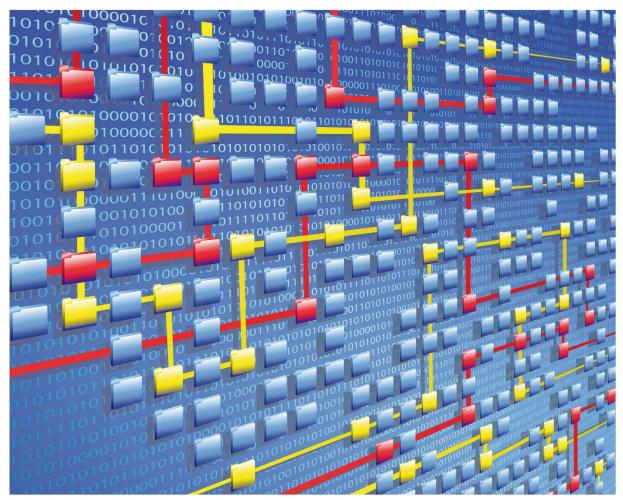
IEEE Task Force on



Process Mining

XES CERTIFICATION FOR APROMORE

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TOOL

Tool

NAME

Apromore

VENDOR

Apromore

VERSION

7.16

REQUESTED CERTIFICATION LEVELS



META

Meta

AUTHORS

Shefali Sharma

DATE

10/07/2020

HISTORY

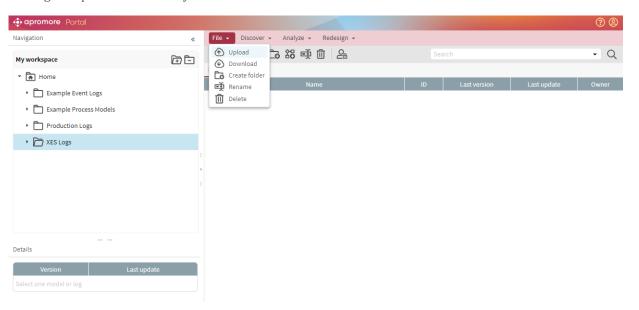
| CHANGES | | |
|----------------|------------|--|
| AUTHOR(S) | DATE | DESCRIPTION |
| Shefali Sharma | 02/07/2020 | Version 1.0 |
| Shefali Sharma | 10/07/2020 | Version 2.0 – Identical screen dumps for export section. |

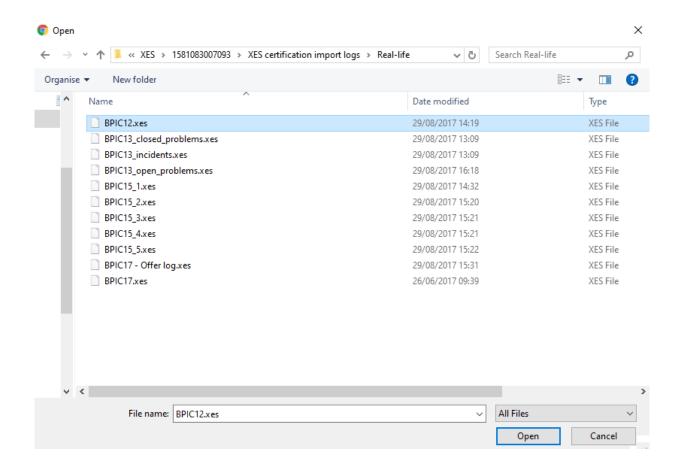
Import

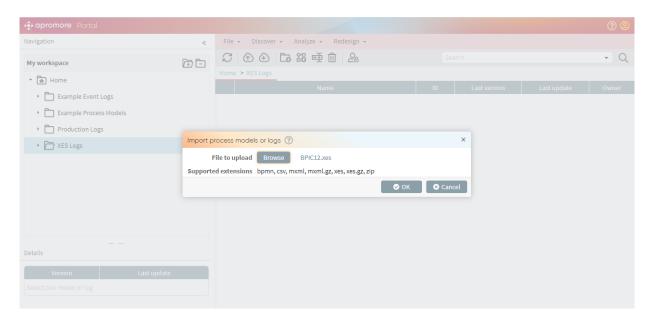
REAL-LIFE LOGS

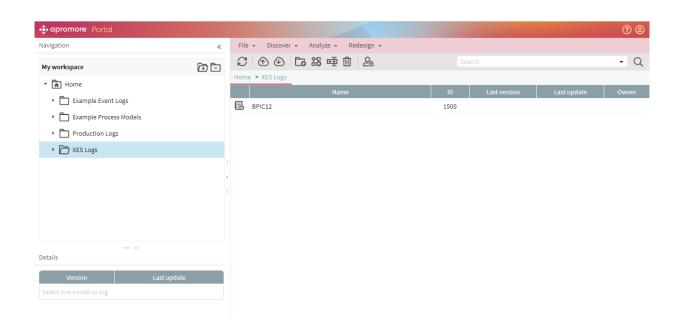
| SANITIZED BPIC LOGS | | | |
|------------------------|--------|-----------|-------------|
| NAME | TDAGEG | EVENITC | CIZE IN ICD |
| NAME | TRACES | EVENTS | SIZE IN KB |
| BPIC12 | 13,087 | 262,200 | 72,363 |
| BPIC13_closed_problems | 1,487 | 6,660 | 4,090 |
| BPIC13_incidents | 7,554 | 65,533 | 38,627 |
| BPIC13_open_problems | 819 | 2,351 | 1,370 |
| BPIC15_1 | 1,199 | 52,217 | 40,261 |
| BPIC15_2 | 832 | 44,354 | 33,616 |
| BPIC15_3 | 1,409 | 59,681 | 45,673 |
| BPIC15_4 | 1,053 | 47,293 | 36,131 |
| BPIC15_5 | 1,156 | 59,083 | 44,961 |
| BPIC17 - Offer log | 42,995 | 193,849 | 107,557 |
| BPIC17 | 31,509 | 1,202,267 | 565,373 |

