete, they have the possibility to **export the service** into a file and **send it to the administrator user** for him to import it and install it later.

Installation step sets the project as an Operative System service. Therefore, once the project has been installed, it can be viewed not only from **FuegoBPM Express** application but also through the services console that is available in your operative system. You can configure the service to start automatically when the host where it resides is started.

Once a project has been installed and started, it remains available and can be executed no matter whether FuegoBPM Express is currently running or not.

Since installation involves modification of very important operative system variables, only users with **Administration** privileges can perform this operation.

Installed projects are visible in the services list of any user using **FuegoBPM Express**.

In Windows Operative System, the project will be registered as a new **Service** and, as such, it can be configured to start automatically from Windows Services console.

In other operative systems, an executable application is created for each project deployed and moved to the initialization directory of the operative system.

While you are developing a project using FuegoBPM Studio, you can configure a Version Control Repository where to check in your Project information and all changes made to the project design.

If you set your Version Control preferences in **FuegoBPM Express** as they are in FuegoBPM Studio, all changes made to your project after the deployment in the production environment can be updated from the repository where the project resides to the project installation location.

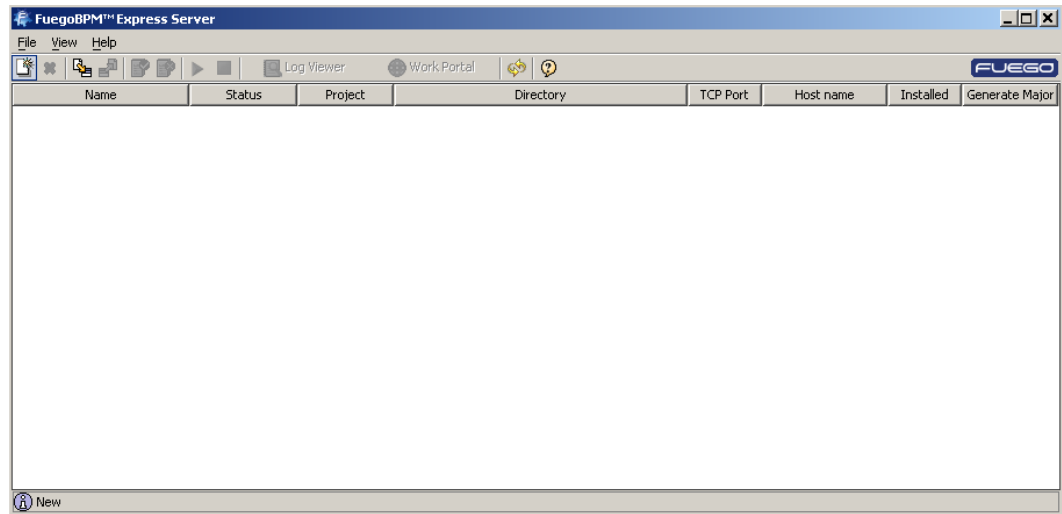
If no Version Control preferences are set, the project must be first exported from **FuegoBPM Studio->File->Export Project** option to be later installed in the production environment.

Deploy New Project

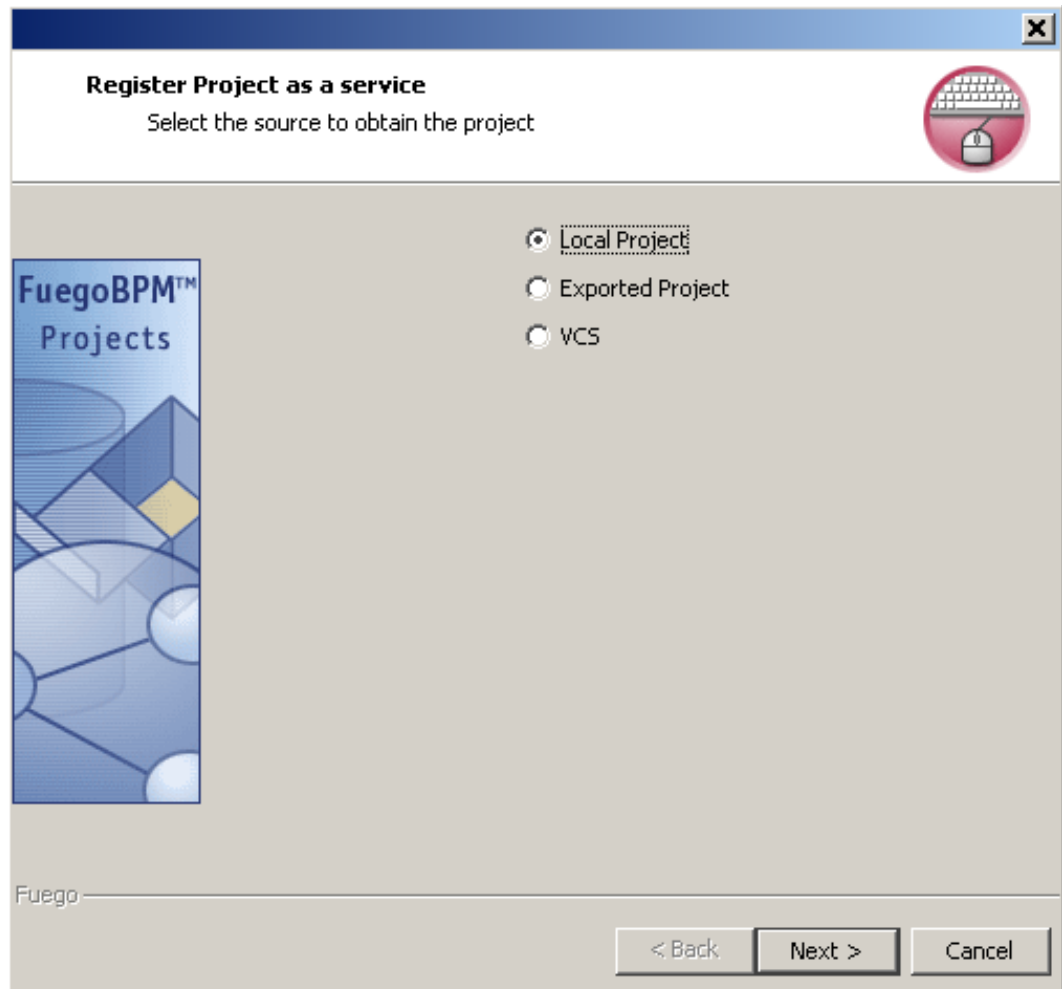
To deploy a new project in the runtime environment, first of all, if you are editing the project in the Studio, **close** it. Then:

