

Lab 4: As Is Process Static Analysis

Lab 4: As-Is Process Static Analysis

Objective:

In this laboratory exercise, you will learn to

1. Invite friends and share workspace for collaboration
2. Importing and Exporting of business process diagram
3. Set the business process attributes for simulation run
4. Perform Static Analysis of the business process diagram

Laboratory Exercise 4 Content

Part 1: Invite Friends and Share Workspace for Collaboration

Part 2: Importing and Exporting of Business Process Diagram

Part 3: Settings using Attributes Panel

Part 4: Creating Quantitative Analysis Report

Part 5: Generation of Business Process Diagram

Prerequisites:

- Completed Laboratory Exercise 3

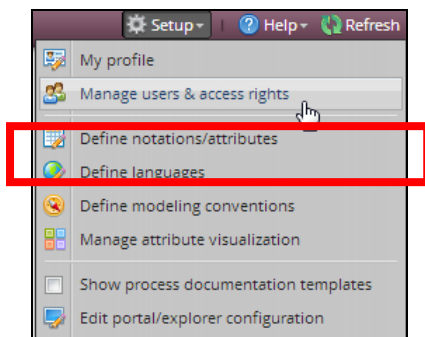
Lab 4: As Is Process Static Analysis

Part 1: Invite Friends and Share Workspace for Collaboration

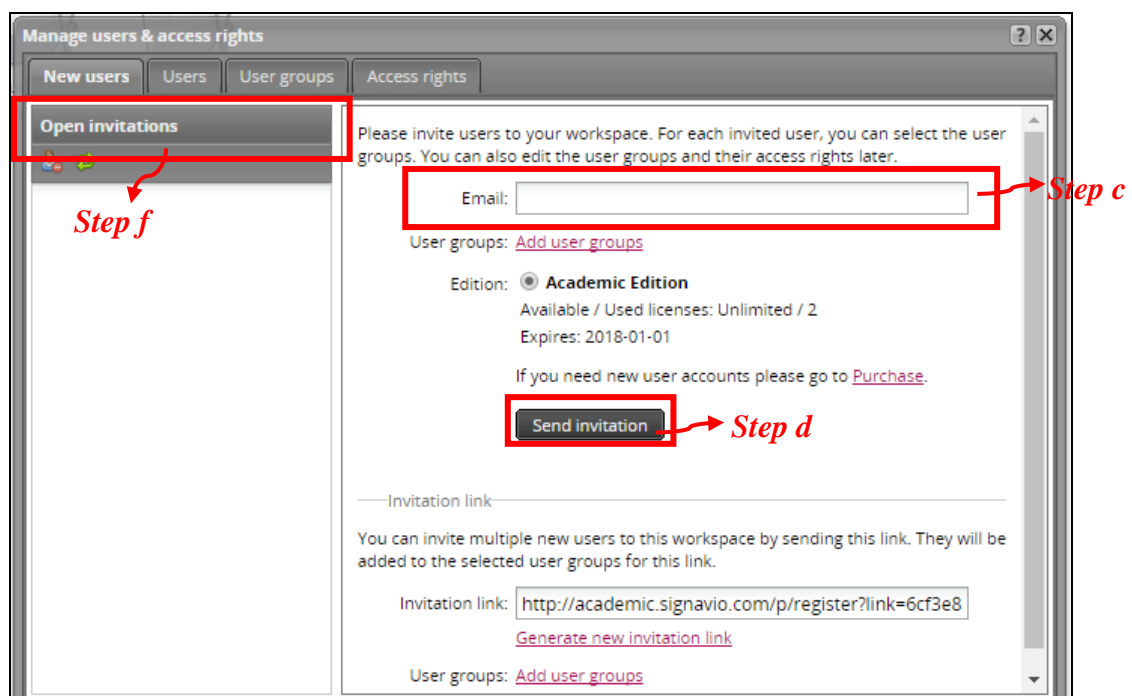
1.1. Invite Friends to your workspace

Each registered user will have his/her own workspace. Each user can invite friends to their workspace to work on process diagram together.

- a. Click  and choose **"Manage users and access rights"**.



- b. The Manage users and access rights window opens:




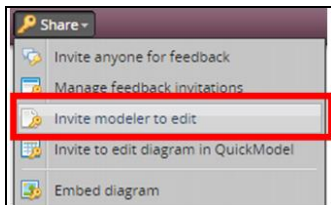
- c. Enter the **email address** of the friend you want to invite into your workspace.
- d. Click **"Send invitation"**
- e. An invitation email will be sent to the specified email address.
- f. The email address will appear on the left in the **"Open invitations"** area.

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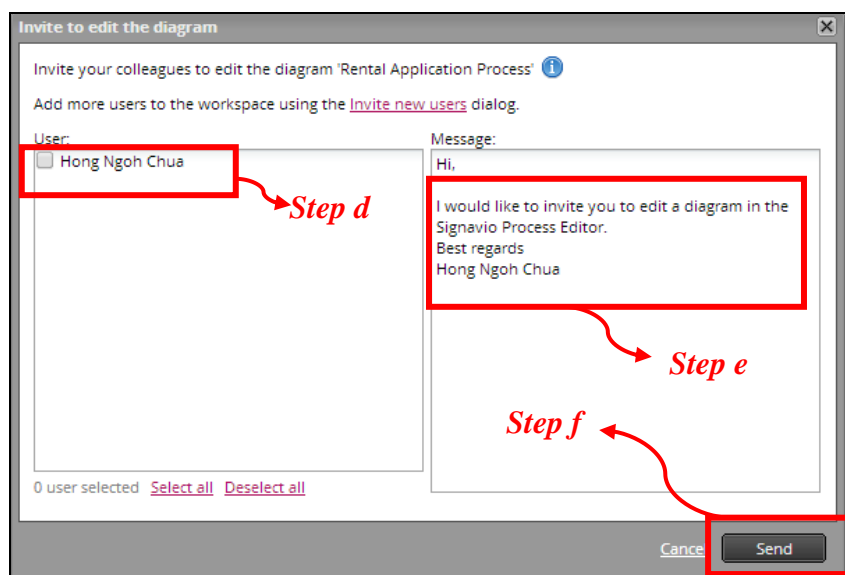
1.2. Invite Friends to Refine Process Diagram

