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Tutorial **Activiti/Activiti Designer** Basics

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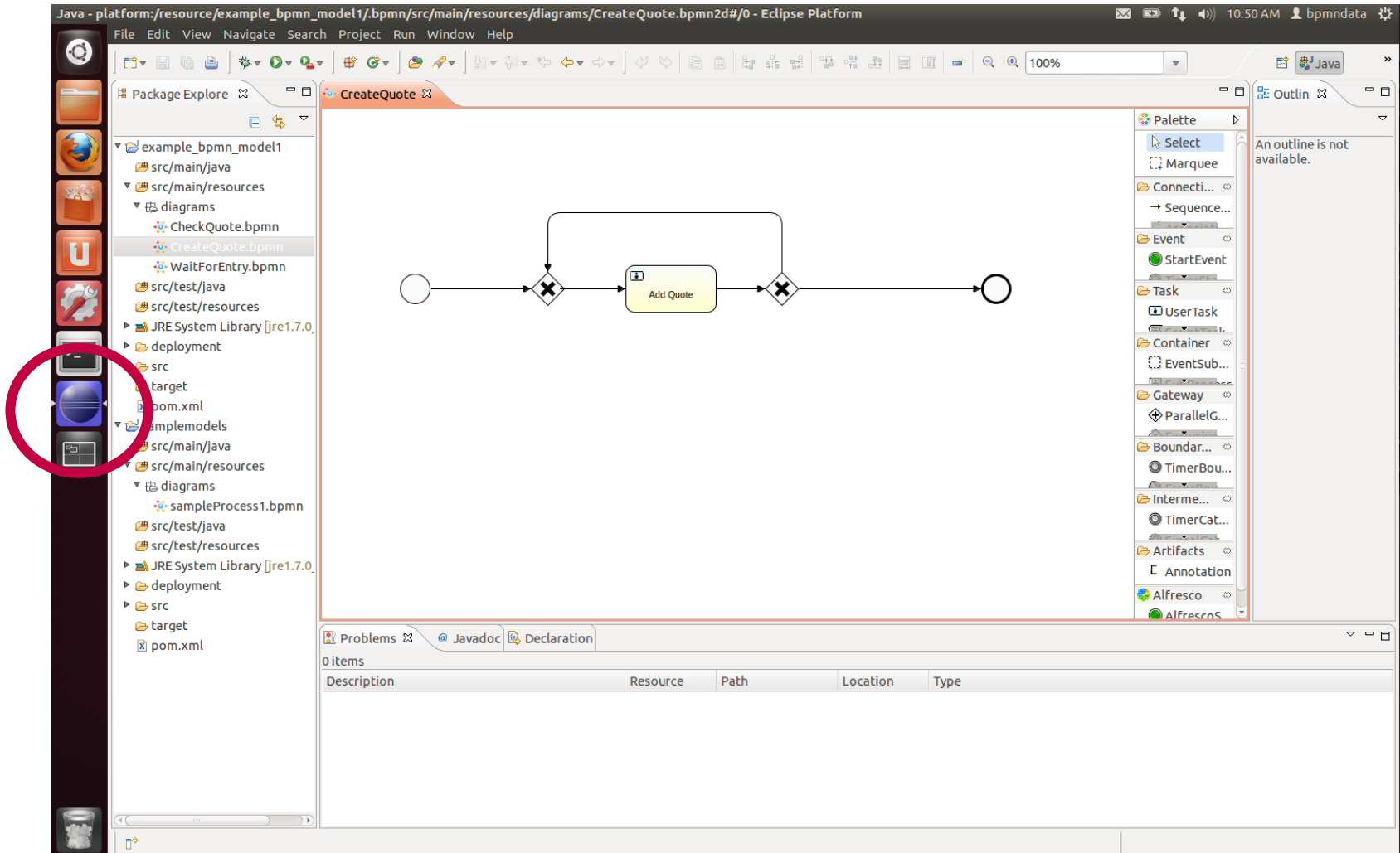
Where innovation starts