BPIC12

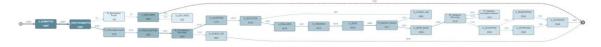




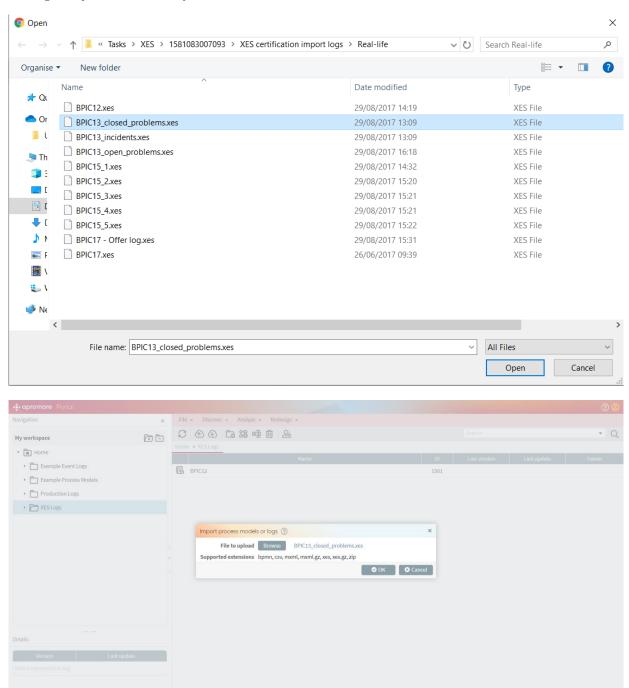


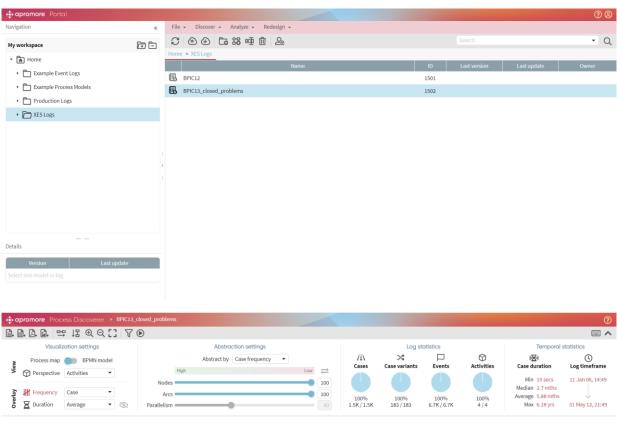


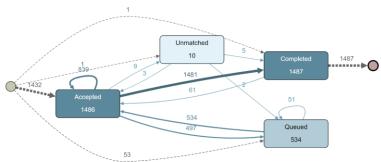




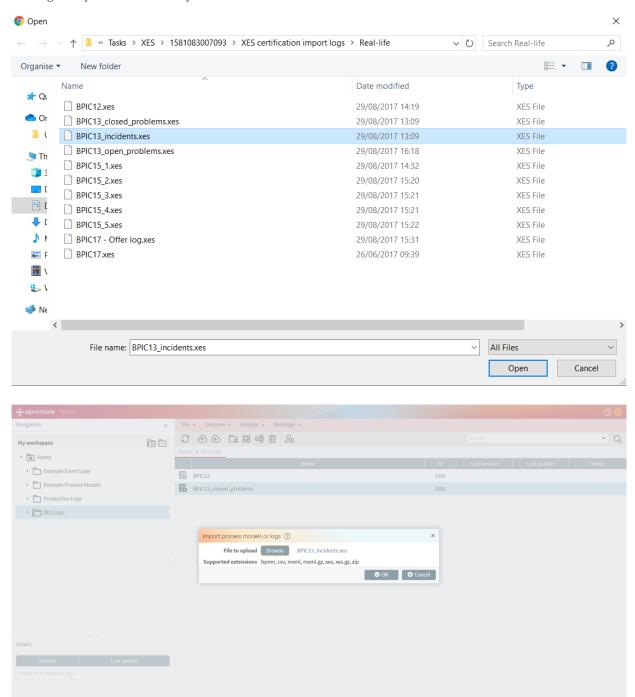
BPIC13_closed_problems

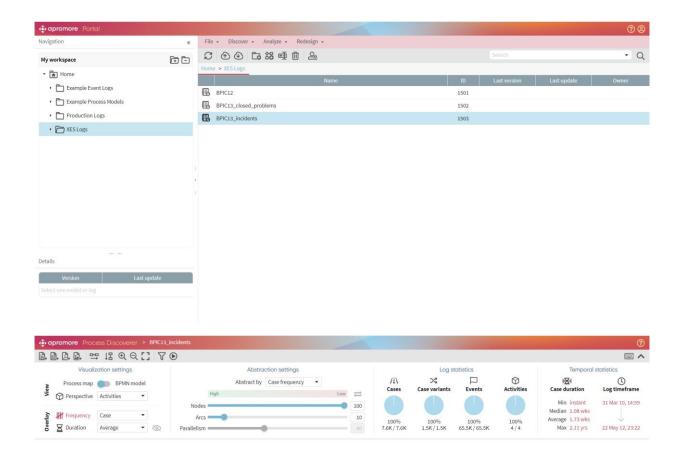


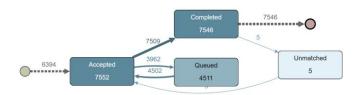




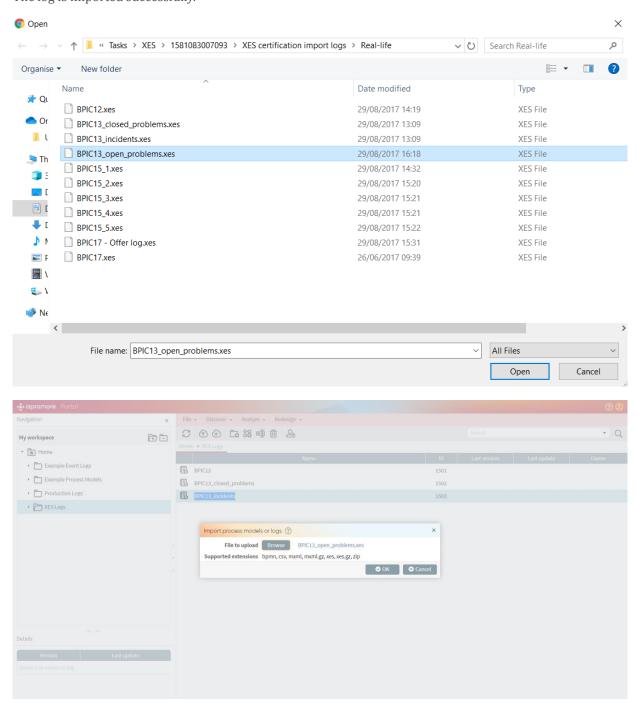
BPIC13_incidents

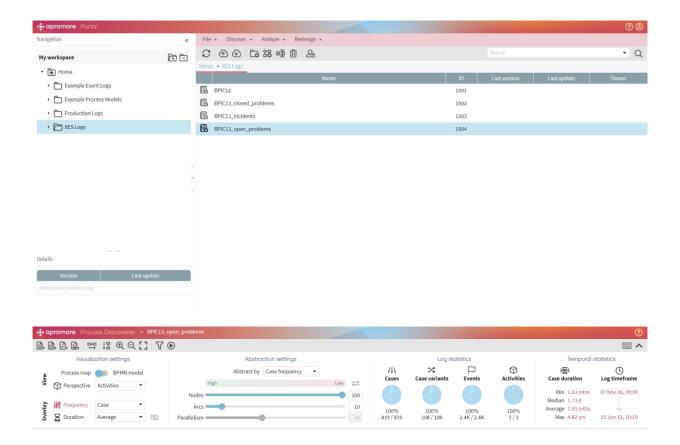


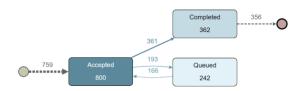




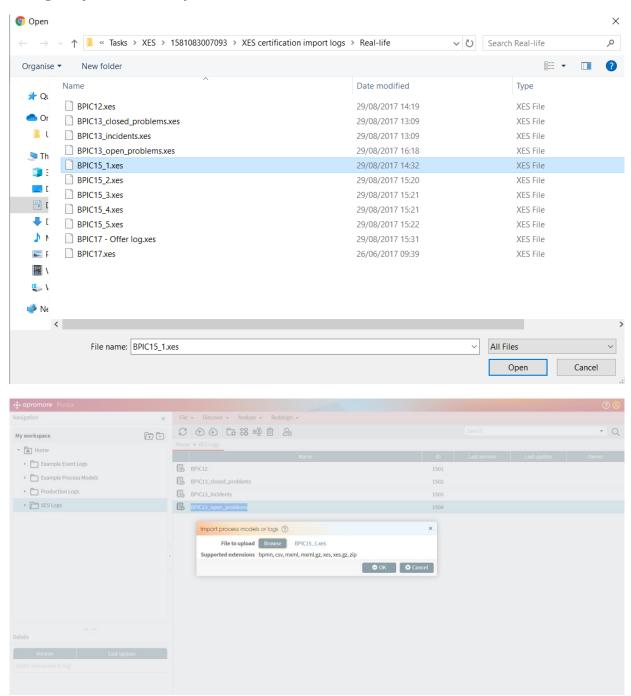
BPIC13_open_problems

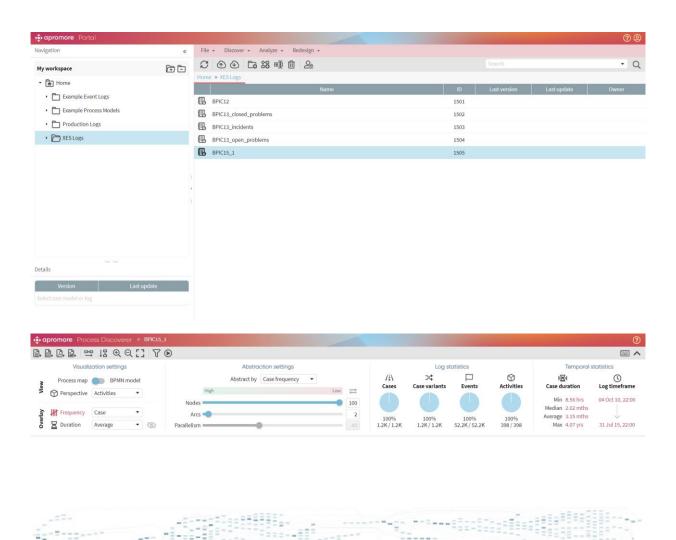




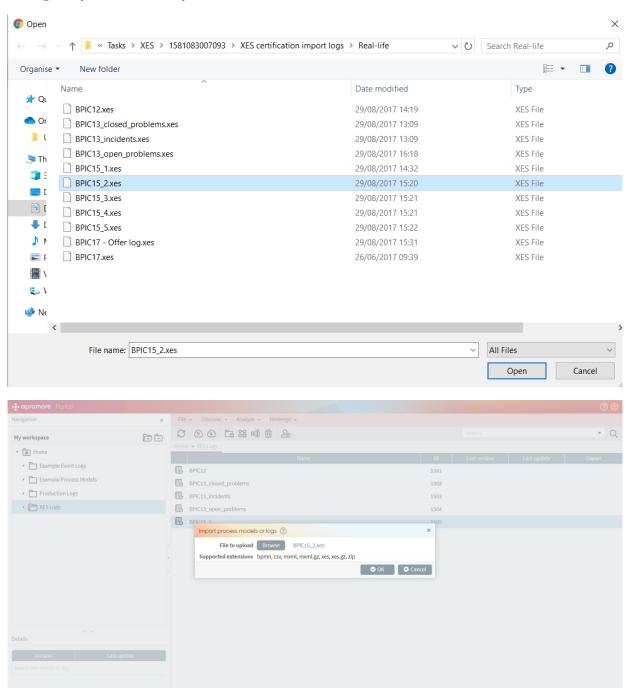


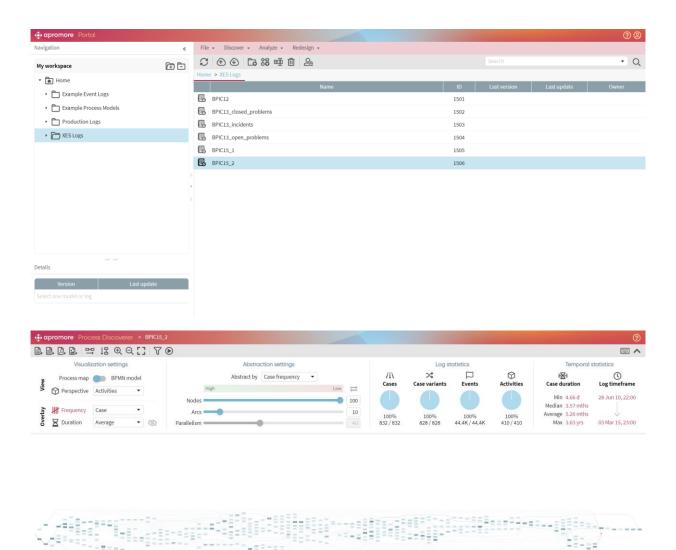
BPIC15_1



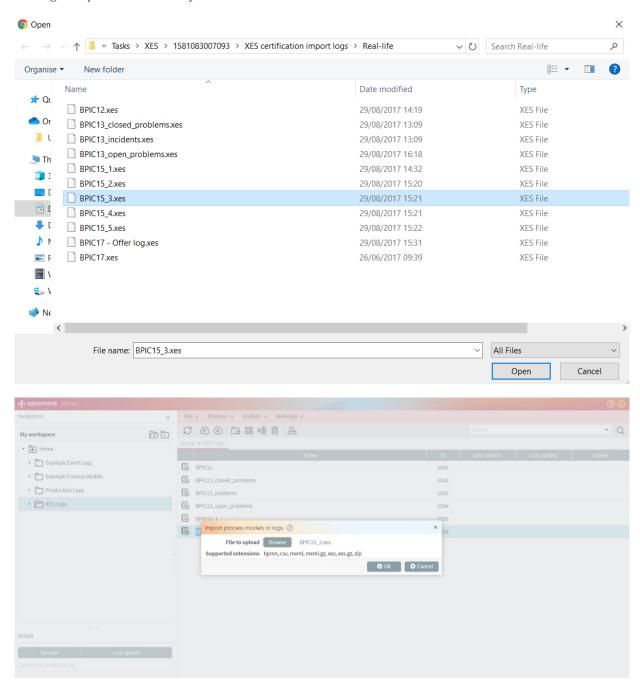


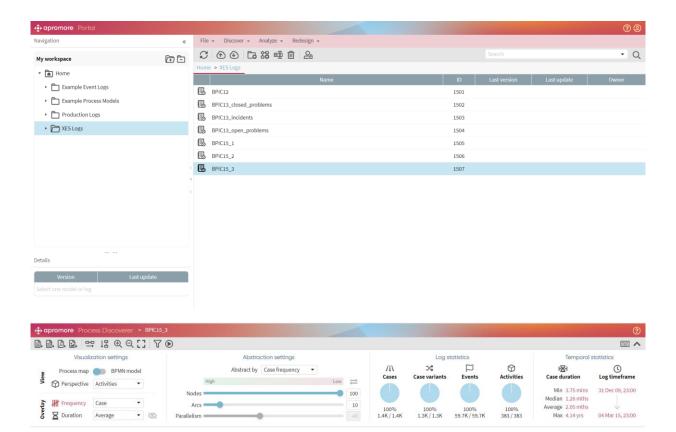
BPIC15_2