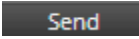
Signavio allows user to notify friends and invite them to refine the diagram.

- Select the process diagram. (Note: Only process diagrams in Shared documents can be shared for editing)
- At **Explorer View**, click  **Share** from toolbar and chose “**Invite modeler to edit**”.
-



- The dialog will open up as follow



- All registered users of the workspace who have write access to the diagram are displayed on the left. Select the names you want to notify to edit the process diagram.
- Customize the invitation message (Optional)
- Click  and invitation email will be sent to all selected users.

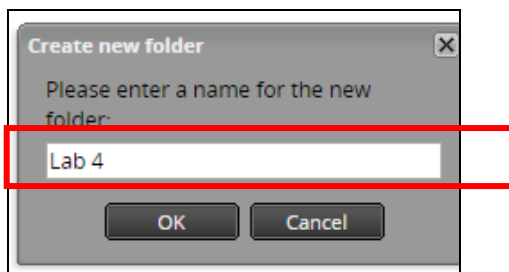
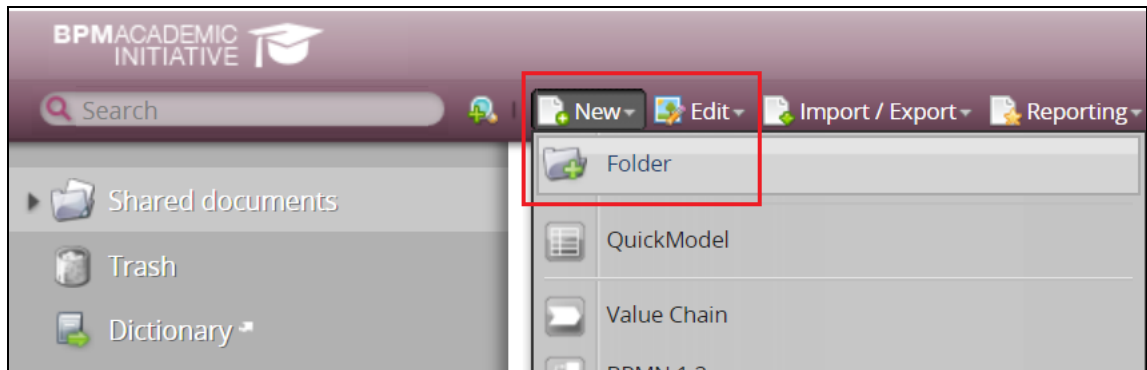
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Part 2: Importing and Exporting of Business Process Diagram

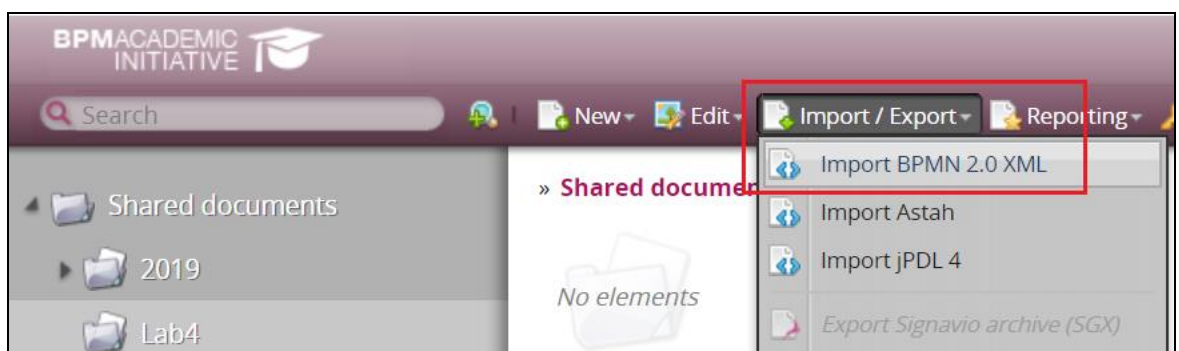
2.1. Import Process Diagram

You can import a process diagram that you have previously exported.