Overview

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5. Create a Deployable Process
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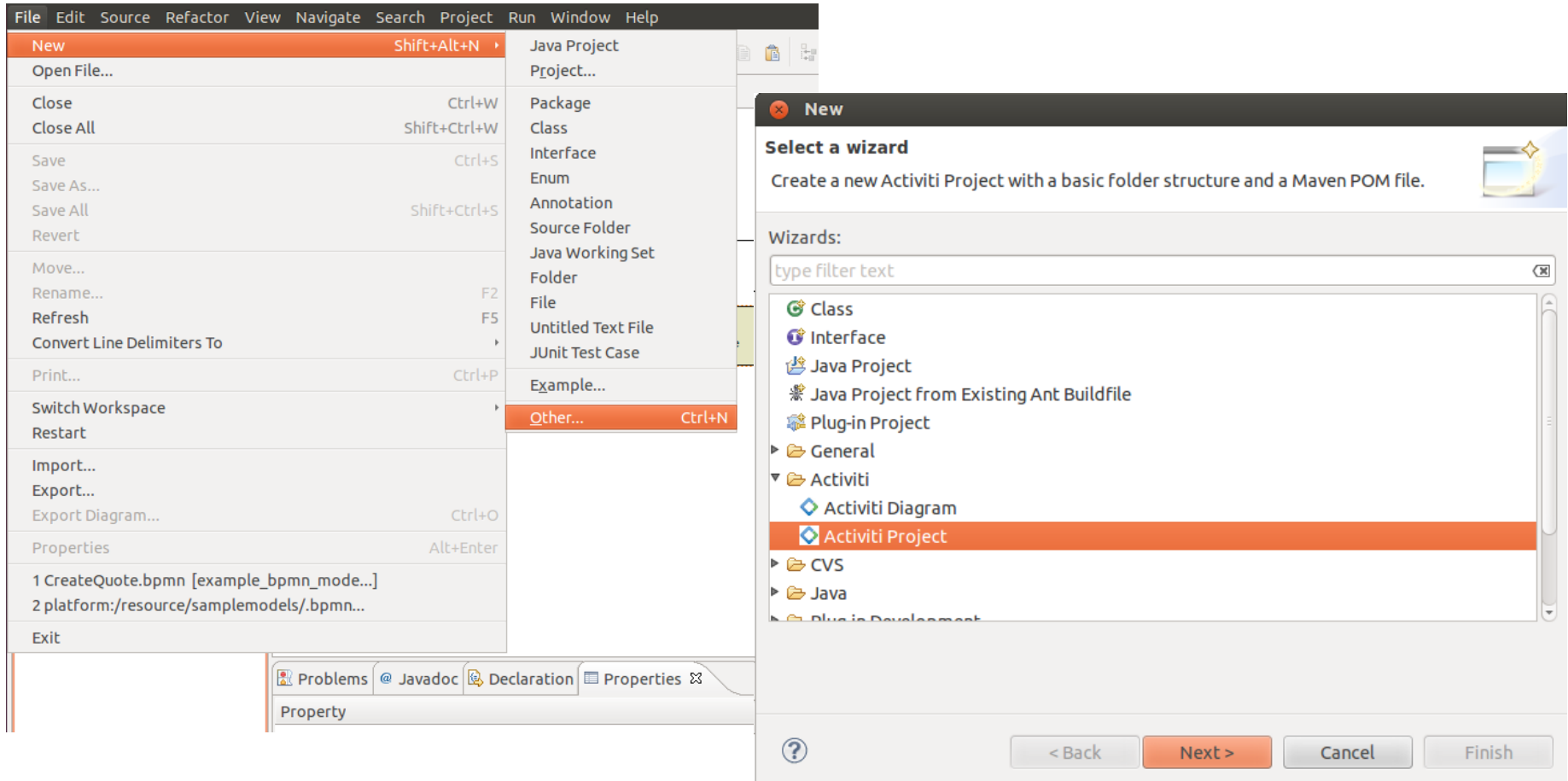
Loading Activiti Designer

