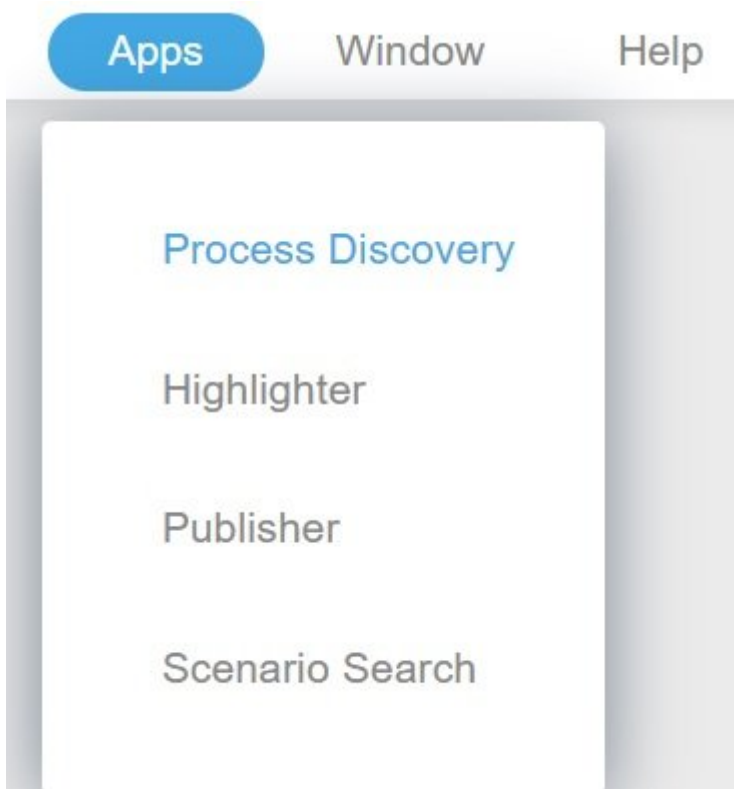


DCR Process Discovery

<https://documentation.dcr.design/documentation/dcr-process-discovery/>


The DCR Portal contains an app, DCR Process Discovery, which can analyse flows and suggest rules to the user.

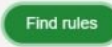







The App is based on latest research from Copenhagen University on process mining and process discovery. Identifying rules in a DCR process models has been a topic for several student project at IT University and Copenhagen University and we're working with researchers to refine the algorithms to make an industrial strength solution.

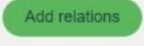
The App can analyze either Flows or specific log files in XES or DCR XML Log format. The image below illustrates analysis of Flows and recommended rules.

Process Discovery

IMPORT LOG 

SETTINGS 

	Source	Type	Target	Explanation	Miner
<input type="checkbox"/>	B		C	<input type="text" value="1004963"/>	Rejection
<input type="checkbox"/>	A		B	<input type="text" value="Not BA"/>	Both
<input type="checkbox"/>	A		B	<input type="text"/>	DisCoveR
<input type="checkbox"/>	A		A	<input type="text"/>	DisCoveR
<input type="checkbox"/>	B		B	<input type="text"/>	DisCoveR

Relations found: 6 New relations: 5 

Clicking on the leftmost grey icon will turn it green to add and red to ignore the rule. The App captures users accept or reject of rules which is used to train the algorithm to provide better suggestions. We also save information about process model, flows and log in order to train the computer.

You can add all the rules in one click without filling out the explanation by clicking CTRL+Add rules button on the same time. Normally we requirement explanations for each rule but you can avoid this simply clicking CTRL too.

Version 1.3 released September 2020 makes it possible to choose which rules to mine:

Enhance graph based on defined Scenarios or by Importing a log file (DCR XML Log or XES log)

Locate new relations between events based on pre-defined Scenarios or an XES log. If new activities or roles are located they can be added.

SCENARIOS

Scenarios List With Count

Required 5

Neutral 4

IMPORT LOG

SETTINGS

Use "org:resource" as role

Mine conditions

Mine responses

Mine includes

Mine excludes

Add milestone relation if condition

Model Recommendation 1.3, released September 7th, 2020

Model Recommendation

Choose to mine






- Conditions
- Responses
- Includes
- Excludes

It is also possible to add a milestone for each condition added. We refer to conditions as the "condition/milestone" rule, or a [pre-condition](#). Version 2.0, released December 30th 2020, supports mining Forbidden flows using the Rejection Miner developed by Tijds Slaats and Søren Debois as part of the [EcoKnow](#) project. We now show which process mining algorithms that found the business rule, i.e. Rejection for rejection miner, DisCover for DisCover miner and Both of rule was found by both miners.

IMPORT LOG 

SETTINGS

Find rules

	Source	Type	Target	Explanation	Miner
<input type="checkbox"/>	B		C	<input type="text" value="1004963"/>	Rejection
<input type="checkbox"/>	A		B	<input type="text" value="Not BA"/>	Both
<input type="checkbox"/>	A		B	<input type="text"/>	DisCoveR
<input type="checkbox"/>	A		A	<input type="text"/>	DisCoveR
<input type="checkbox"/>	B		B	<input type="text"/>	DisCoveR

Relations found: 6 New relations: 5

Add relations

Type: User guide
Audience: Modelers