1. Click on **FuegoBPM Express** icon . The application displays:

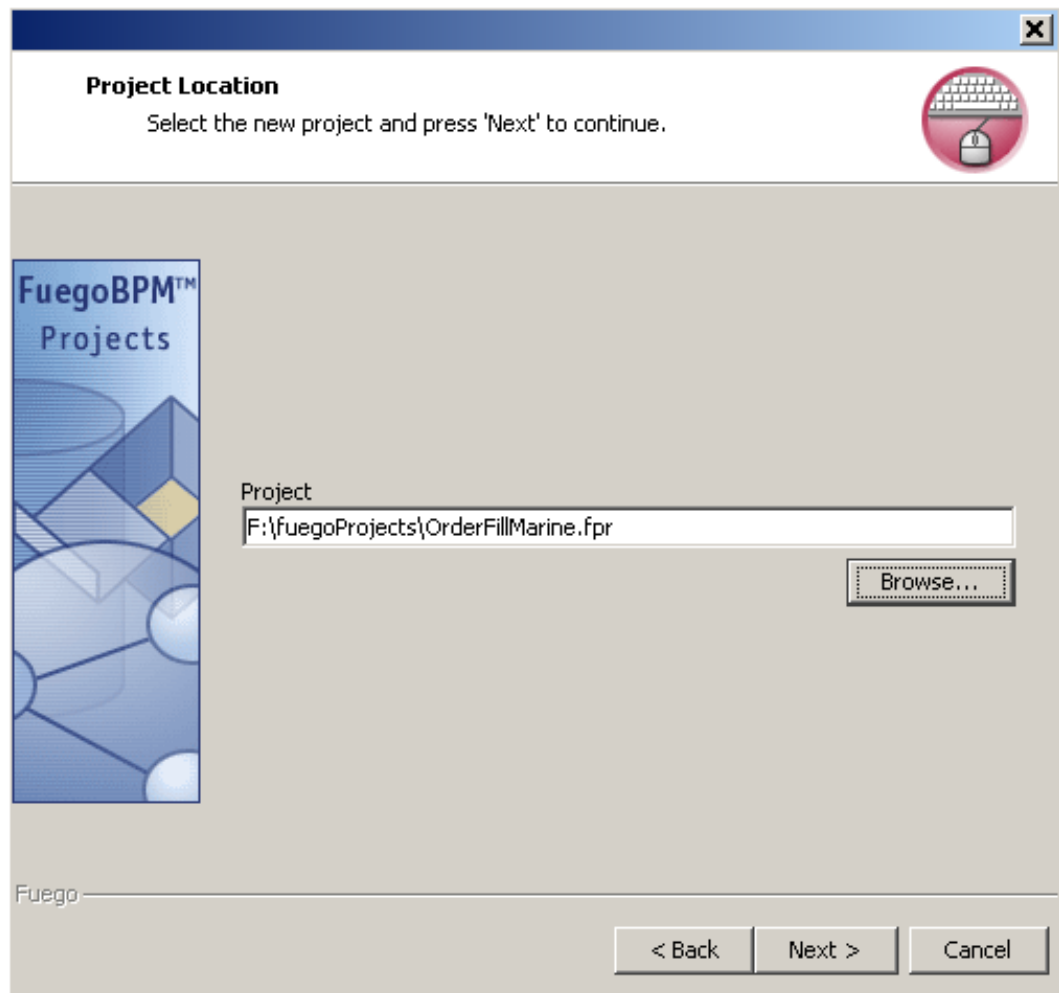
Project and Services in FuegoBPM Express



2. Click the **New**  icon. The wizard appears.



3. Select the source to obtain the project from. Select **Local Project** if the project is located in the local machine. Select Exported Project option if the project you want to install was exported using **FuegoBPM Studio** export project option. Select VCS option to get the project from a Version Control repository. Then, Click **Next**.
4. If you select **Local Project** option, the next step is displayed by the wizard.



5. Type the path to the project or click **Browse** to find it. Click **Next**.
6. If the source selected is **VCS**, the VCS Manager Information step

displays.

VCS Manager Information
Enter the connection information according to the selected VCS manager.

Version Control Manager: CVS

Connection Type:
☒ PServer ☐ Ext

Login Settings:
Server: fgc-piv24
User Name: gloria
User Password: ****

Repository Settings:
Path: /repository
Checkout files read-only: ☒
Path to external rsh: ssh

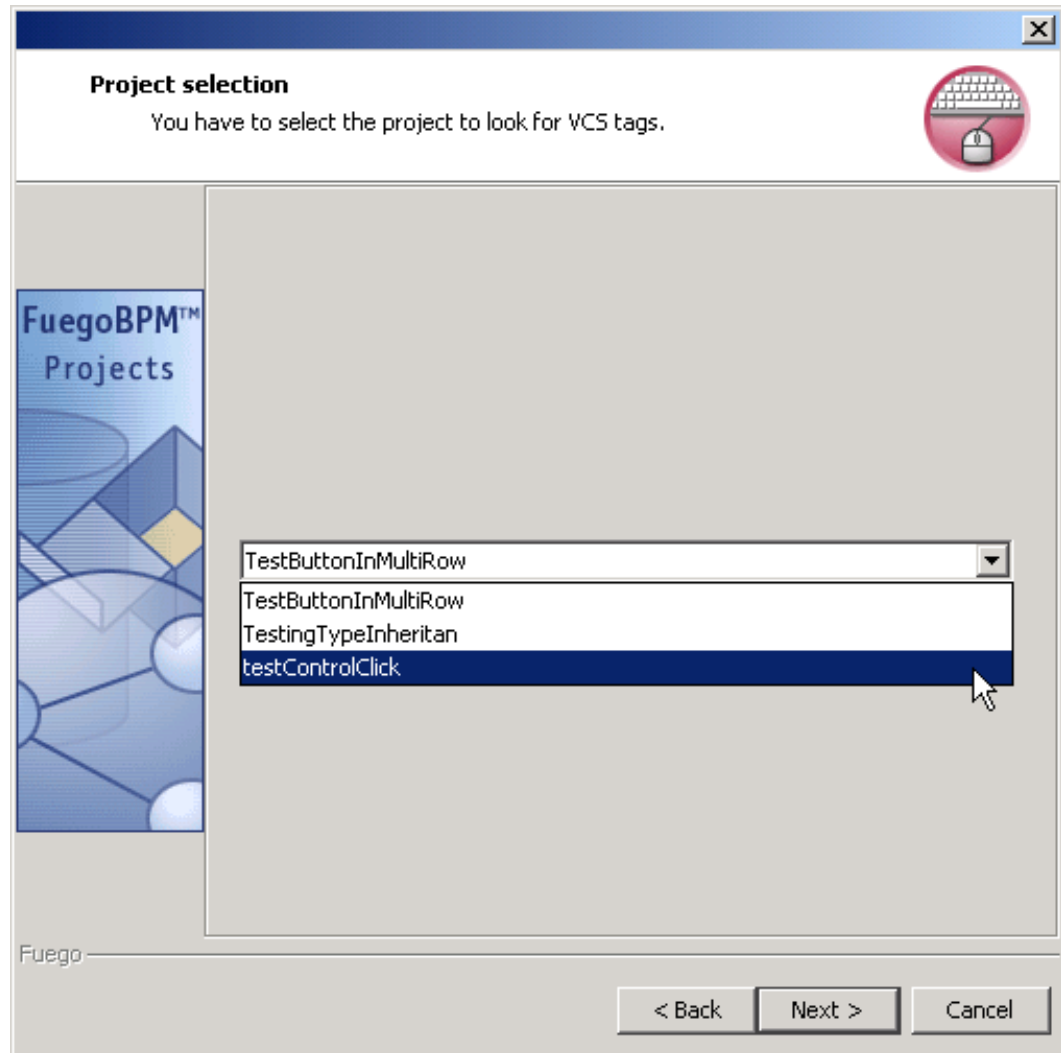
CVSROOT=:pserver:gloria@fgc-piv24:/repository