- a. Create a new **Folder** -> **Lab4** in “**Shared documents**” workspace



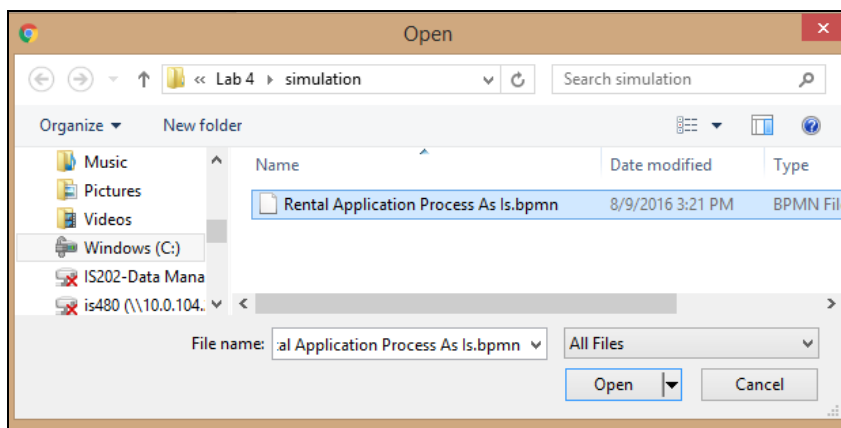
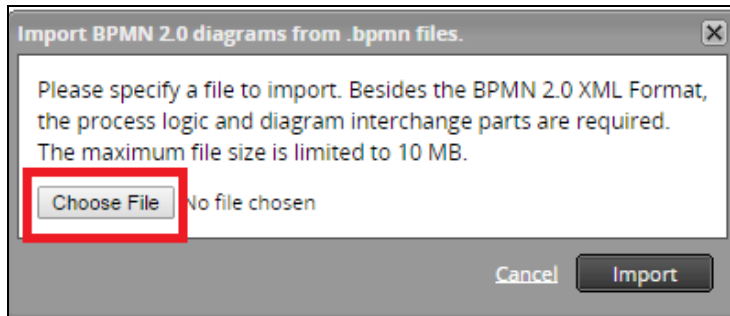
- b. At **Explorer View**, select workspace “**Lab4**”, click “**Import/Export**” and select “**Import BPMN 2.0 XML**”



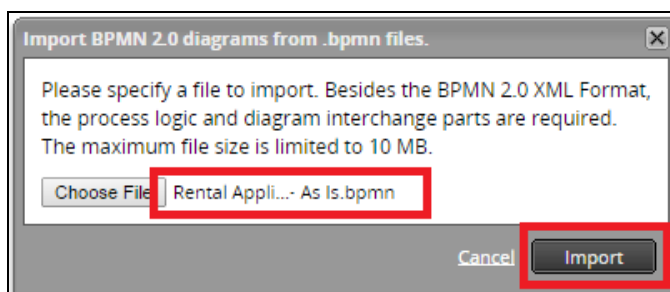
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- c. Click **“Choose File”**. Select the **“Rental Application Process – As Is.bpmn”** file from your download folder.

[Note: you are required to download the bpmn file from eLearn Week 4 Lesson Plan]



- d. Click **“Import”**. The selected process diagram will be imported and appear on your **Explorer View**.

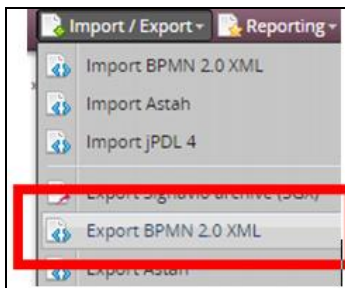


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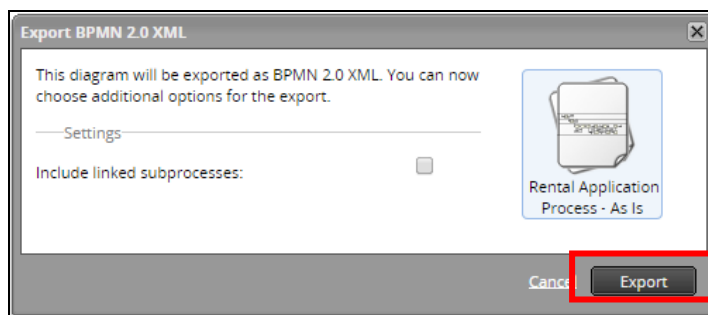
2.2. Export Process Diagram

You can export a process diagram to create regular backups of your work or to share with others.

- a. At **Explorer View**, select the process diagram that you want to export. Click “**Import/Export**” and select “**Export BPMN 2.0 XML**”.



- b. Click “**Export**” to save the bpmn file to your download folder.



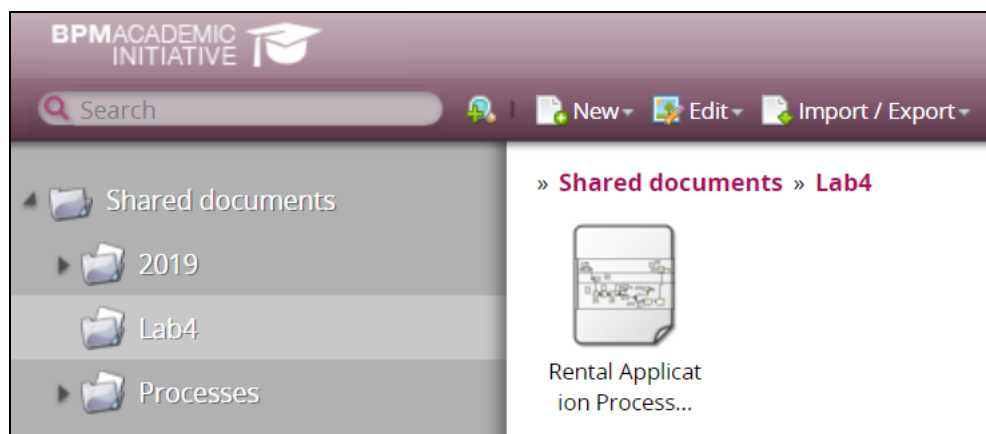
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Part 3: Settings using Attributes Panel