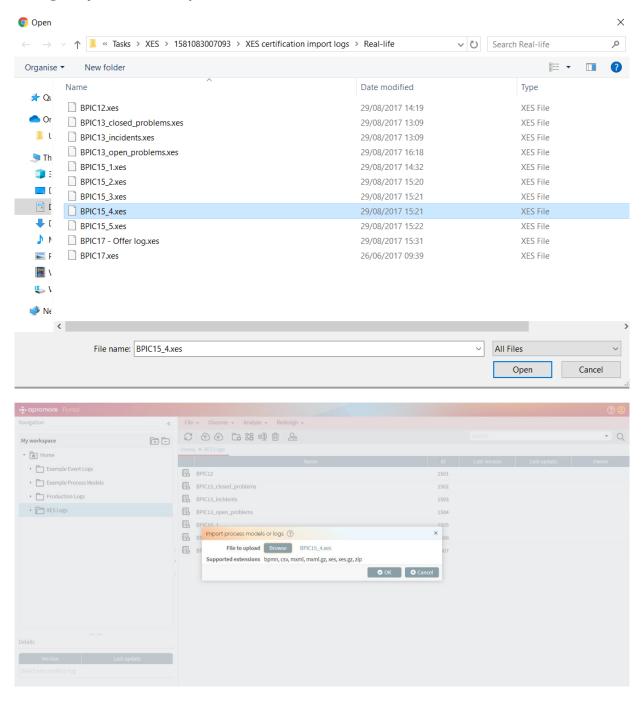
BPIC15_3

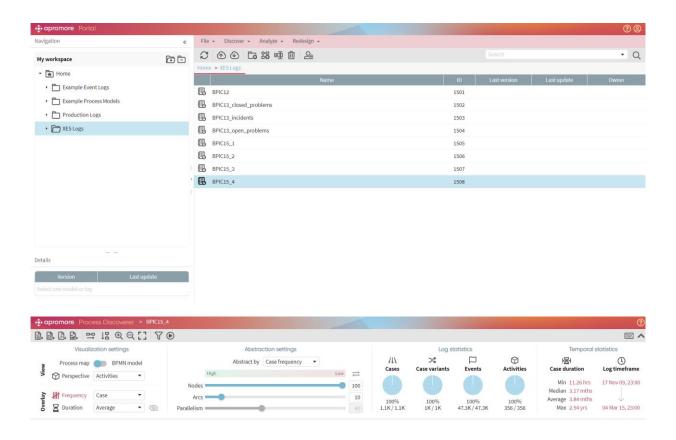






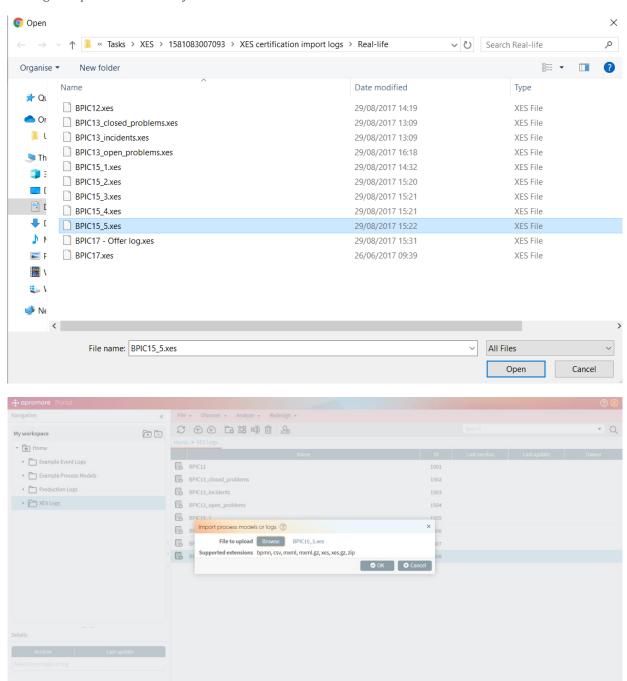
BPIC15_4

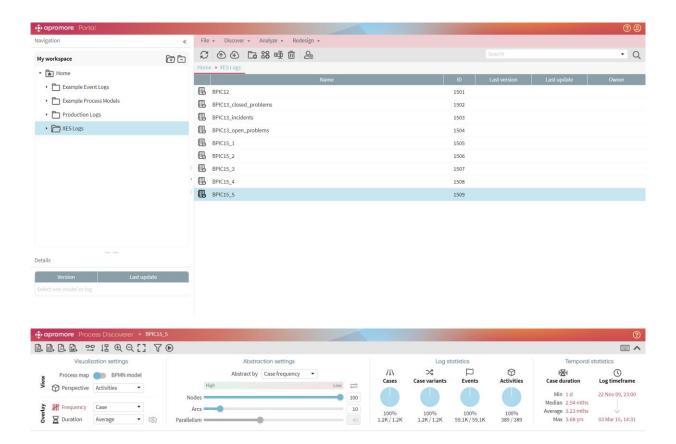






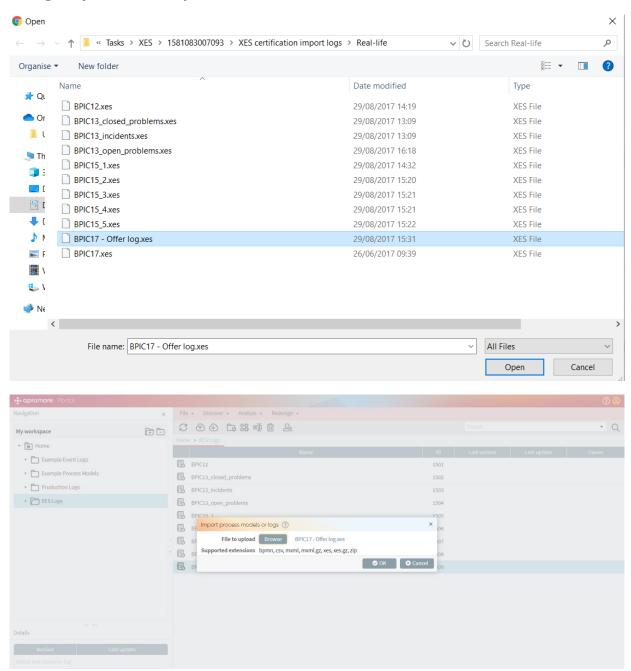
BPIC15_5

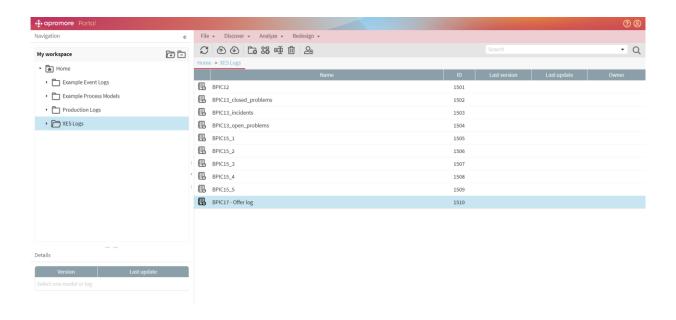




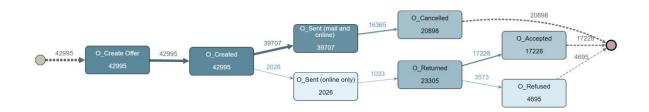


BPIC17 - Offer log

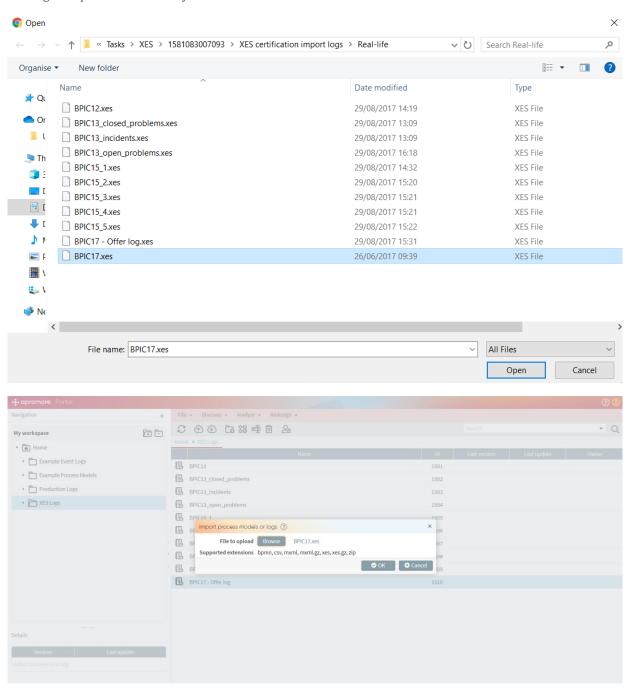


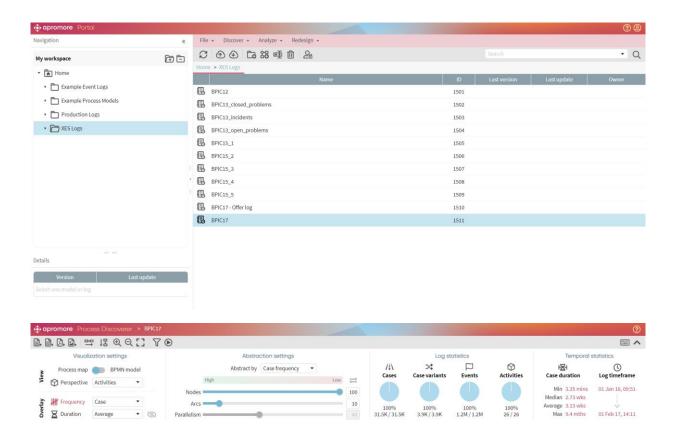


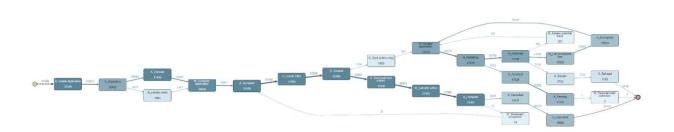




BPIC17







ARTIFICIAL LOGS

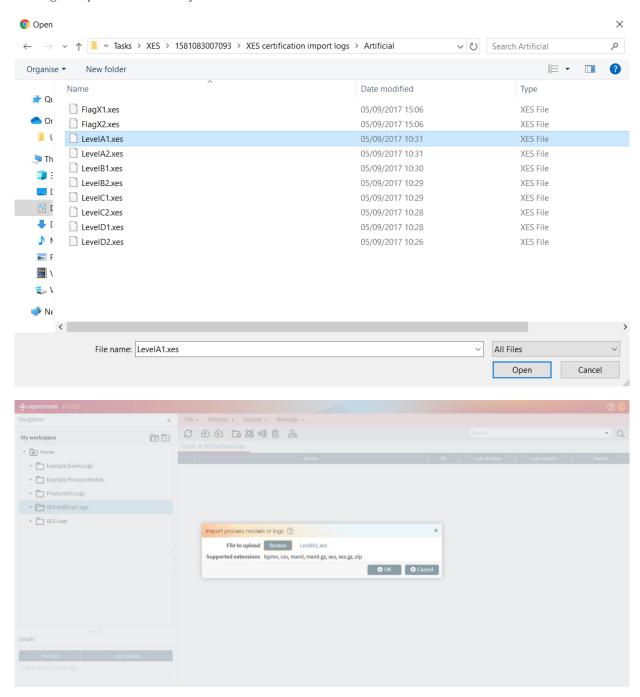
| FILTERED REPAIR | REXAMPLE LOGS | |
|-----------------|---------------|---|
| NAME | LEVEL | EVENT ATTRIBUTE KEYS (IF BOLD THEN GLOBAL) |
| LevelA1 | A1 | concept:name |
| LevelA2 | A2 | Classifier (concept:name AND lifecycle:transition) |
| LevelB1 | B1 | concept:name, lifecycle:transition, time:timestamp |
| LevelB2 | B2 | Classifier (concept:name AND lifecycle:transition), time:timestamp |
| LevelC1 | C1 | concept:name, org:resource |
| LevelC2 | C2 | Classifier (concept:name AND lifecycle:transition), org:resource |
| LevelD1 | D1 | concept:name, concept:instance, lifecycle:transition, org:resource, org:group, org:role, time:timestamp |
| LevelD2 | D2 | Classifier (concept:name AND lifecycle:transition), concept:instance, org:resource, org:group, org:role, time:timestamp |
| FlagX1 | X1 | defectFixed, defectType, Key 1, Key 2, Key 3, Key 4, Key 6, phoneType, numberRepairs, {0,1,2} 2Sa!! +1 <x>, ITEMS:41, #1, o.1.1</x> |
| FlagX2 | X2 | defectFixed, defectType, Classifier (Key 1 AND Key 6), Key 2, Key 3 , Key 4 , |