FuegoBPM Projects

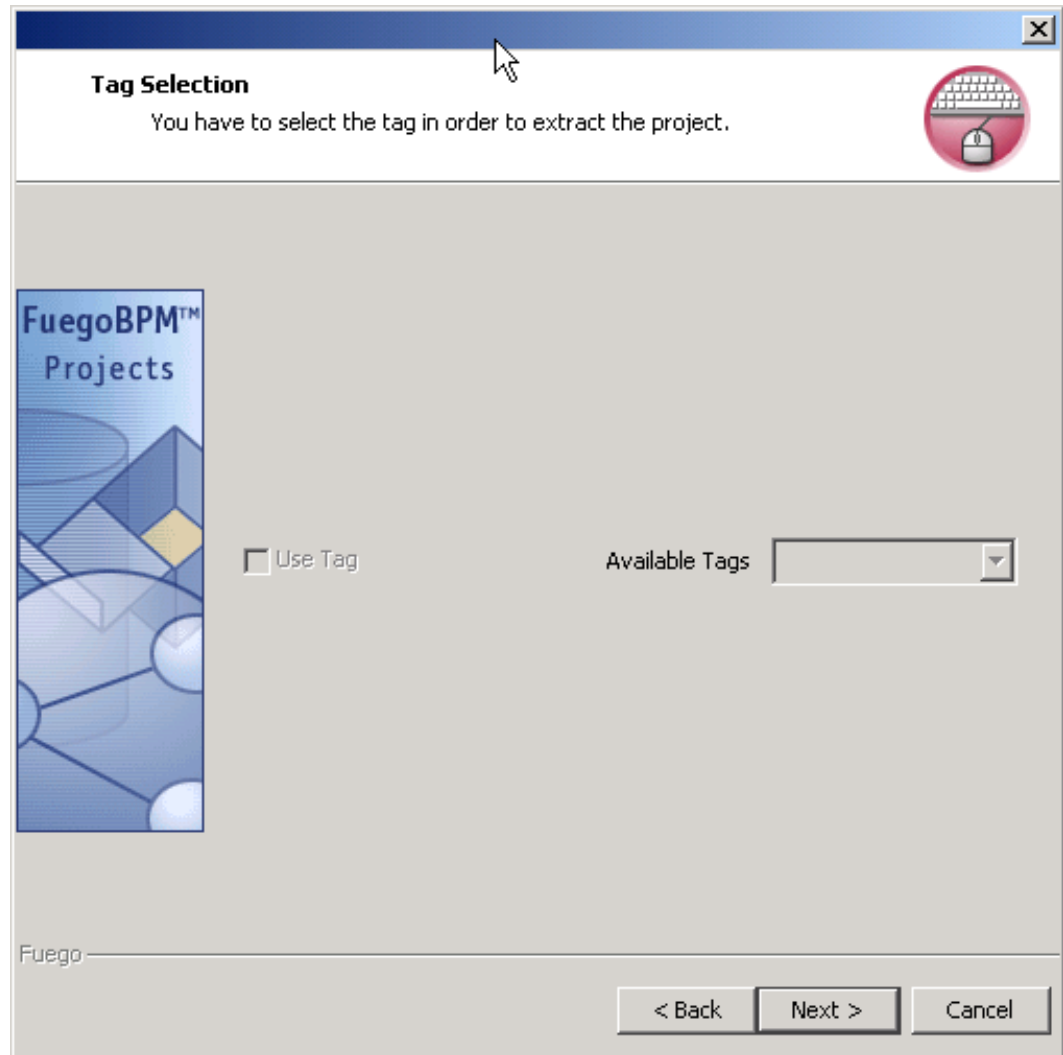
Fuego

< Back Next > Cancel

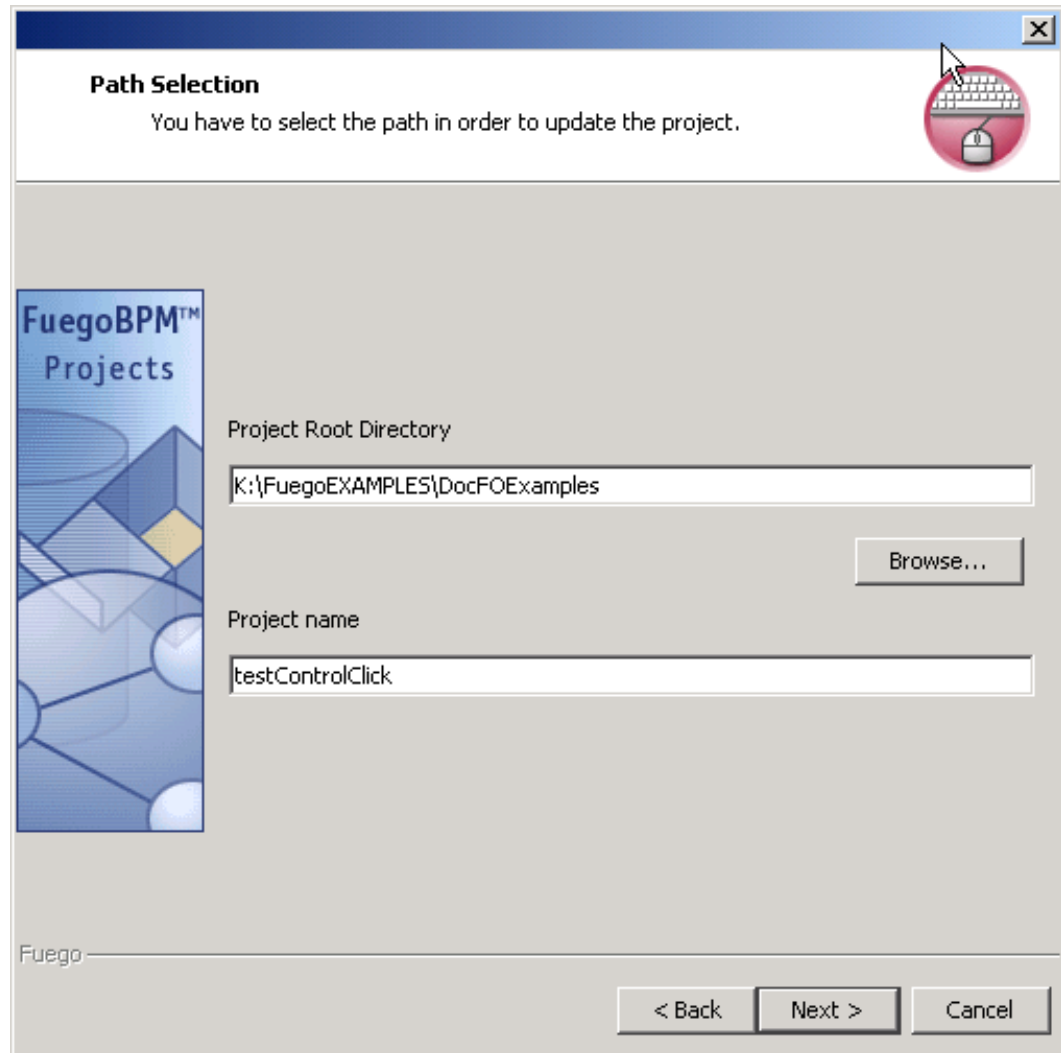
7. Select the Version Control Manager from the drop-down list. The managers configurations included in the drop-down list and the settings displayed correspond to the settings configured in the **VCS Manager Information** entered through File->Preferences menu option. If no VCS has been configured, you can enter the connection information here or change the default values at your will for this specific project. Click **Next**.
8. After all the projects found in the repository are displayed in a drop-down list, select the project to deploy. Click **Next**.



9. In the next step you will be prompted to select the VCS tag, if needed. From a drop-down list that displays all the available tags you can select the appropriate tag to deploy your project. Click **Next**.