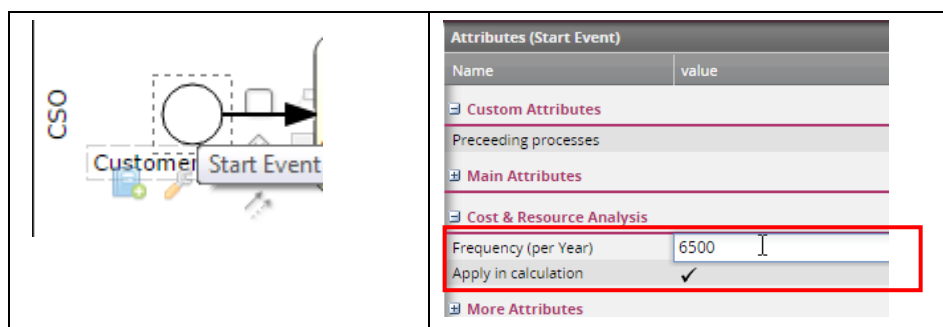
3.1. Attaching performance attributes to process diagram

Each modeling element comes with a range of attributes that can be added or modified. We are going to change the **(i) Frequency for Start Event**, **(ii) Execution Cost and Time for each task** and **(iii) Distribution for each gateway**.

- a. Double click on the “**Rental Application Process – As Is**” from the lab4 workspace. To launch the Graphical Editor for your process workflow.

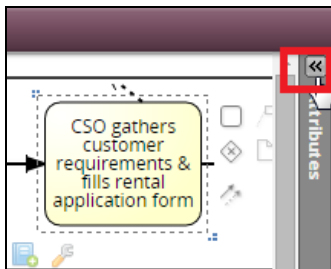


- b. Select **Start Event** and open the attributes properties panel. Under the **Cost & Resource Analysis** section, input “**6500**” for **Frequency (per Year)**. This will denote how often a process is started via this entry point. **Note:** We are using 6500 as there are 25 instances per day, 5 working days a week and we are using 52 weeks in a year.

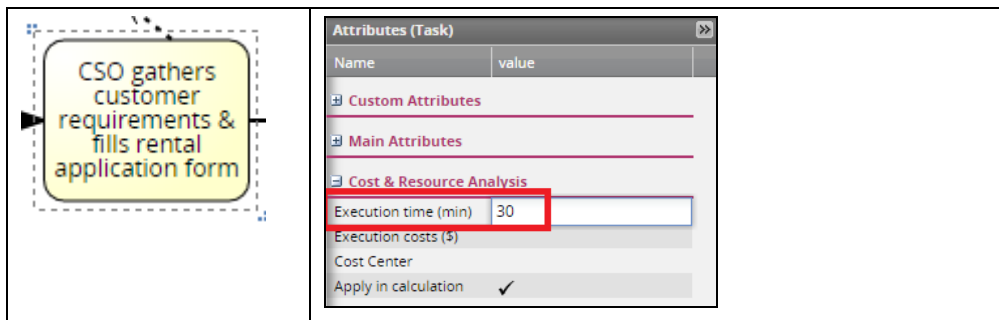


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- c. Select the first task, “**CSO Gathers Requirement and Fills Rental Application Form**”. Click “<<” to open the attributes editor on the right.



- d. The attributes property panel will open for editing. Under the **Cost & Resource Analysis** section, update the **Execution time (min)** with the value **30**.



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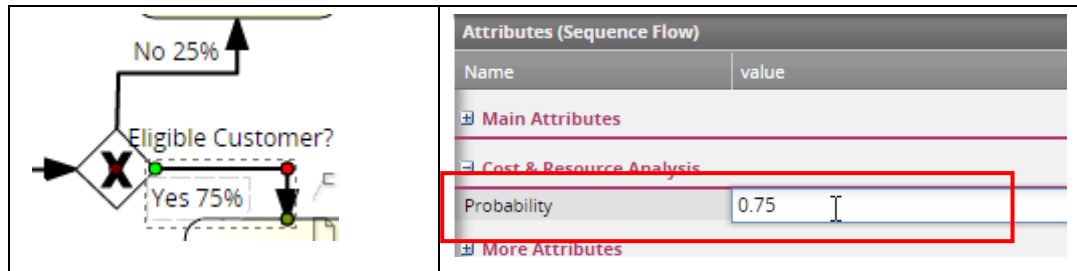
- e. Complete the Execution Time (min) for all the process workflow tasks. The values are as follows:

Cur Step	Prev Step	Task Description	Execution Time (min)
1	-	CSO gathers customer requirements & fills Rental Application Form	30
2	1	OD dispatches Rental Application Form from CSO to MO	5
3	2	MO checks availability of choice industrial space using IMS using information from the rental application form	25
4	3	MO proceeds to CSC to meet customer	5
5	4	MO obtains customer UEN & verifies eligibility from government website	5
6a	5	MO markets choice industrial spaces to customer if UEN eligible (75%)	45
6b	5	MO informs customer of UEN ineligibility and updates Rental Application Form of rejection status (25%). Process ends.	3
7a	6a	If customer rejects choice industrial space, MO updates Rental Application Form of customer rejection (10%). Process ends.	3
7b	6a	If customer accepts choice industrial space, MO reserves customer selection in IMS, updates Rental Application Form & passes form to customer (90%)	5
8	7b	MO sends email to LM for Rental Application approval	3
9	8	CSO collects rental application form and booking fee from customer. CSO note down the payment and issue receipt to customer. Process ends.	12

Note: Leave the **Execution costs (\$)** blank. If there is a one-time fix cost for the task, you may input the execution costs (\$).