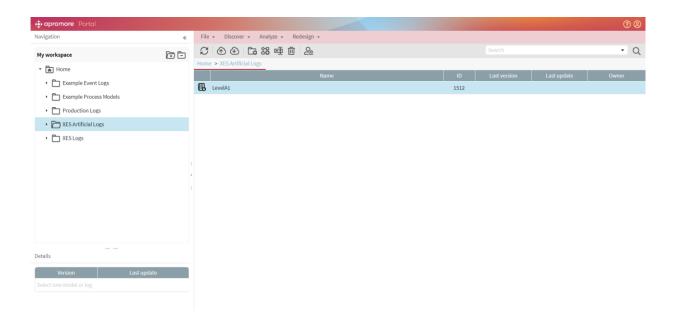
phoneType, numberRepairs, {0,1,2} 2Sa!! +1 <x>, ITEMS:41, #1, o.1.1

| ATTRIBUTE TYPES AND VALUES | 5 | |
|---------------------------------------|--------|--|
| KEYS | TYPE | VALUES |
| concept:instance Key 2 | string | instance 1 instance 2 instance 3 instance 4 |
| concept:name (A1 and C1 logs) | string | Analyze Defect+complete Analyze Defect+start Archive Repair+complete Inform User+complete Register+complete Repair (Complex)+complete Repair (Simple)+start Repair (Simple)+start Restart Repair+complete Test Repair+complete Test Repair+start |
| concept:name (other logs) Key 1 | string | Analyze Defect Archive Repair Inform User Register Repair (Simple) Repair (Complex) Restart Repair Test Repair |
| lifecycle:transition Key 6 | string | start complete |
| org:group {0,1,2} 2Sa!! +1 <x></x> | string | Group - Group 1, 3, and 5 Group 2 and 4 |
| org:resource Key 3 | string | SolverC1 SolverC2 SolverC3 SolverS1 SolverS2 SolverS3 System Tester1 Tester2 |

| | | Tester3 Tester4 Tester5 |
|---------------------------------|---------|--|
| | | Tester6 |
| org:role ITEMS:41, #1, o.1.1 | string | Role 1, 2, and 3 Role 10 Role 9 |
| time:timestamp Key 4 | date | Like 1970-01-02T12:23:56.720+01:00 |
| defectFixed | boolean | true false |
| defectType | int | 1 10 2 3 4 5 6 7 8 |
| numberRepairs | int | 0 1 2 3 |
| phoneType | String | T1 T2 T3 |

Level A1

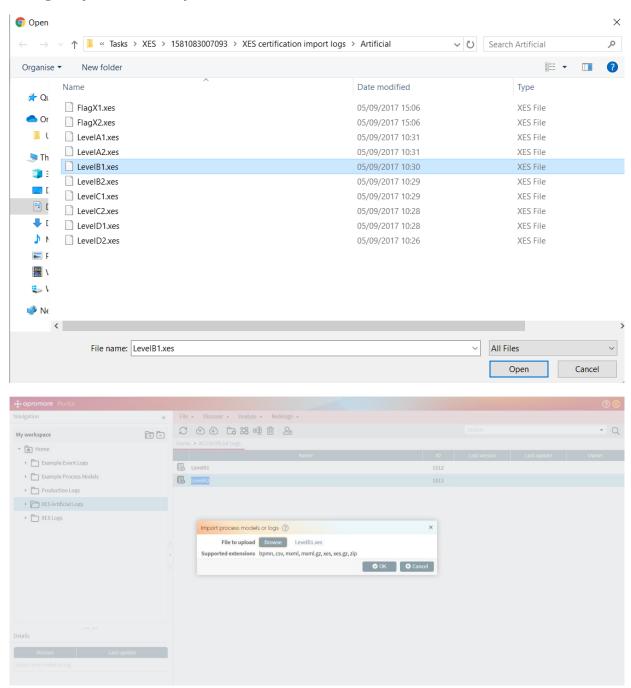


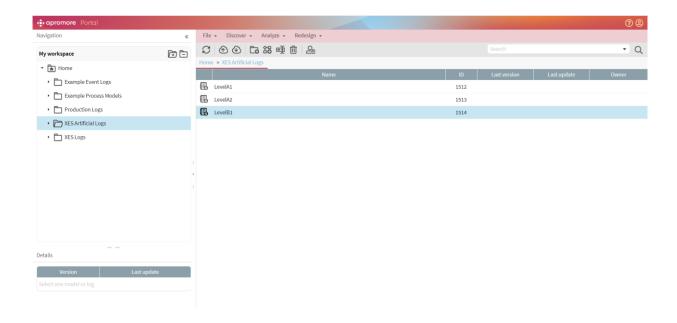


The concept:name attributes contained in the log were used.

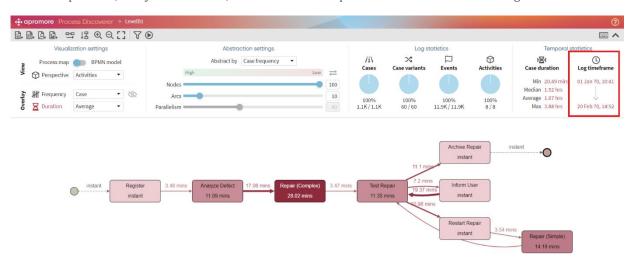


Level B1

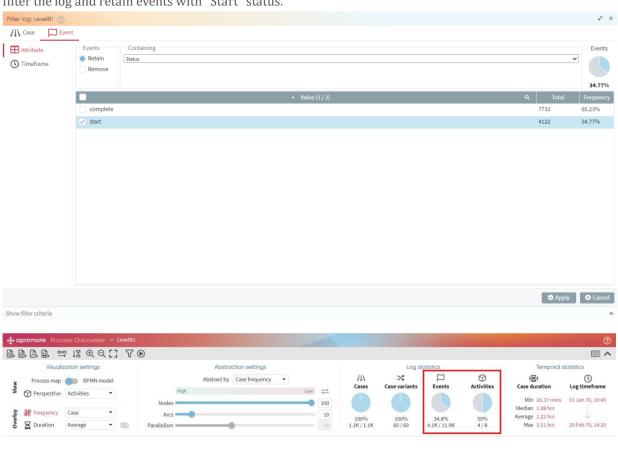


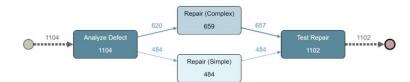


The concept:name, lifecycle:transition, and time:timestamp attributes contained in the log were used.

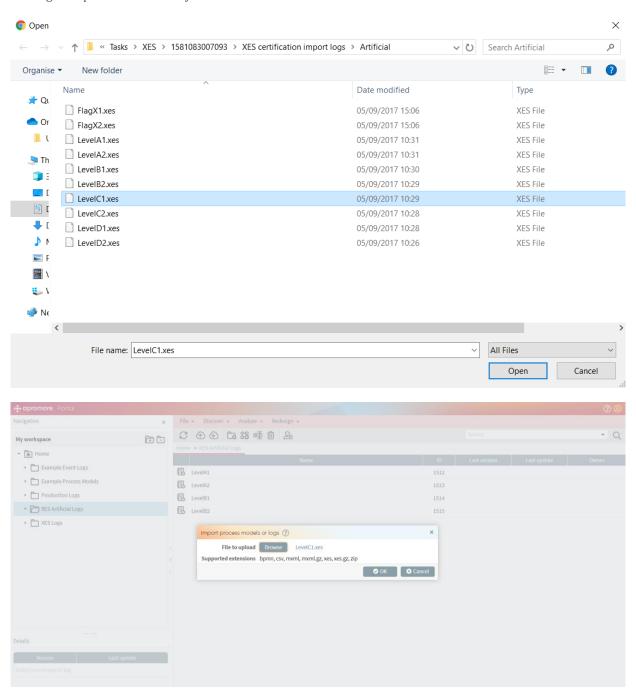


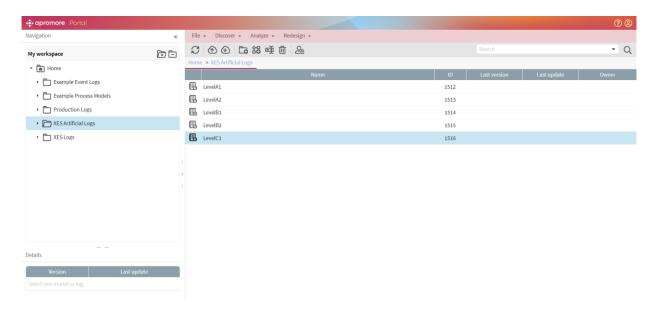
The following screenshot shows that lifecycle:transition can be used for the purpose of filtering. Eg: We can filter the log and retain events with "Start" status.