10. Select the path in order to update the project. Click **Next**.



The image shows a Windows-style dialog box titled "Path Selection" with a close button (X) in the top right corner. Below the title bar, the text "You have to select the path in order to update the project." is displayed. To the right of this text is a circular icon containing a keyboard and a mouse. On the left side of the dialog, there is a vertical blue banner with the text "FuegoBPM™ Projects" and a graphic of overlapping circles and lines. The main area of the dialog contains two text input fields. The first is labeled "Project Root Directory" and contains the text "K:\FuegoEXAMPLES\DocFOExamples". To the right of this field is a "Browse..." button. The second field is labeled "Project name" and contains the text "testControlClick". At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The "Fuego" logo is visible in the bottom left corner of the dialog area.

Path Selection
You have to select the path in order to update the project.

FuegoBPM™ Projects

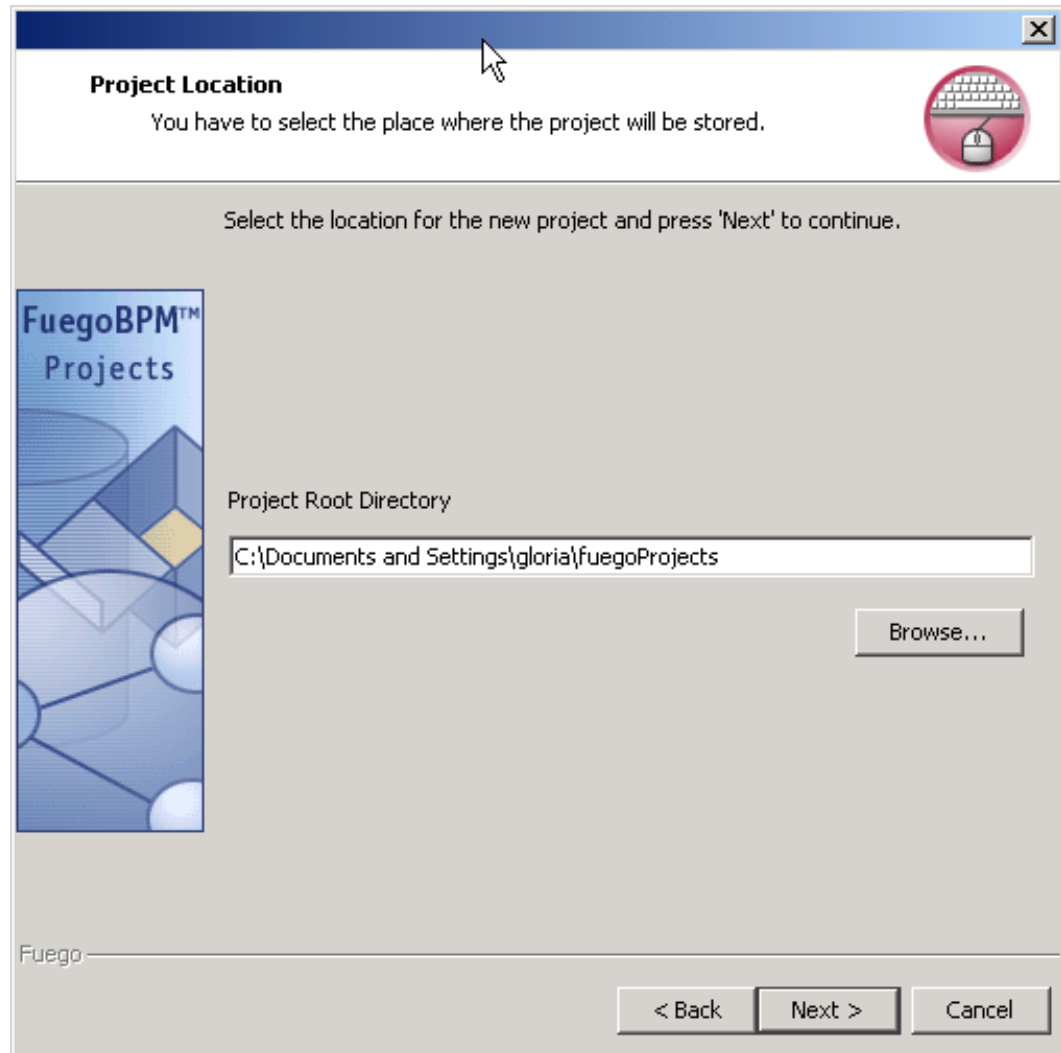
Project Root Directory
K:\FuegoEXAMPLES\DocFOExamples
Browse...