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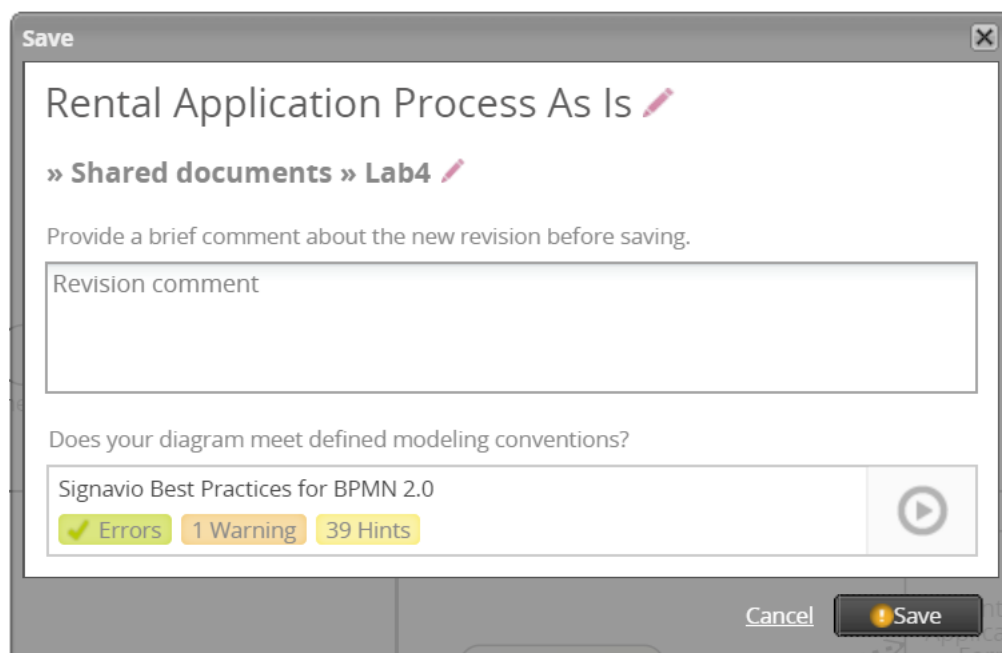
- f. We are going to enter the probability for each gateway. Select the **Yes sequence flow connector for Eligible Customer?** gateway and enter “**0.75**” under **Probability of the Cost & Resource Analysis** section. This will denote the probability for choosing this sequence flow after a decision **gateway/XOR-connector**.



Repeat the **step f** for the following gateway sequence flows:

Gateway	Probability
Eligible Customer?	
No	0.25 (Ineligible, 25%)
Customer Decision	
Accept Choice	0.90 (Accept choice of spaces recommended by MO, 90%)
Reject Choice	0.10 (Reject choice of spaces recommended by MO, 10%)

- g. **Save** the process diagram once you have modified attributes for all modeling elements.



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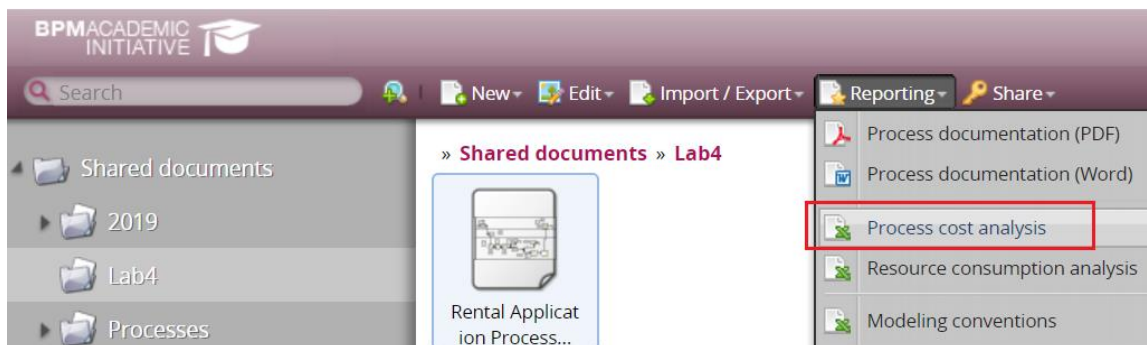
Part 4: Creating Quantitative Analysis Report

The first level of analysis that you can carry out on a model is quantitative analysis. Quantitative analysis refers to any of the available analyses that gather and report data based only on the model information. These analyses can be useful in the review and verification of your process, making sure that the data that you have entered is accurate. Signavio Process Editor enables you to run analysis of your processes. In this course, we will be running both **Process Cost Analyses** and **Resource Consumption Analyses**.

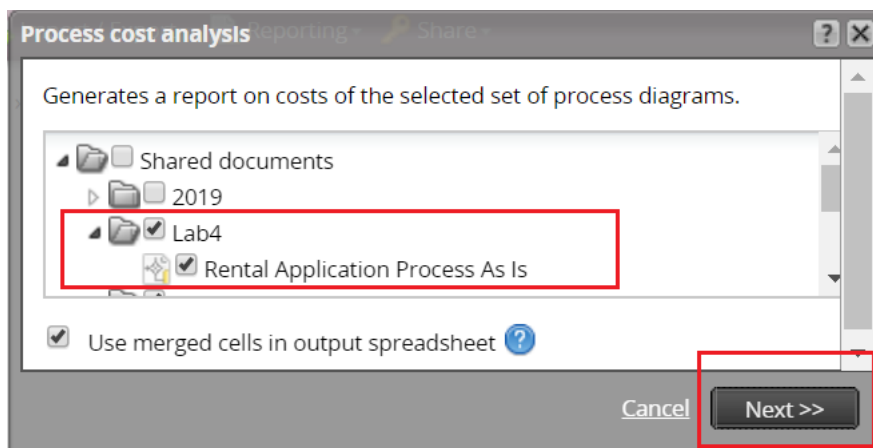
4.1. Process Cost Analysis

This analysis distributes process costs to processes and tasks and lists them by cost centers. Based on the key process indicators set, it creates a table that shows costs for certain tasks or cost centers

- Select "**Rental Application As-Is Process**" from Signavio Explorer.
- Click "**Reporting**" from toolbar and select "**Process cost analysis**".