Level C1

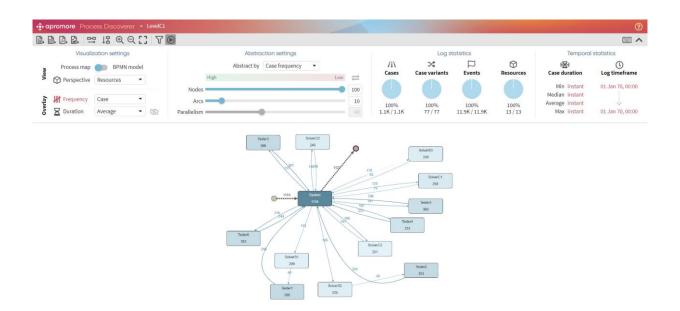




The concept:name and org:resource attributes contained in the log were used.

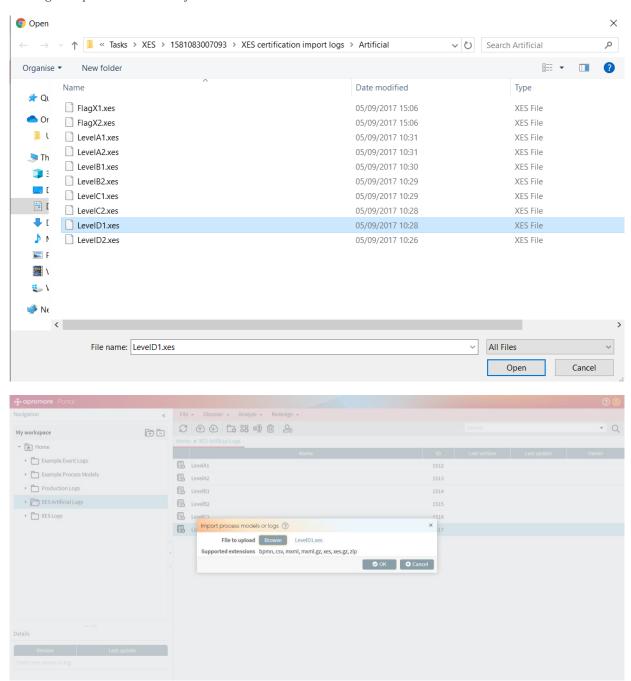


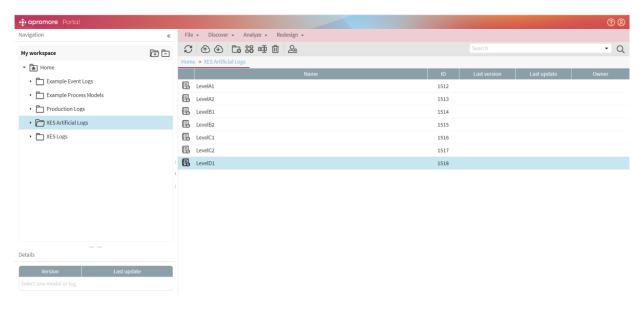




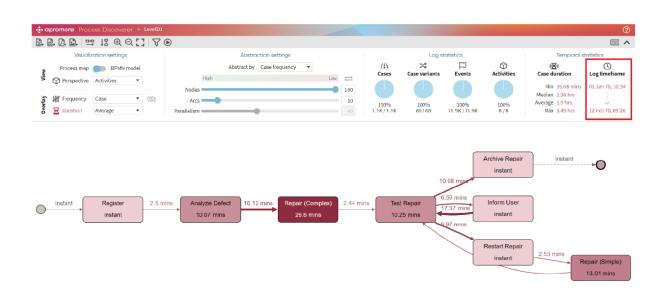
Level D1

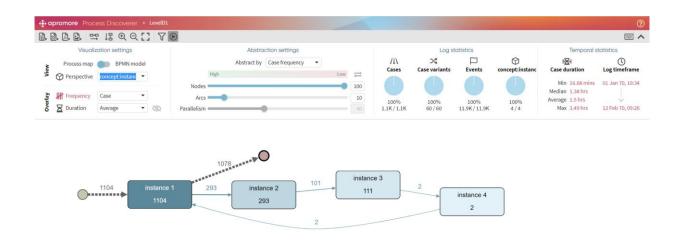
The log is imported successfully.



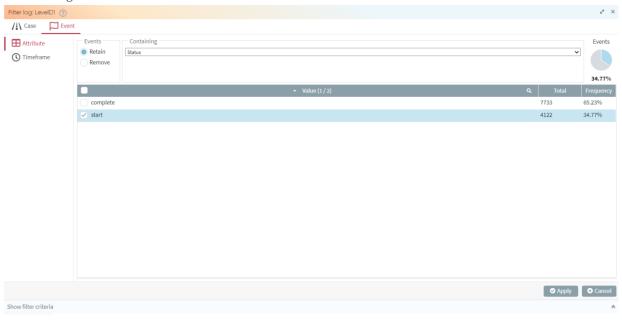


All (standard) attributes contained in the log were used.

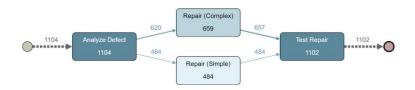




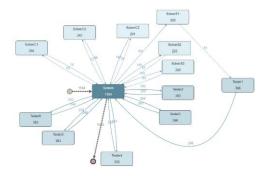
The following screenshot shows that lifecycle:transition can be used for the purpose of filtering. Eg: We can filter the log and retain events with "Start" status.



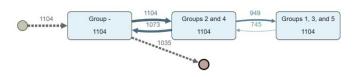




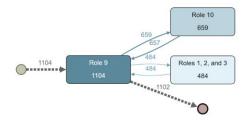










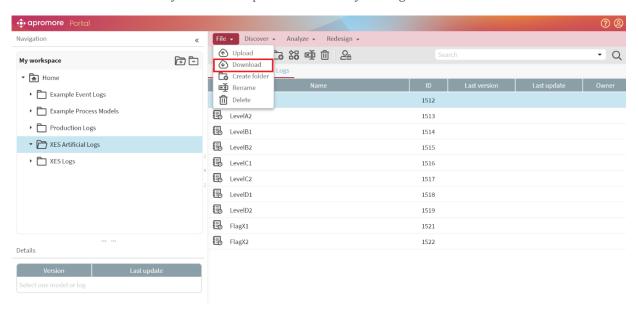


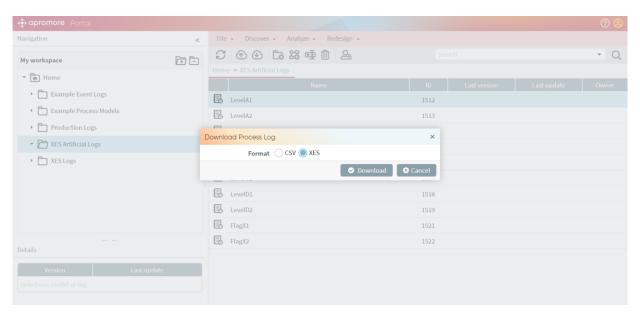
Export

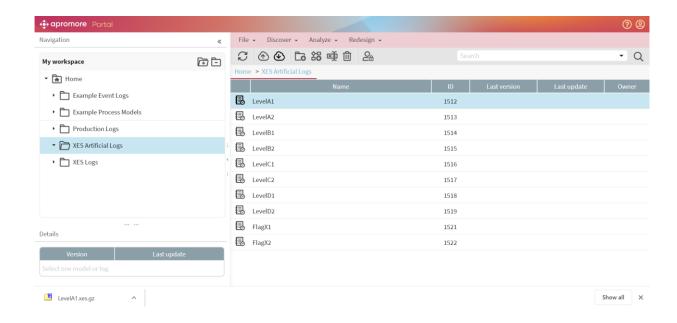
To achieve this task, we export the imported logs in the previous section to a XES file, import the exported log and show that the results are the same as with the import shown in the previous section.