Project name
testControlClick

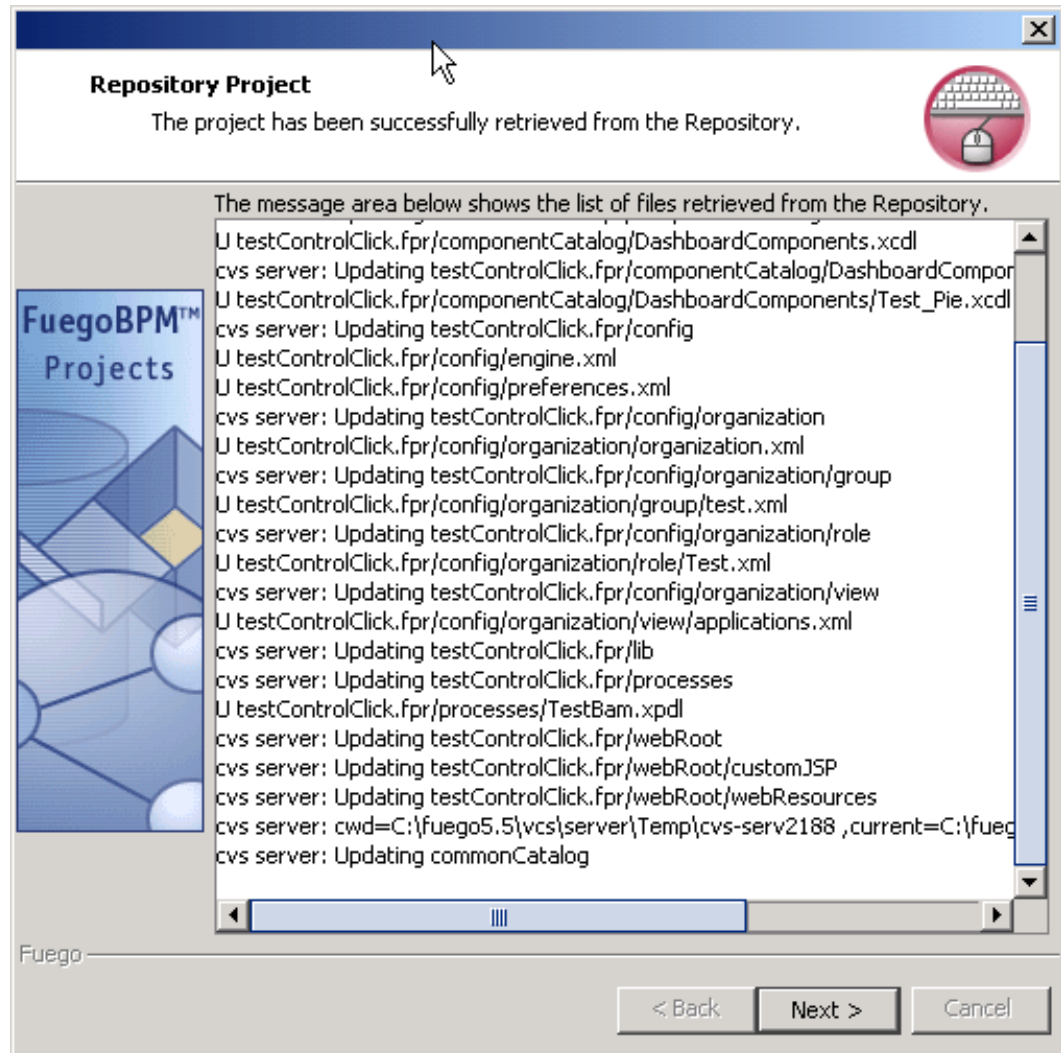
Fuego

< Back Next > Cancel

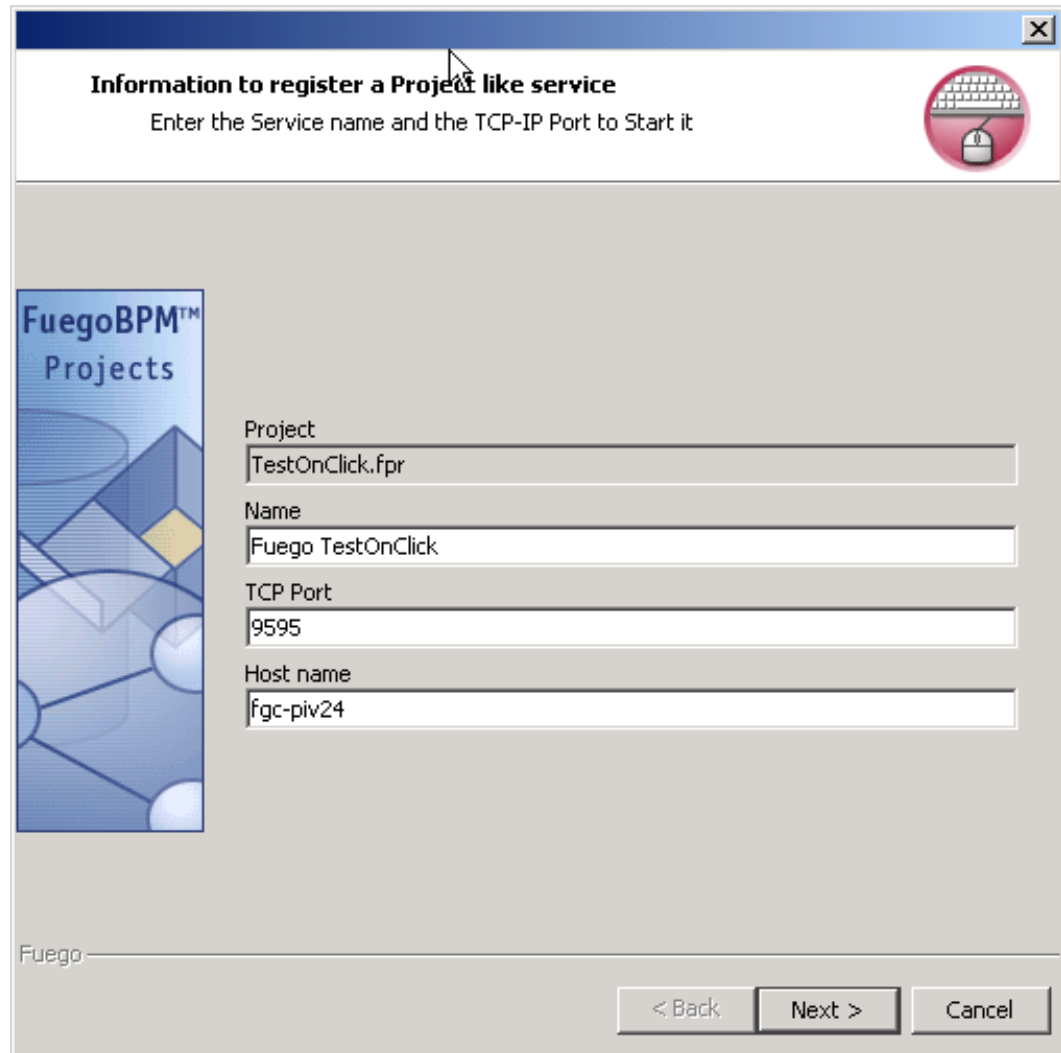
11. Select the location where to store the new project. Click **Next**.



12. The following step shows the list of files retrieved from Repository. Click **Next** to continue.



13. The last steps apply for any of the sources selected: Enter the **Service Name** and **TCP IP port** to start the project as service. In the **Host Name** text box, enter the host name or IP address that other machines need to use in order to establish a connection with the host where Express service installation resides.



Information to register a Project like service
Enter the Service name and the TCP-IP Port to Start it