- Start the Virtual Machine and load Eclipse



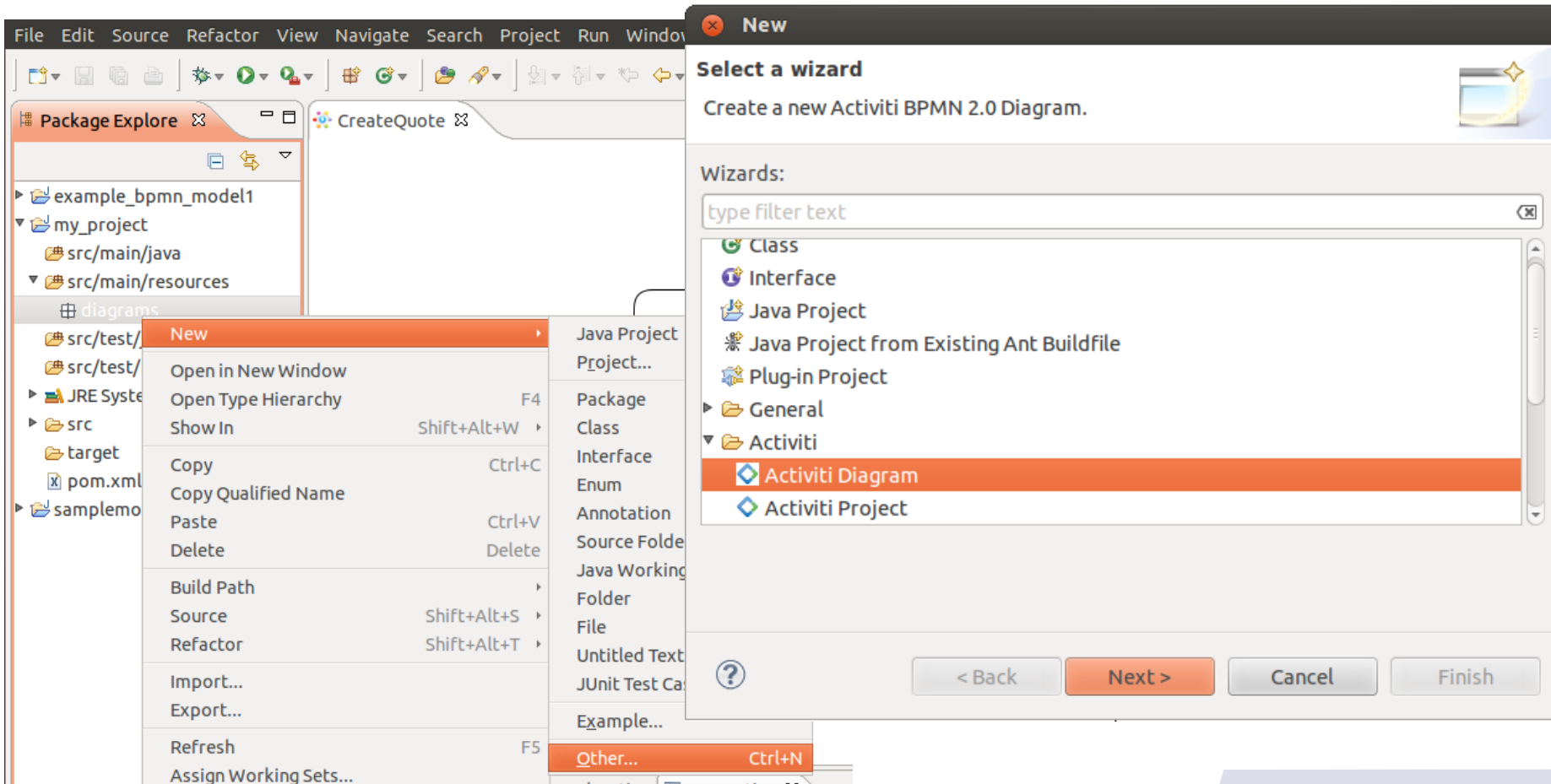
Creating New Projects

- File > New > Other... > Activiti > Activiti Project



Creating Editing Process Models (1)

- open <project>/src/main/resources/diagrams
- right click > New > Other... > Activiti > Activiti Diagram



Creating Editing Process Models (2)

The screenshot displays the Eclipse IDE interface for editing a BPMN diagram. The Package Explorer on the left shows the project structure, including 'my_project' and 'diagrams'. The main canvas shows a BPMN diagram with a start event, a task labeled 'A', and a context menu open over it. The context menu lists various BPMN elements such as StartEvent, TimerStartEvent, MessageStartEvent, ErrorStartEvent, EndEvent, ErrorEndEvent, TerminateEvent, Task, Container, Gateway, Boundary event, Intermediate event, and Artifacts. A red circle highlights the context menu, and a red arrow points from it to the task 'A'. A pink text box at the top right says 'drag shapes from the palette onto the canvas'. Another pink text box at the bottom center says 'use the context menu to extend the process with new nodes and edges'. The Properties view at the bottom shows the task's details: Id: usertask1, Name: User Task, Asynchronous: unchecked, Exclusive: checked.