- The **Process cost analysis window** appears. Make sure you have selected the correct process diagram for analysis. Click "**Next>>**".



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- d. The **Quantitative analysis** window appears. Make sure **Process cost analysis** is selected.
- Select “**Use resource consumption attributes for the calculation (if provided)**”, if you want to include the cost per hour for each resource in the Process cost analysis report.
 - Click “**Next>>**” to set the costs for the resources.

Quantitative analysis

Please select a report mode:

☒ Process cost analysis

€ Cost centers

	1	2	3
Task 1			
Task 2			

Calculation of process costs (\$ per cost center) based on the execution frequency and costs per activity.

☒ Use resource consumption attributes for the calculation (if provided)

☐ Resource consumption analysis

⌚ Resources

	1	2	3
Task 1			
Task 2			

Calculation of resource consumption (hours per resource) based on the execution frequency and execution time per activity.

☐ Include subprocesses in calculation

<< Back Next >>

- e. The next window appears for you to enter cost for each resource for calculation. Enter “**20**” for **CSO**, “**30**” for **MO** and “**6**” for **OD** and click “**Start Calculation**”. If process diagram contains mistakes, system will inform you about that.

Quantitative analysis

Please specify resource costs:

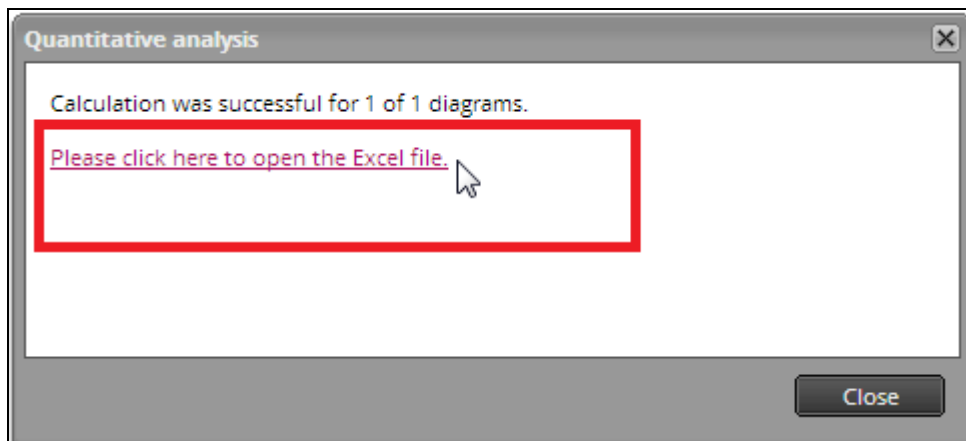
Resource	Costs \$ / h
StarMall - CSO	20
StarMall - MO	30
StarMall - OD	6

<< Back Start Calculation

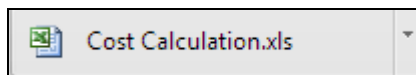
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- f. If there are no errors, an Excel file will be generated.

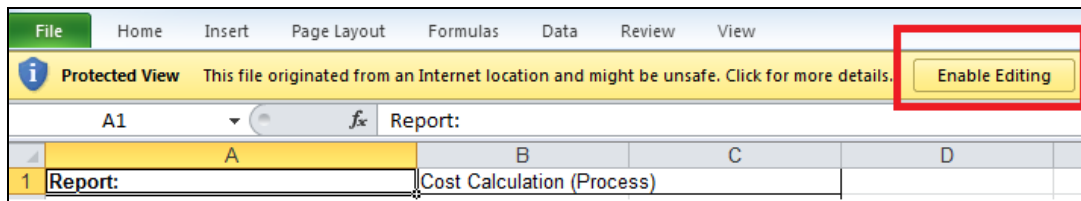
Click “**Please click here to open the Excel File**” link to open the file.



- g. The “**Cost Calculation.xls**” will be at the left bottom of the screen. Click to open the Excel file.



- h. Click “**Enable Editing**” to view the calculated **Process Cost Analysis**.



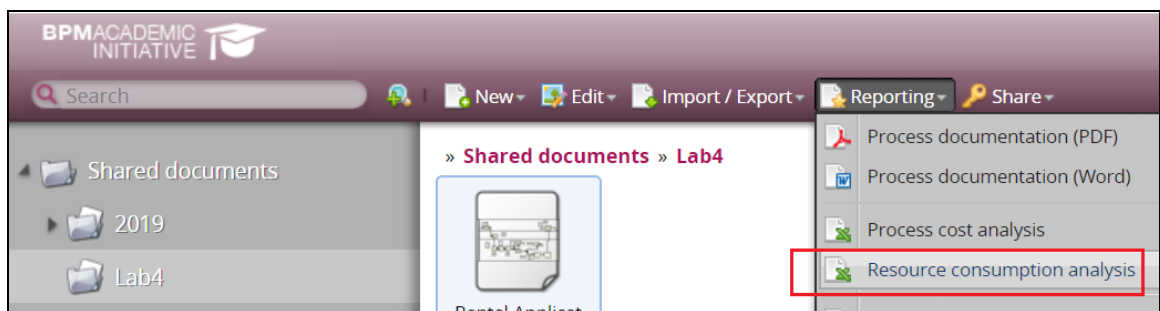
You will see the calculated process cost per task, the input factor which is based on branching structures and probabilities, the execution cost per task and the frequency of instances per year.