Level A1

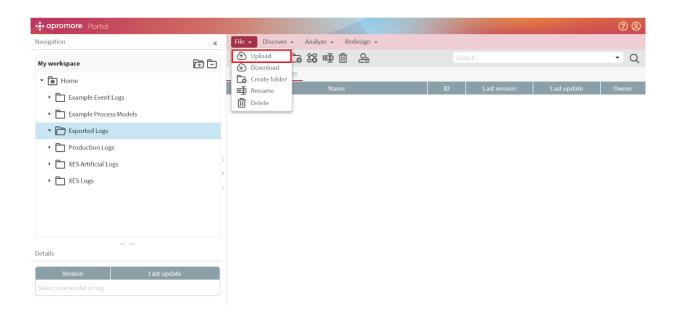
The current data as stored by the tool is exported successfully to a log

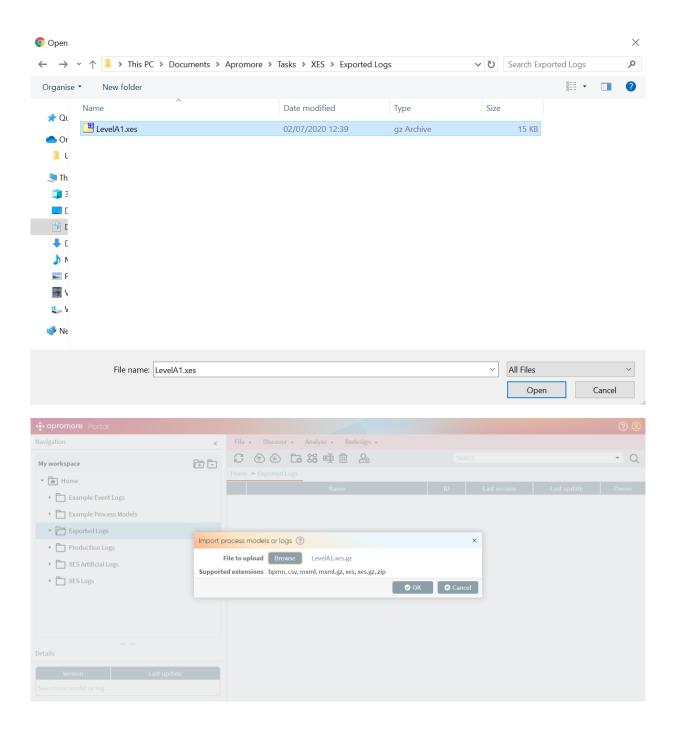


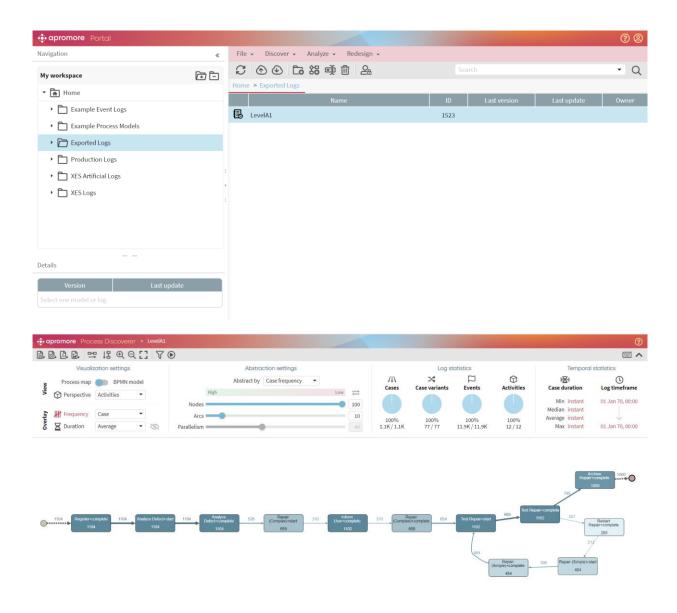




The concept:name attributes as contained in the log match the current data as stored by the tool

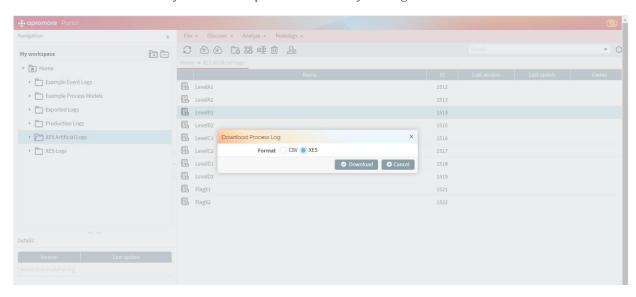


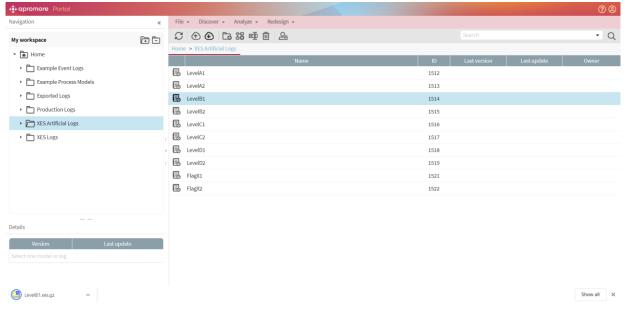




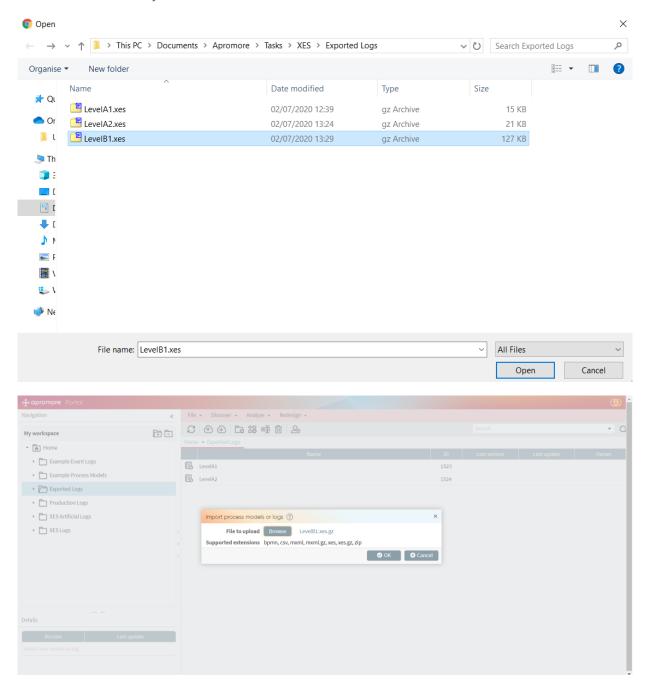
Level B1

The current data as stored by the tool is exported successfully to a log



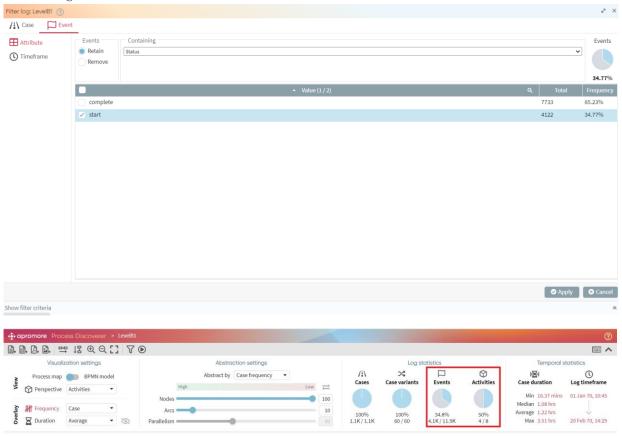


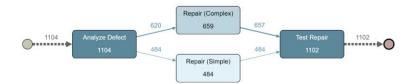
The concept:name, lifecycle:transition, and time:timestamp attributes as contained in the log match the current data as stored by the tool





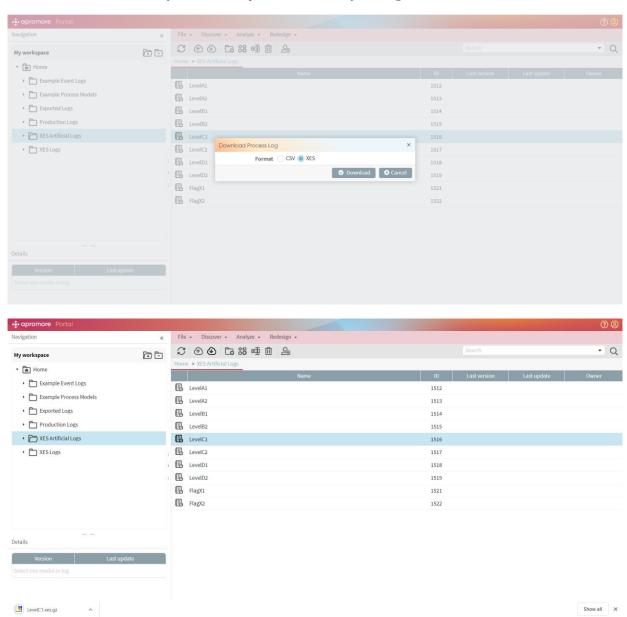
The following screenshot shows that lifecycle:transition can be used for the purpose of filtering. Eg: We can filter the log and retain events with "Start" status.