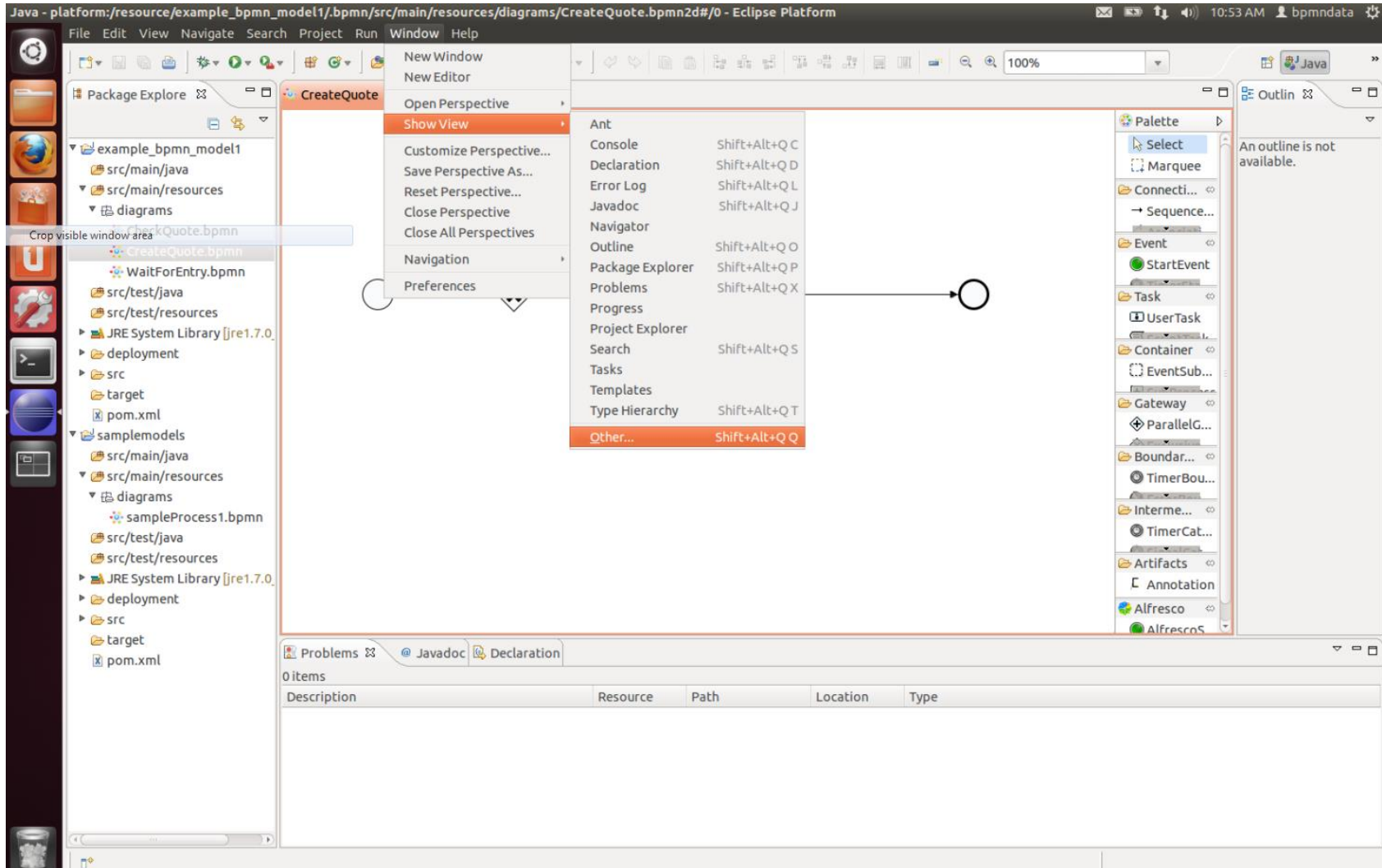
drag shapes from the palette onto the canvas

use the context menu to extend the process with new nodes and edges

General	Id:	usertask1
	Name:	User Task
	Asynchronous:	<input type="checkbox"/>
	Exclusive:	<input checked="" type="checkbox"/>

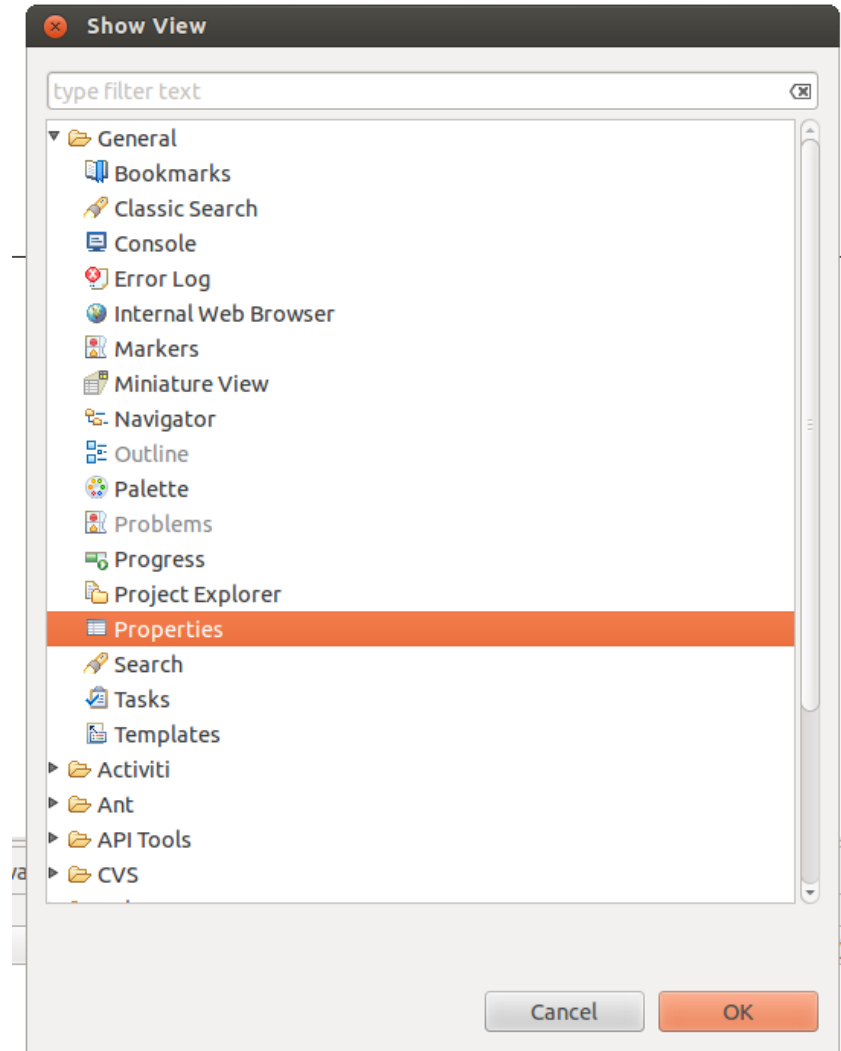
Show the Properties View (1)