FuegoBPM™ Projects

Project
TestOnClick.fpr

Name
Fuego TestOnClick

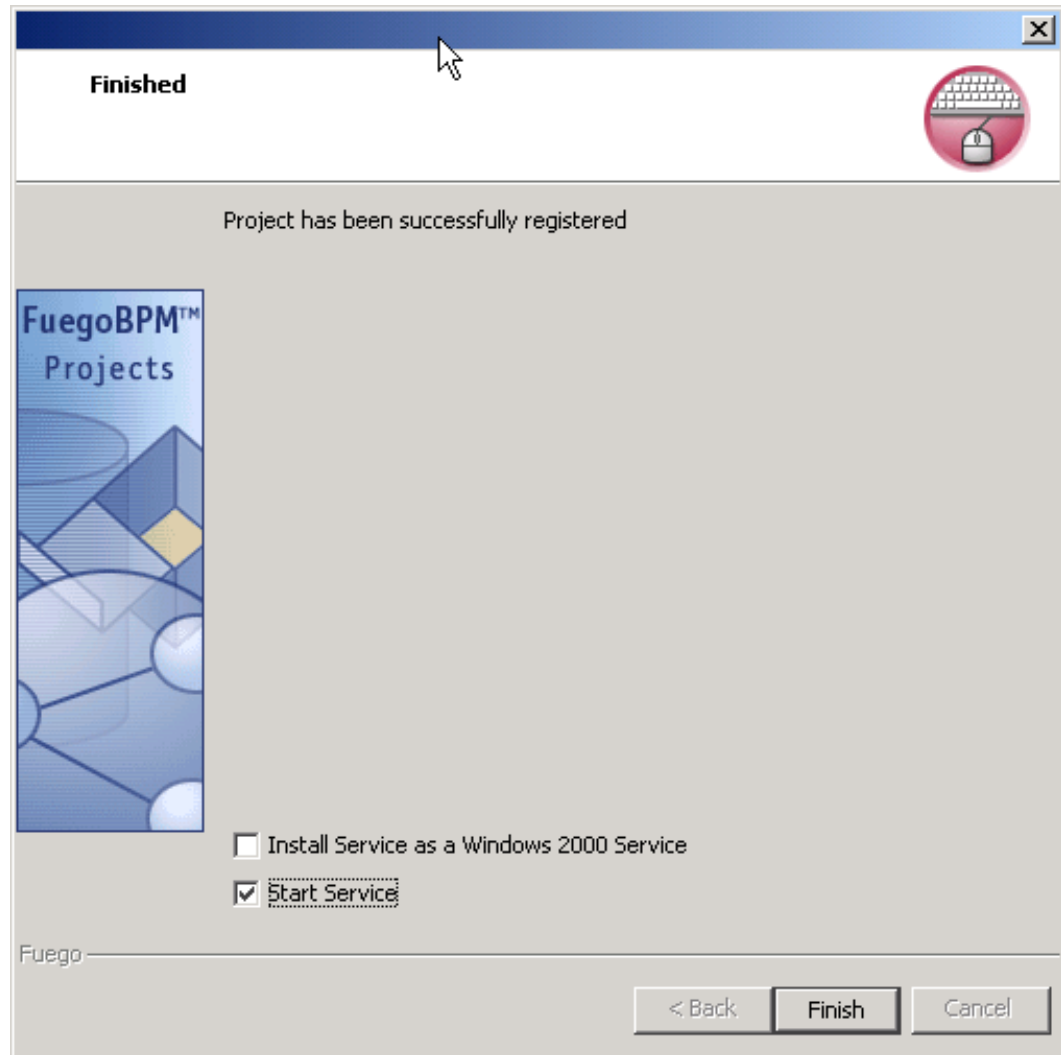
TCP Port
9595

Host name
fgc-piv24

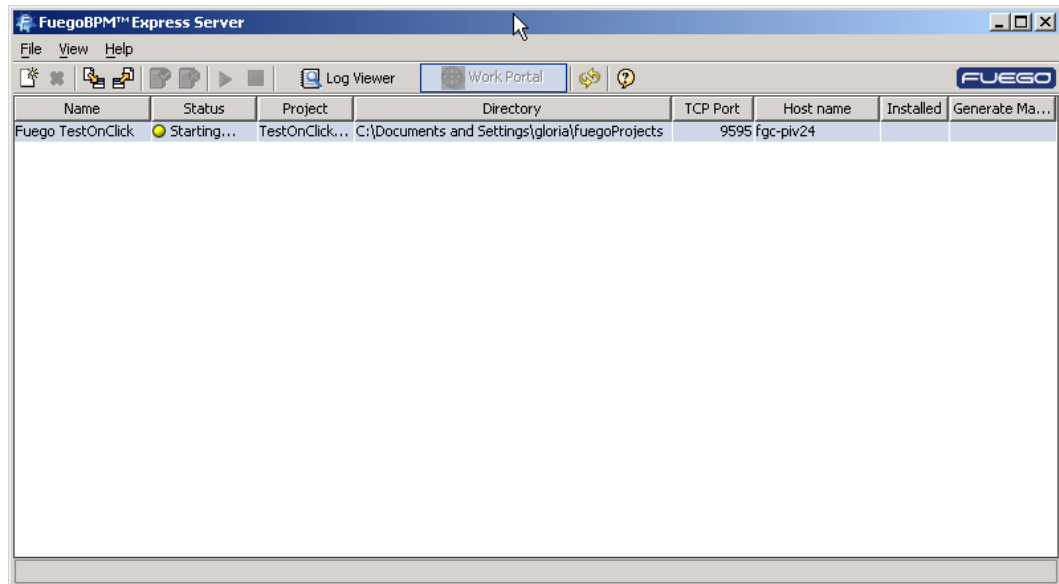
Fuego

< Back Next > Cancel

14. After you click **Next** the wizard notifies you that the project has been successfully **registered**. If you check **Start service** checkbox, the project will be started after you click on **Finish** button. Another checkbox allows you to **install** the project as an Operative System service. This operation will only succeed if you have Administration privileges. If a project is not **Installed**, it may be executed anyway but only if FuegoBPM Express is running. The project will be visible just for the user who created it.



15. When you click on **Finish**, the new service displays in the **Services** list.



Note




When you start each project as a service, it will run in its own Server

Unregister a Project

To unregister a project

To unregister a project, you need to delete it from the services list.

If the service you intend to remove is installed, uninstallation of the project takes place first. FuegoBPM Express asks for confirmation if this is the case.

To remove the service, you can click on delete  icon. The icon is only enabled when the selected project is not started.

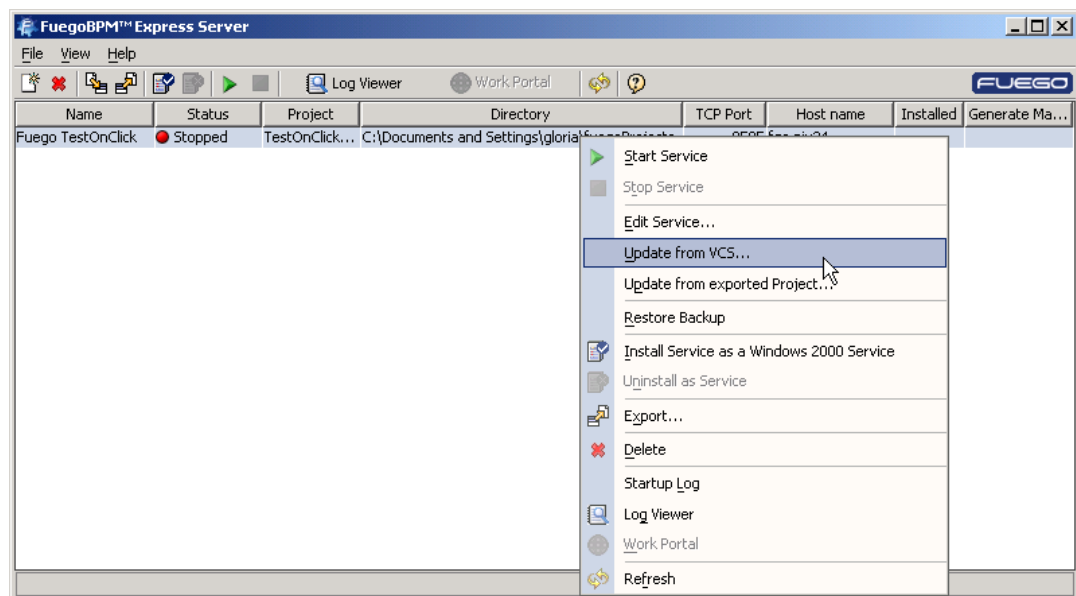
Update Project Changes

To update project changes to the runtime Environment

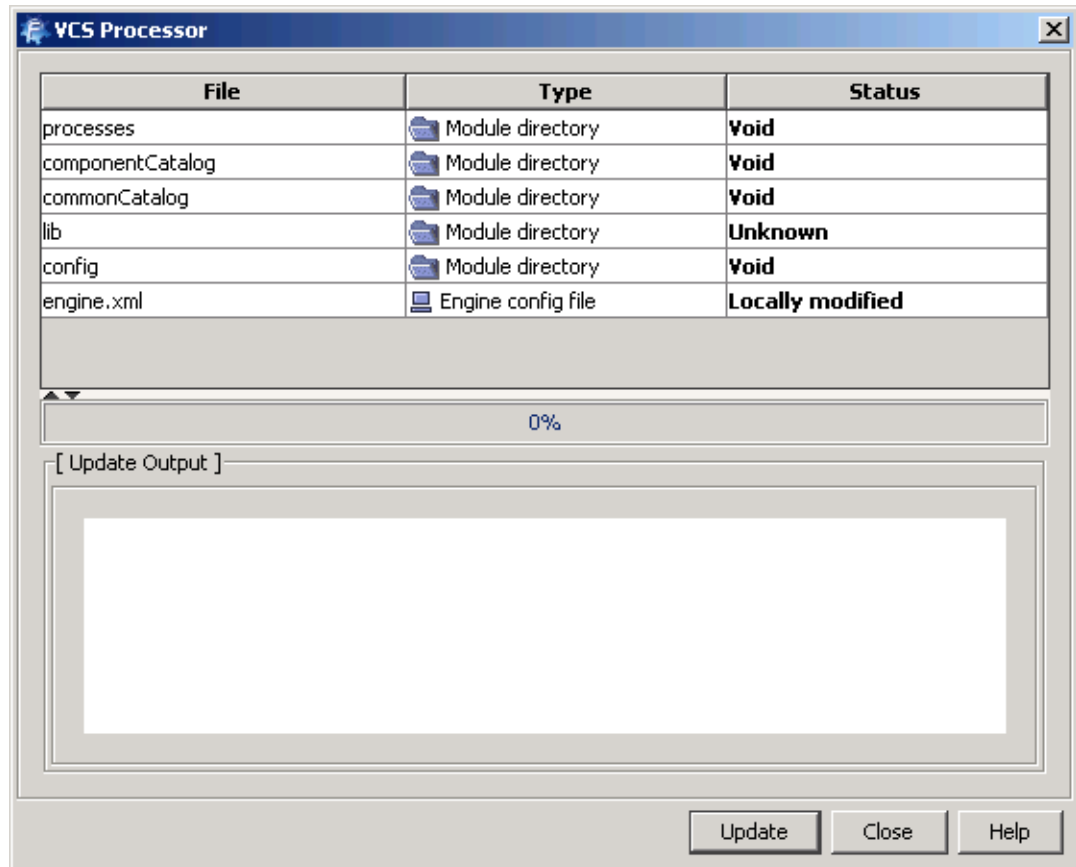
Depending on the project being deployed from Version Control

