

Log Preparation Steps for Extremely Large logs – Splitting Procedure

(In our case: BPI Challenge 2019)

For preliminary splitting in subprocesses the following steps were followed.

The following steps were followed in **Disco**:

- 1) Filtering by attributes
- 2) Filtering by (case) Item Category
- 3) Apply them and create a copy

The following logs were split:

- 1) Consignment
- 2) 2 way matching
- 3) 3 way matching invoice receipt before GR
- 4) 3 way matching invoice receipt after GR

In the following steps we removed the incomplete traces based on endpoints filter:

- 1) We lack knowledge of the start and end activities so we choose based on mainstream behavior (removing those with less frequency comparatively)
- 2) The following steps combined with the semantically meaningful activity name were followed.
- 3) In addition to the above two steps if the case item category is 3 way matching invoice receipt after GR then “ Record Goods Receipt ” cannot be an end activity.

As a result, we filter by the following start and end activities:

	<i>Allowed start activities</i>	<i>Allowed end activities</i>
<i>3-way matching, invoice after GR</i>	Create Purchase order item, Create Purchase Requisition Item	Clear Invoice, Set Payment Block
<i>3-way matching, invoice before GR</i>	Create Purchase Order Item	Clear Invoice
<i>2-way matching</i>	Vendor creates invoice	Record Invoice Receipt, Clear Invoice

<i>Consignment</i>	Create Purchase Order Item, Create Purchase Order Requisition Item	Record Goods Receipt, Delete Purchase Order Item
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The following steps were followed in **Disco**:

- 1) Filtering by endpoint
- 2) Select start and end activities
- 3) Apply them and create a copy