- Window > Show View > Other...



Show the Properties View (2)

- select:
General > Properties



Show the Properties View (3)

- Select tasks and explore their properties

The screenshot displays an IDE interface with a BPMN diagram in the center. The diagram shows a process flow starting with a start event, followed by an XOR gateway, a task named 'Add Quote', another XOR gateway, and finally an end event. The 'Add Quote' task is selected, and its properties are shown in the Properties view at the bottom.

The Properties view shows the following table:

Listener implementation	Type	Event	Fields
sql:INSERT INTO `quotes` (`customer`, `item`, `itemprice`)	expression	complete	

Buttons for 'New', 'Edit', 'Remove', 'Up', and 'Down' are visible to the right of the table.

Create a Deployable Process

- right click on the project > Create deployment artifacts

The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure, including the 'my_project' folder. A context menu is open over the project, with 'Create deployment artifacts' highlighted at the bottom. A red arrow points from this menu item to the 'deployment' folder in the Package Explorer, where a file named 'my_process.bar' has been generated. The Java view on the right shows the BPMN diagram of the process, and the Properties view at the bottom right shows the properties of the selected file.

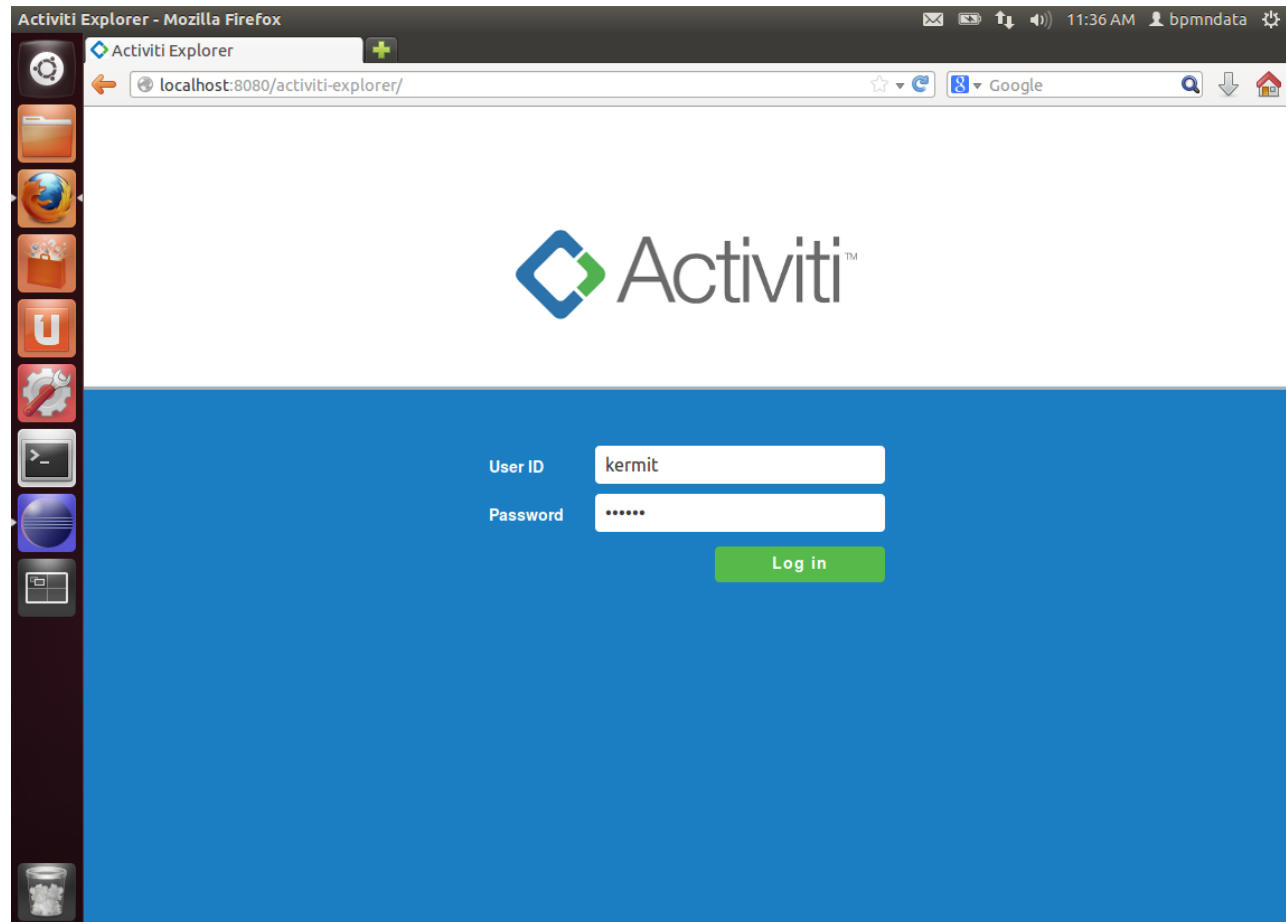
make sure you are in the Java view

generates a .bar file in <project>/deployment

Declaration	Value
isReadOnly	false
isHidden	true
creationDate	May 3, 2013 11:24 AM
isShared	false
location	/home/bpmndata/works/my_project

Log Into Activiti (1)

- open Firefox, go to: localhost:8080/activiti-explorer/
- log in as
- user: kermit
- pass: kermit



Log Into Activiti (2)

- Activiti shows

The screenshot displays the Activiti Explorer web application in a Mozilla Firefox browser. The browser's address bar shows the URL `localhost:8080/activiti-explorer/#process/add_quote:1:36`. The application's navigation bar includes tabs for **Tasks**, **Processes**, and **Manage**. The **Processes** tab is currently selected. Below the navigation bar, there are buttons for **Start process** and **Convert to editable model**. The main content area shows a process diagram for the **Add Quote** process, which includes a start event, a gateway, and an end event. A sidebar on the left lists various tasks such as **Add Quote**, **Review sales lead**, **Vacation request**, and **Wait For Entry**.

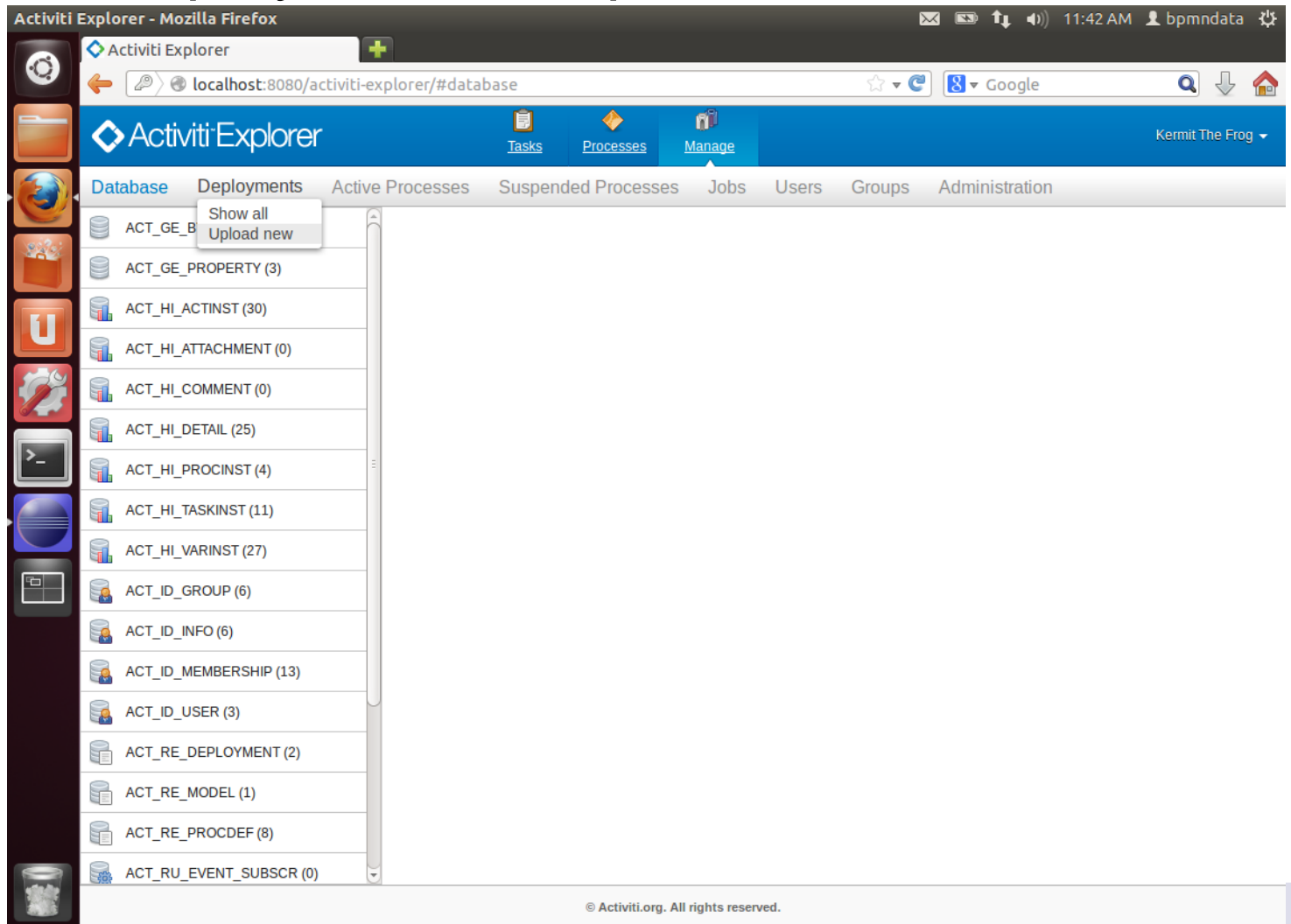
tasks of processes that are currently executed