Repository or locally from a project file, you will be able to update the changes made to the project from **FuegoBPM Studio** by doing one of the following:

- If VCS was used as source for the project deployment, you can use the **Update from VCS** menu option to update the project in the runtime environment with the latest changes committed to the repository. In order to update the latest changes: Select the row corresponding to the project you want to update. Right click over the row and select **Update from CVS** option.



. The Update window appears. Click **Update** button. The changes are updated.



After that, you have to re-start the project service for the changes to effectively apply.

- If no VCS was used as source of the project deployed, changes can be made by opening the project with **FuegoBPM Studio**. After that, you need to re-start the project service. If you receive the changes in an exported file, the best practice is to unregister the project and register it again using the new version of the exported file. Take into account that, in this last case, all the instances will be lost since the database is recreated when the project is registered.

Warning




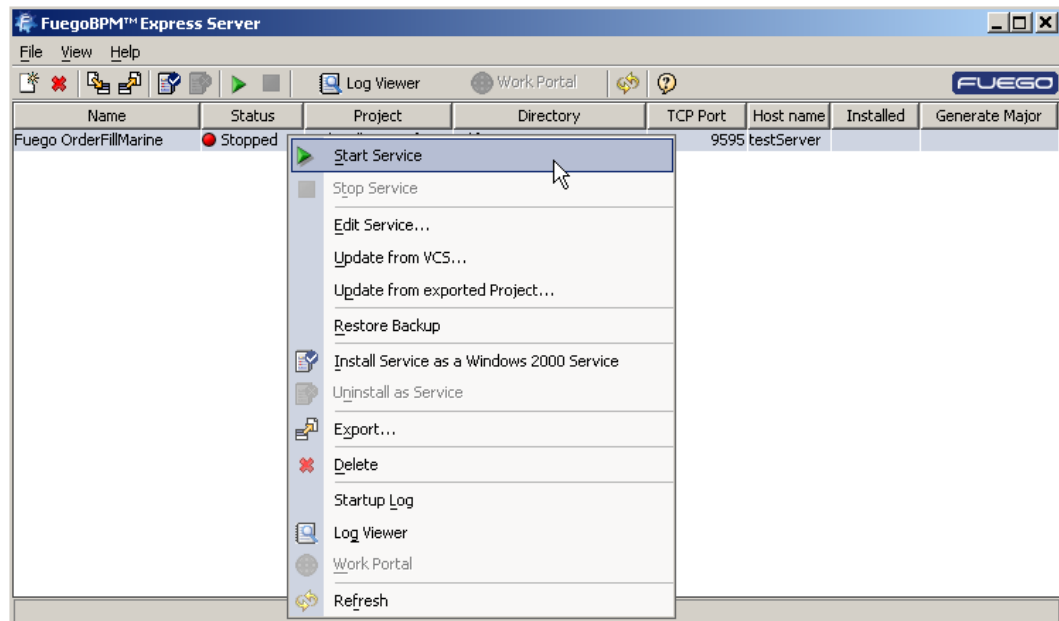
Once the project is deployed, the procedure to apply changes made to the project design and Organization settings to the runtime environment is to **stop** the service corresponding to the project, **update** the project in the Studio, **close** the project in the Studio and then **re-start** the service corresponding to that project. Hot deploy is only available in **FuegoBPM Enterprise** runtime environment edition.

Services


Start registered services

To start a stopped registered service,

1. If you didn't check the **Start Service** checkbox when creating the service, you can start it at any moment. In order to start a project, select the row that corresponds to the project you want to start. Next, click on **Start**  icon in the toolbar or right click over the row and then, select **Start** option in the displayed menu.





2. The service started enables Work Portal icon and thus provides the possibility to execute all the processes deployed on the


project. To launch Work Portal, click on  Work Portal icon.

Install a service as an Operative System service

To install a service as an Operative System service,

1. If you didn't install the project at creation time and you have Administration privileges, you can install it at any moment. Select the row corresponding to the service you want to install, then select **Install Service** menu option or click on **Install**  icon.
2. If you have no Administration privileges, you will be able to test the registered project and then export the service to send it to the administrator in order to have it installed. To export the project, select it from the services list and click on Export  icon.

When the project is started for the first time, a log file is generated in the **system** directory of the project.

Clicking the **Log Viewer** icon  launches Log Viewer application that allows you to track project execution viewing all the events logged by **FuegoBPM Server** and **Work Portal**.

Every time the new service installed is started, the following steps are performed:

1. All the organization data of the latest updated version of the project is updated to the runtime environment.
2. All the processes in the project are published and deployed.

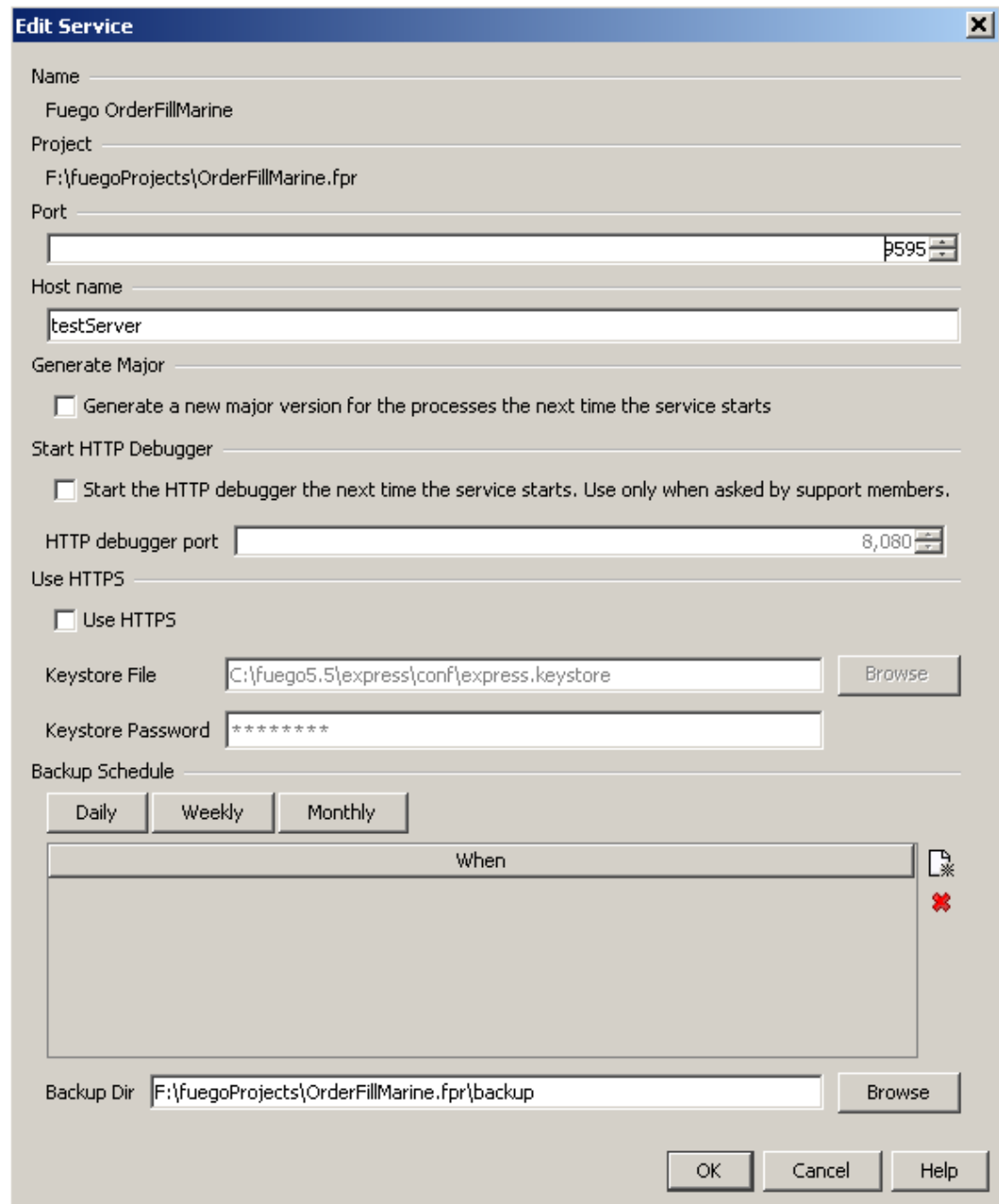
3. The server is started.
4. Work Portal users are able to connect to the latest updated version of the project.