- i. Click “**Close**” to close **Quantitative analysis** window in Signavio.

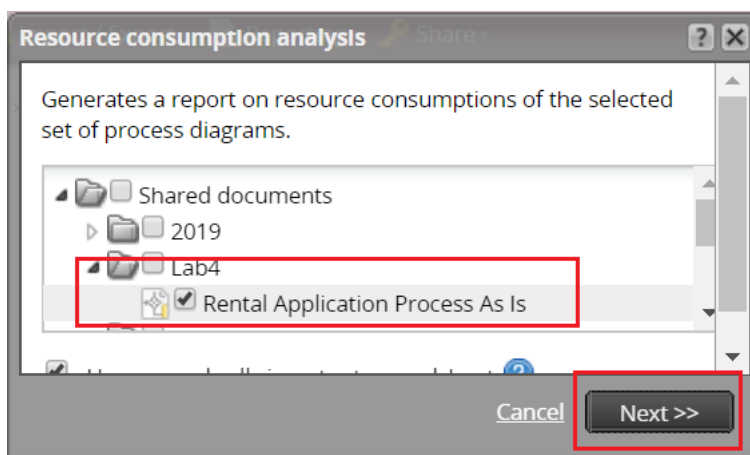
Lab 4: As Is Process Static Analysis**4.2. Resource Consumption Analysis**

This analysis allows computing the time consumption per task or process. It is based on the execution frequency and execution time per activity. It helps finding out the time consuming task and enable management in planning the resource consumption of process participants.

- a. Select “**Rental Application As-Is Process**” from Signavio Explorer.
- b. Click “**Reporting**” from toolbar and select “**Resource consumption analysis**”



- c. The **Resource consumption analysis** window appears. Make sure you have selected the correct process diagram for analysis. Click “**Next>>**”.



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- d. The **Quantitative analysis** window appears. Make sure **Resource consumption analysis** is selected.
- Click “**Next>>**” to set more details on resource calculation.

Quantitative analysis

Please select a report mode:

☐ Process cost analysis

€ **Cost centers**

	1	2	3
Task 1			
Task 2			

Calculation of process costs (\$ per cost center) based on the execution frequency and costs per activity.

☐ Use resource consumption attributes for the calculation (if provided)

☒ **Resource consumption analysis**

🕒 **Resources**

	1	2	3
Task 1			
Task 2			

Calculation of resource consumption (hours per resource) based on the execution frequency and execution time per activity.

☐ Include subprocesses in calculation

<< Back **Next >>**

The next windows appear.

Quantitative analysis

Please provide more details on resource calculation:

Personal allowance (% of total work time) ⓘ

Technical allowance (% of total work time) ⓘ

☐ Save for future calculation

Nominal value of work days / year ⓘ

Nominal value of work hours / day ⓘ

☐ Save for future calculation

<< Back **Start Calculation**

Enter as per stated in the table below and click “**Start Calculation**”:

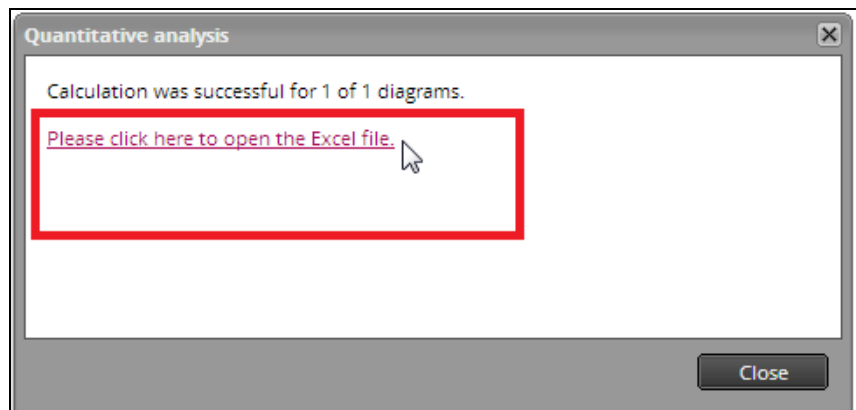
Parameters	Remarks	Value
Personal allowance (% of total work time)	The delay during the execution that happens for personal reasons (eg break etc.) It is the proportional unit of time that are required to meet human needs (value between 0 and 100)	11
Technical allowance (% of total work time)	The delay that happen for technical reasons (eg starting software, etc) It is the proportional unit of time that are required bridge organisation gaps (value between 0 and 100)	5

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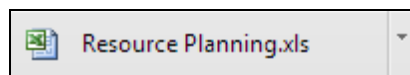
Nominal value of work days / year	Average work days of a full-time employee per year. (value between 0 and 365)	220
Nominal value of work hours/day	Average work hours of a full-time employee per day (value between 0 and 24)	8

- e. If there are no errors, an Excel file will be generated.