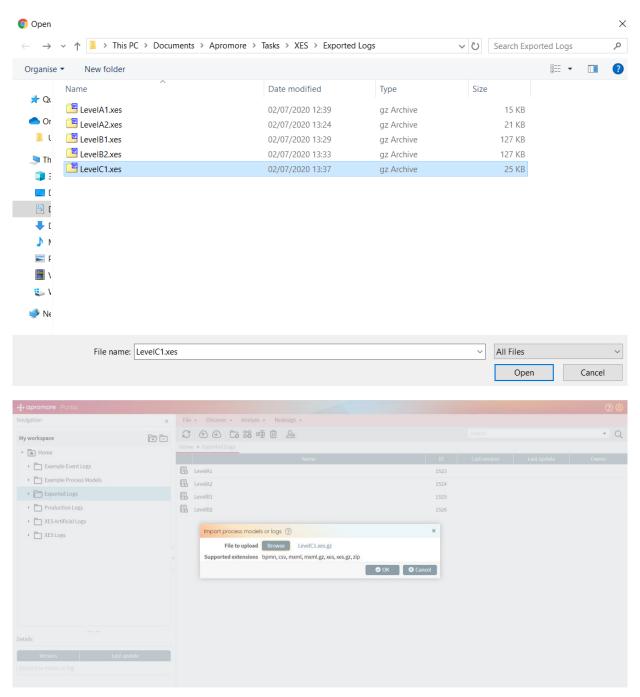


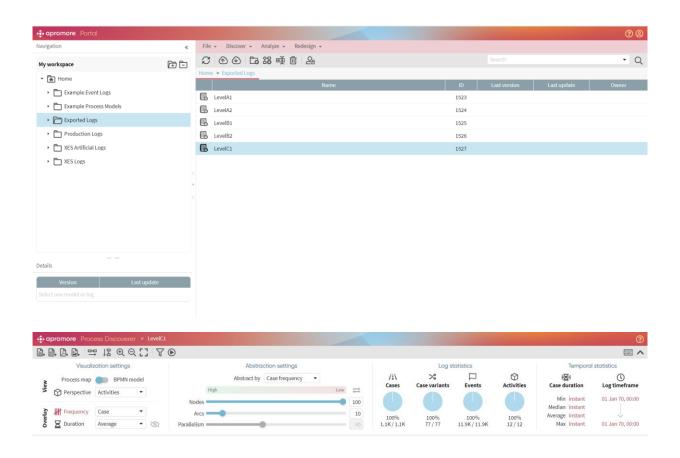
Level C1

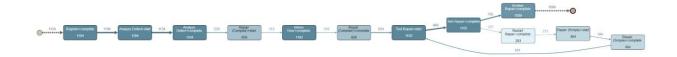
The current data as stored by the tool is exported successfully to a log

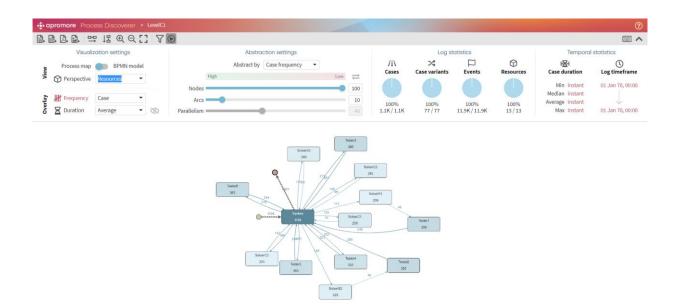


The concept:name and org:resource attributes as contained in the log match the current data as stored by the tool



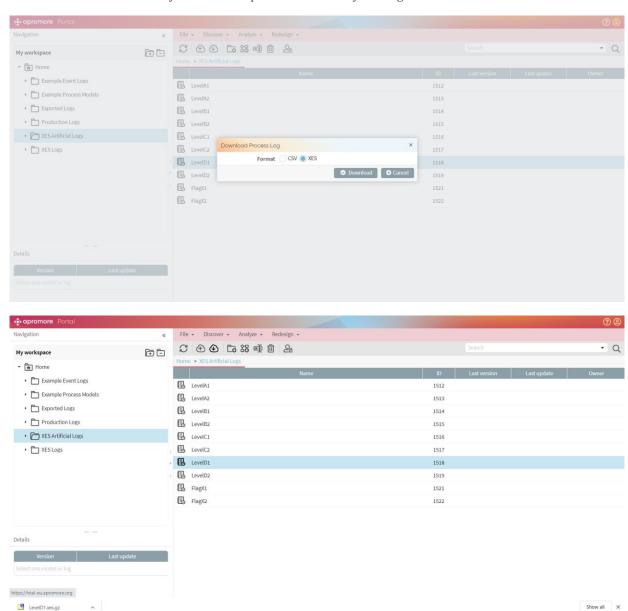




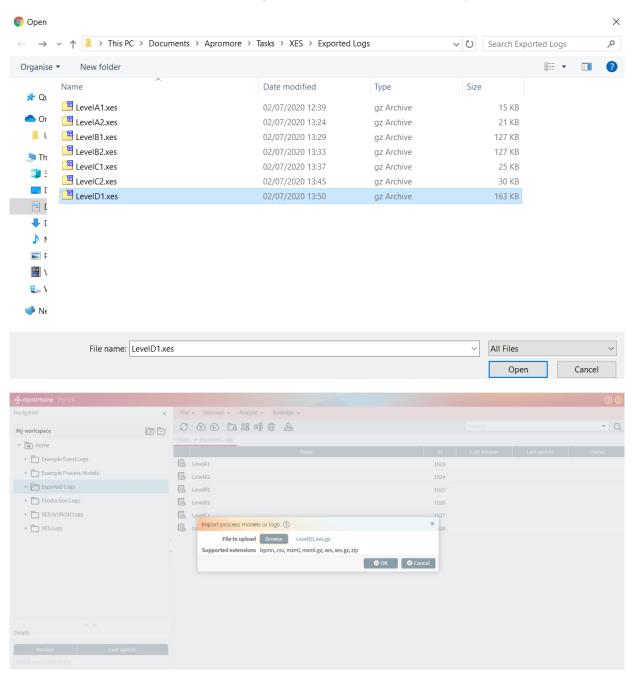


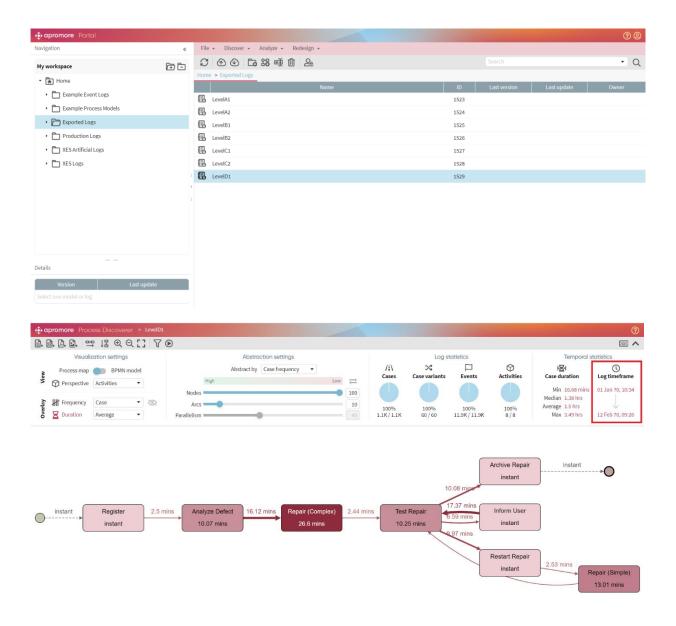
Level D1

The current data as stored by the tool is exported successfully to a log

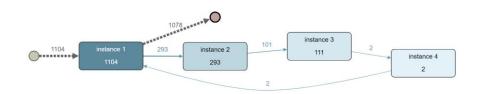


All standard attributes as contained in the log match the current data as stored by the tool

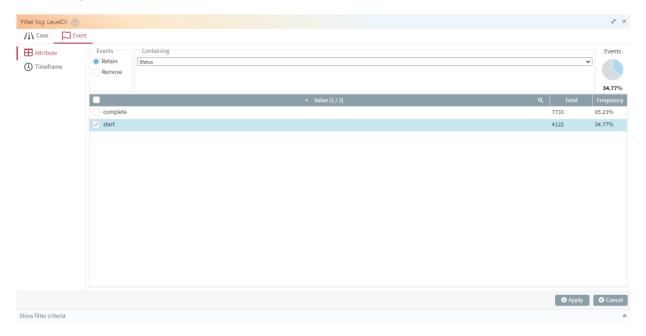








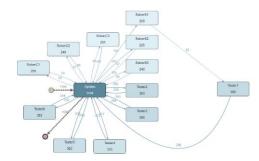
The following screenshot shows that lifecycle:transition can be used for the purpose of filtering. Eg: We can filter the log and retain events with "Start" status.



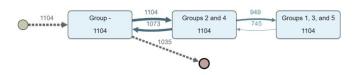




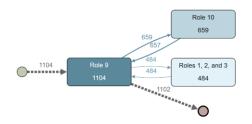












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IEEE Task Force on Process Mining
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Process Mining