Edit service's information

To edit service information

Once the service has been created, you can edit it to change either the port or host name assigned to the service. In order to do this:

1. Select the row corresponding to the service to edit.
2. Right click on the row selected and choose the **Edit Service** option from the pop-up menu. Change the data at will.



The 'Edit Service' dialog box is used for configuring a service. It contains the following fields and options:

- Name:** Fuego OrderFillMarine
- Project:** F:\fuegoProjects\OrderFillMarine.fpr
- Port:** 9595
- Host name:** testServer
- Generate Major:** ☐ Generate a new major version for the processes the next time the service starts
- Start HTTP Debugger:** ☐ Start the HTTP debugger the next time the service starts. Use only when asked by support members.
- HTTP debugger port:** 8,080
- Use HTTPS:** ☐ Use HTTPS
- Keystore File:** C:\fuego5.5\express\conf\express.keystore (with a 'Browse' button)
- Keystore Password:** *****
- Backup Schedule:** Buttons for 'Daily', 'Weekly', and 'Monthly'. Below them is a 'When' field with a calendar icon and a red 'X' icon.
- Backup Dir:** F:\fuegoProjects\OrderFillMarine.fpr\backup (with a 'Browse' button)

At the bottom right are 'OK', 'Cancel', and 'Help' buttons.

Using HTTPS



The service can be configured to use the https protocol (http + ssl) if required.

1. Select the **Use HTTPS** property in the edit service panel.
2. The **Keystore file** and **Keystore password** fields are enabled. Browse the directory where the keystore is located in the file system. And type the keystore password to access and open the keystore file.

Backup Schedule


The backup of the server database can be configured through the edit service panel. This schedule can be done on daily, weekly or monthly bases.

To schedule the backup

1. Select one of the backup options button, **Daily**, **Weekly** or **Monthly**. An entry is generated in the *When* section of the window.
2. Configure the entry according to your needs.
3. Add a new entry using the new schedule icon . Or delete an existing one using the delete schedule icon .
4. Select the directory where to store the backup. Browse the file system clicking the **Browse** button. By default the directory **backup** under the project directory structure is suggested. The entire server database is copied to the given directory.

Stop a service execution

To stop service execution

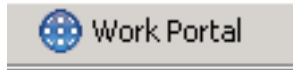
You can click **Stop Service** icon  to stop the execution of a certain project at any moment.

Chapter 4. FuegoBPM Express and Work Portal

Running the FuegoBPM Work Portal

After deploying the project in the Express, and it appears as **Started**, you are able to run the Work Portal.

1. Select the project and click on the Work Portal button on the top of the Express.

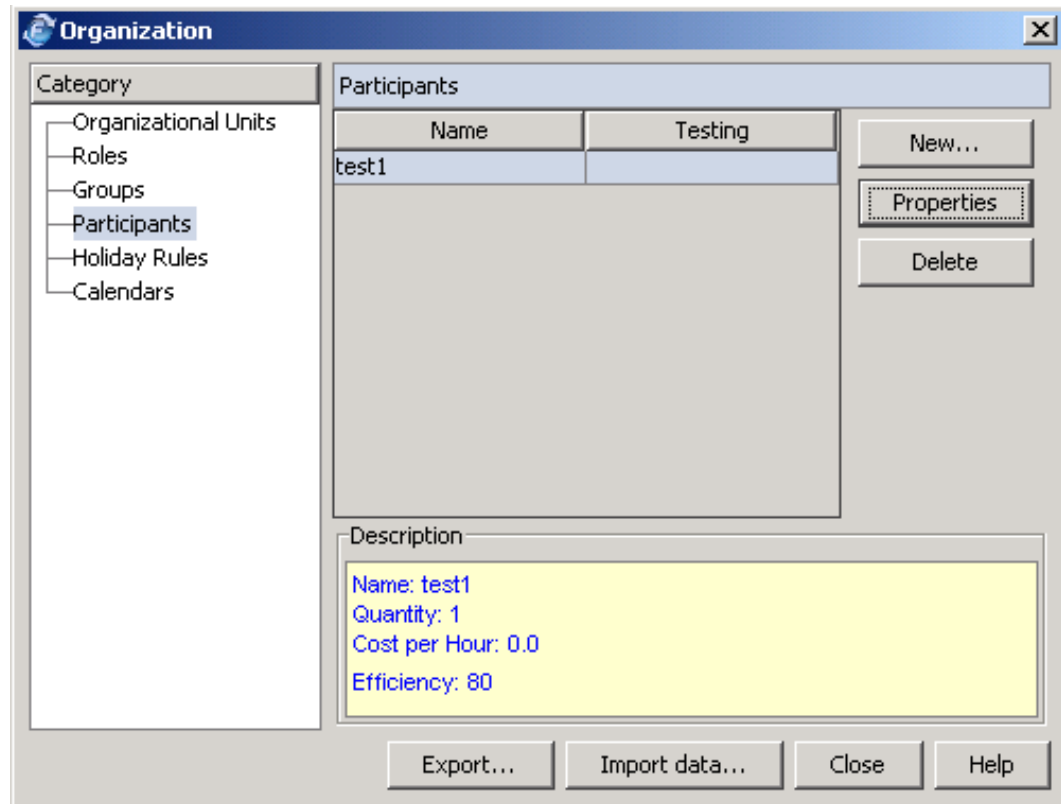


If the project is not started this option is disabled.

Changing a Participant's password

To change a participant's password, you should work with the Studio's participant definition:

1. Stop the project as a Service in the Express (this is necessary as you will not be able to open the same project in the Studio while it is enabled as a service)
2. Delete the participant in the Studio's Organization



3. Re-start the project as service
4. Stop the service
5. Add the same participant in the Studio's Organization
6. Re-start the project as a service in the Express.

The participant's password is reset to the name's participant