

# Event Log Sampling for Predictive Monitoring

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---- User Manual

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<https://github.com/Malekhy/ws2122-lspm>

## Overview

The event log sampling for Predictive Monitoring (LSPM) proposes an instance selection procedure that allows sampling training process instances for prediction models.

We implement 3 different sampling algorithms as a training service in the form of web services, combine it with existing predictive models, and produce prediction results.

On our web service page, the user will be able to import (csv/xes) and export (xes) their files. With choosing the suitable sampling method as they want, they will get the prediction results with reliable levels of prediction accuracy instantly.



# Getting started!


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## Steps

- Clone the project from <https://github.com/Malekhy/ws2122-lspm>
- Open the command terminal 'cmd'
- Move into the directory folder of the project: (project-path)\ws2122-lspm
- Move into project environment:
  - For Windows users: `.\Scripts\activate`
  - For Mac users: `source Scripts\activate`
- Run the web app: `python manage.py runserver`
- Open the browser and hit the URL: <http://localhost:8000/>

# Then you will get... 👍

 Chair of Process and Data Science



Home Sample Model Help Page

**Event Logs**

Please upload the event log:  No file chosen

CPMExport - Copy.csv  
CPMExport - Copy\_QjkElkp.csv  
CPMExport.csv  
FirstAssignmentBPI- concept.csv  
FirstAssignmentBPI-DataSet2.csv  
ItalianHelpdeskFinal- concept - Copy.csv  
ItalianHelpdeskFinal- concept.csv  
ItalianHelpdeskFinal- Concept.xes  
ItalianHelpdeskFinal.csv  
ItalianHelpdeskFinal.xes  
exampleSample.xes

is used as input.

**Please choose event log characteristics**

Please choose the Case ID:

Please choose the Activity Name:

Please choose the Start Time Stamp:

**Please choose the sampling method**

☒ Unique Selection

☐ Logarithmic distribution

☐ Division



# Instruction

1. Click here to choose files

2. Click here to add the chosen files

\*Click here to delete the chosen files

\*Click here to download the chosen files on the list

Home Sample Model Help Page

Event Logs

Please upload the event log: Choose File No file chosen

Add Event Log to system

CPMExport - Copy.csv  
CPMExport - Copy\_QjkEklp.csv  
CPMExport.csv  
FirstAssignmentBPI- concept.csv  
FirstAssignmentBPI-DataSet2.csv  
ItalianHelpdeskFinal- concept - Copy.csv  
ItalianHelpdeskFinal- concept.csv  
ItalianHelpdeskFinal- Concept.xes  
ItalianHelpdeskFinal.csv  
ItalianHelpdeskFinal.xes

Set Delete Download

is used as input.

Please choose event log characteristics

Please choose the Case ID: Set an Eventlog first

Please choose the Activity Name: Set an Eventlog first

Please choose the Start Time Stamp: Set an Eventlog first

Please choose the sampling method

☒ Unique Selection  
☐ Logarithmic distribution  
☐ Division



# Instruction

\*Click here to see statistics comparison between the original event log and the sampling results

5. Click here to start sampling

3. Click here to adjust the preferred characteristics

4. Click here to choose the sampling methods

Home Sample Model Help Page

Event Logs

Please upload the event log:  No file chosen

CPMExport - Copy.csv  
CPMExport - Copy (2).csv  
CPMExport.csv  
FirstAssignmentBPI-concept.csv  
FirstAssignmentBPI-DataSet2.csv  
ItalianHelpdeskFinal-concept - Copy.csv  
ItalianHelpdeskFinal-concept.csv  
ItalianHelpdeskFinal-Concept.xes  
ItalianHelpdeskFinal-Concept.xes  
ItalianHelpdeskFinal.csv  
ItalianHelpdeskFinal.xes

ItalianHelpdeskFinal-concept - Copy.csv is used as input.

Please choose event log characteristics

Please choose the Case ID:

Please choose the Activity Name:

Please choose the Start Time Stamp:

Please choose the sampling method

☒ Unique Selection  
☐ Logarithmic distribution  
☐ Division




# Instruction


results page 

In the Bounce Rate column we can see the reduced percentage after prediction.

e.g. In this row we can see the significant changes after implementing our sampling methods.



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and Data Science



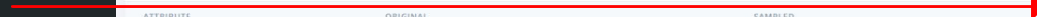
Home Sample Model Help Page

Sample model window

Original eventlog and sampled one some statistics [See all](#)

ATTRIBUTE	ORIGINAL	SAMPLED	BOUNCE RATE
Event log name	Italian-helpdeskFinal-concept - Copy.csv	SAMPLED.FILE20220107-214243.csv	
Number of cases	4579	2123	↓ 46,53%
Number of events	21342	10366	↓ 36,49%
Average case duration	0d 0h 0m 0s	0d 0h 0m 0s	↓ 50,87%
Number of variants	226	111	↓ 46,53%
Total case duration	0d 0h 0m 0s	0d 0h 0m 0s	↓ 46,53%

Please navigate to Home tab for changing the selected log





**Thanks for your attention**

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