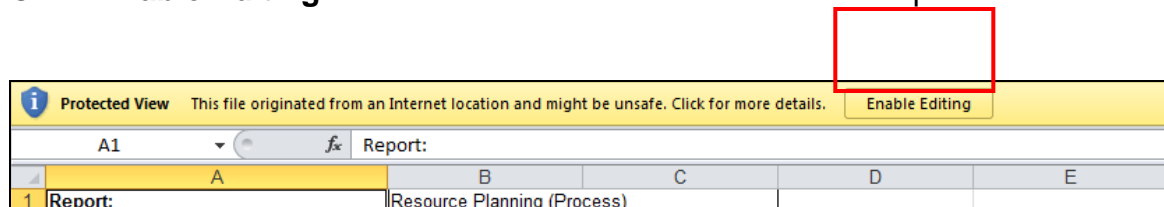
Click “**Please click here to open the Excel File**” link to open the file.



- f. The “**Resource Planning.xls**” will be at the left bottom of the screen. Click to open the Excel file.



- g. Click “**Enable Editing**” to view the calculated Resource consumption.



- h. Click “**Close**” to close the Quantitative analysis window in Signavio.

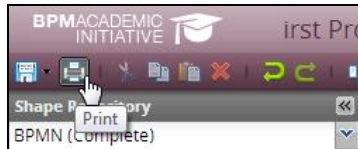
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Part 5: Generation of Business Process Diagram

5.1. Generation of Process Diagram

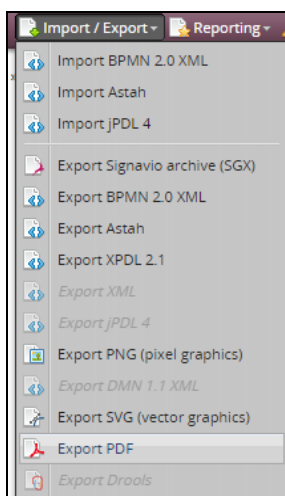
You may export the process diagrams to a PDF document either via **Editor View** or **Explorer View**.

- a. In **Editor View**, click “**Print**” from toolbar.

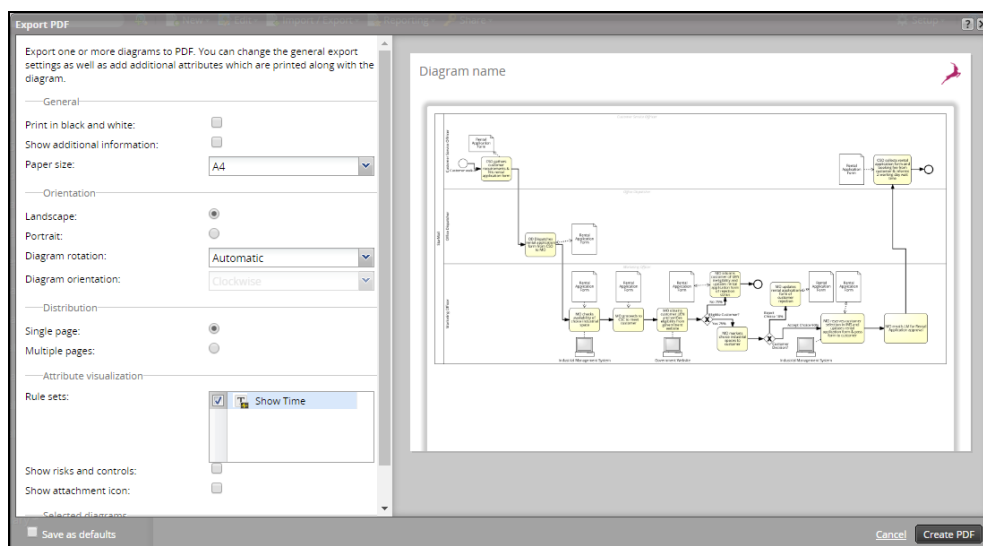


- b. In **Explorer View**,

- Select diagram & click “**Import/Export**” and select “**Export PDF**”.



- c. The **Export PDF** window will open up for you to set the printing preferences



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The following table provide an overview over the printing preferences:

General Section	
Print in black and white	Checked to print the document in black and white
Show additional information	Display printing attributes (eg date or page) or diagram attributes directly in the PDF document. Checked and click the “Configure” Link
Paper size	Select between three different paper types, depending on the paper and the diagram will be printed on.
Orientation	
Landscape / Portrait	Select if you want to print in landscape or portrait layout
Diagram Rotation (a)	Choose whether the diagram orientation should be managed automatically, always in a certain manner or if it should not differ from the internal diagram orientation. Select Automatic as the preference in most cases.
Diagram Orientation (b)	If “ Always ” has been selected under Diagram Rotation (a), you can select whether the orientation should always be clockwise or anti-clockwise .
Distribution	
Single Page / Multiple Pages	Choose whether you want to have a diagram fitted to one page or distributed over several pages. When printing a diagram over multiple pages, the size will be automatically adjusted, so that the diagram width is seizing all available space in PDF. The diagram length is adjusted in relation to the width.
Attribute Visualization	
Show risks and controls	If you have set to show the visualization of attributes, you may decide if you want to show when you export it out PDF
Rule Sets	It will depends if you have set any rule sets.
Selected diagrams	Show which diagram you have selected for exporting to PDF

- d. Once you have configured the printing preferences, click “**Create PDF**” to create a PDF file containing the selected diagram(s). The diagram(s) will be downloaded in your download folder or displayed in your browser.

~ ~ ~ **END OF LABORATORY EXERCISE 4** ~ ~ ~