a management view

processes that are available to be started

Deploy a Process in Activiti (1)

- Manage > Deployments > Upload new



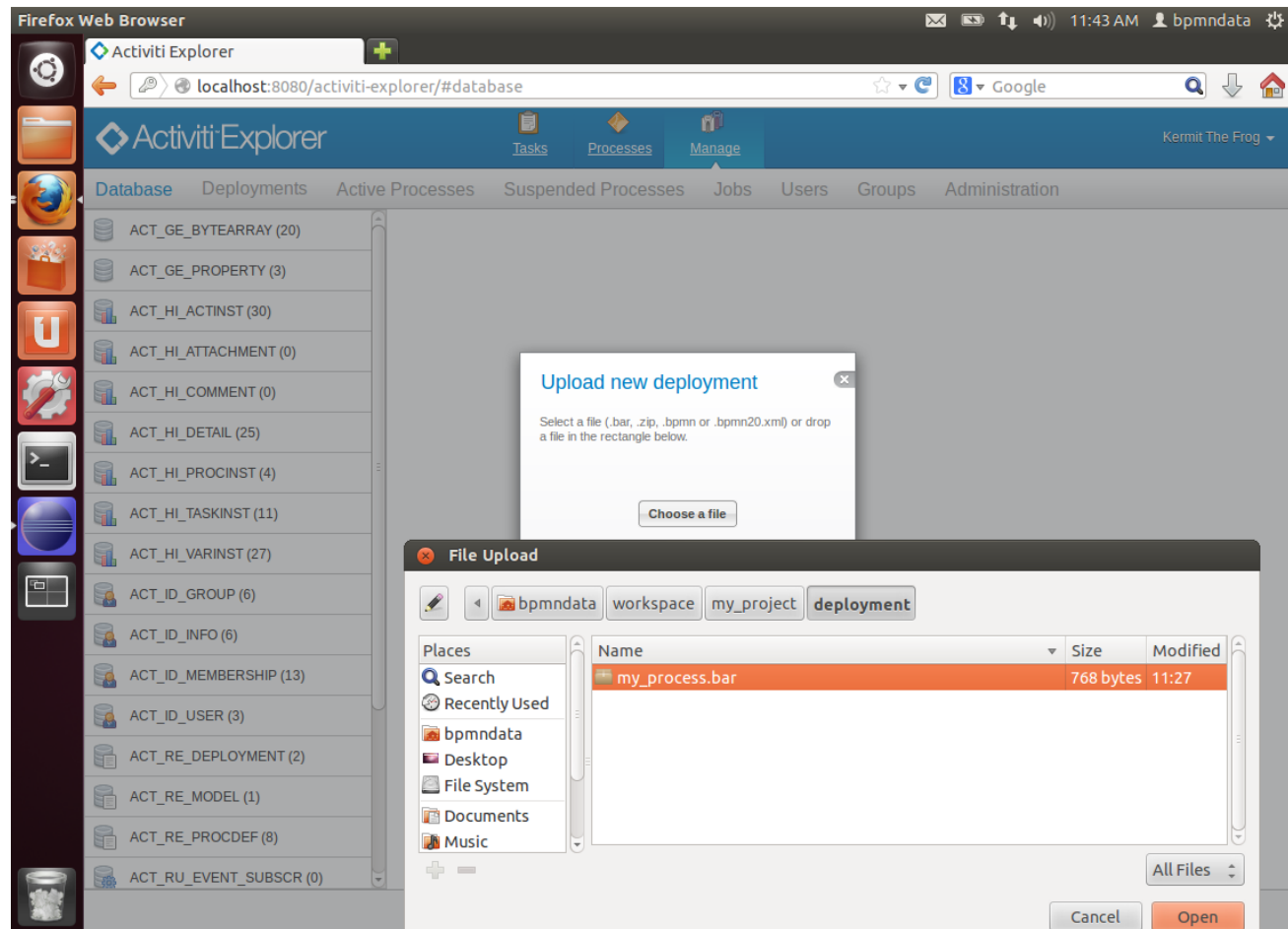
The screenshot shows the Activiti Explorer web application running in Mozilla Firefox. The browser address bar displays `localhost:8080/activiti-explorer/#database`. The application's main navigation bar includes 'Tasks', 'Processes', and 'Manage'. The 'Manage' menu is expanded, showing options for 'Database', 'Deployments', 'Active Processes', 'Suspended Processes', 'Jobs', 'Users', 'Groups', and 'Administration'. The 'Deployments' menu item is highlighted, and a sub-menu is visible with the options 'Show all' and 'Upload new'. The main content area displays a list of database tables with their respective counts:

Table Name	Count
ACT_GE_B	
ACT_GE_PROPERTY	(3)
ACT_HI_ACTINST	(30)
ACT_HI_ATTACHMENT	(0)
ACT_HI_COMMENT	(0)
ACT_HI_DETAIL	(25)
ACT_HI_PROCINST	(4)
ACT_HI_TASKINST	(11)
ACT_HI_VARINST	(27)
ACT_ID_GROUP	(6)
ACT_ID_INFO	(6)
ACT_ID_MEMBERSHIP	(13)
ACT_ID_USER	(3)
ACT_RE_DEPLOYMENT	(2)
ACT_RE_MODEL	(1)
ACT_RE_PROCDEF	(8)
ACT_RU_EVENT_SUBSCR	(0)

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Deploy a Process in Activiti (2)

- choose a file > navigate to:
bpmndata/workspace/<project>/deployment
- select the
.bar file
- open
- possible bug:
the “File Upload”
dialog may be
shown a second
time, press cancel



Deploy a Process in Activiti (3)

- if the process model has no errors, then the new process is listed under deployments

The screenshot displays the Activiti Explorer web application interface. The browser address bar shows the URL `localhost:8080/activiti-explorer/#deployment/727`. The application header includes the Activiti Explorer logo and navigation tabs for `Tasks`, `Processes`, and `Manage`. Below the header, a secondary navigation bar contains links for `Database`, `Deployments`, `Active Processes`, `Suspended Processes`, `Jobs`, `Users`, `Groups`, and `Administration`. A vertical sidebar on the left lists several deployment folders: `CheckQuote.bar`, `Demo processes`, and `my_process.bar`, with the latter selected. The main content area displays details for the selected deployment, including a folder icon, the name `my_process.bar`, and the status `Deployed moments ago`. Below this, there are sections for `Process Definitions` (listing `My process`) and `Resources` (listing `my_process.bpmn20.xml` and `my_process.myProcess.png`). The footer of the application contains the text `© ActivitiOrg. All rights reserved.`

Run a Process

- go to Processes > Deployed process definitions
- select the process of interest
- click “Start Process”

The screenshot shows the Activiti Explorer web application in a Mozilla Firefox browser. The browser address bar displays the URL `localhost:8080/activiti-explorer/#process/myProcess:1:730`. The application header includes the Activiti Explorer logo, navigation tabs for 'Tasks', 'Processes', and 'Manage', and a user profile for 'Kermit The Frog'. Below the header, there are tabs for 'My instances', 'Deployed process definitions', and 'Model workspace', along with 'Start process' and 'Convert to editable model' buttons. A left sidebar contains a list of process definitions, with 'My process' selected and highlighted. The main content area displays the details for 'My process', including a gear icon, the title 'My process', and metadata 'Version 1' and 'Deployed moments ago'. Below this, the 'Process Diagram' is shown, which is a simple flow diagram consisting of a start circle, a task node labeled 'A' (represented by a yellow rounded rectangle with a person icon), and an end circle.

Further Reading (1)

- watch <https://www.youtube.com/watch?v=ixF30ozsis4> to see all features of the Activiti UI and how to run processes
- visit <https://www.google.nl/search?q=activiti+tutorial>, <https://www.google.nl/search?q=activiti+designer+tutorial> to see more examples of modeling, deploying, and running processes

Further Reading (2)

- Check the example processes that are already deployed in Activiti in the VM
- Important: process execution requires that a task is assigned to a role or a user
 - if the process model specifies for task no role, or a role that is not defined, then the task will not be shown in Activiti, e.g.
 - **example:**
 - the process “Review Sales Lead” that is deployed in Activiti in the VM has a task “Review Customer Rating” that requires a user with role “accountancy”
 - Activiti does not define a user group called “accountancy”
 - to execute the process, go to Manage > Groups, create a group “accountancy” (case sensitive!), and add a user to this group



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Good Luck and Enjoy!

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