IEEE TASK FORCE ON PROCESS MINING

Object-Centric Event Data Standardization

OCED Working Group

Announcing Community Call

October 15th

- How to get involved
  - Core & Extended OCED WG
  - Community Calls
- OCED Community Call 14th November 2025 (online)
  - Information on Standardization Process
  - Feedback & Discussion: Scope of OCED Standard

How to get involved?

Involvement is possible on three different levels: Core Working Group, Extended Working Group and within Community Calls

Working Group Setup

Core Working Group

Active contribution to the OCED standard development, currently seeking additional vendor involvement

Keeping the extended group informed and engaged in the OCED standardization process
via regular and open **community calls**

Extended Working Group

Provide validation, use case input and adoption feedback and enables broad industry involvement without high workload

Commitment

Participation and getting involved in the core or extended working group requires experience in Process Mining and its community and an honor-based agreement to

- Adhere to Principles of OCED WG (transparency, simplicity, consensus)
- Actively and regularly participate in the working group meetings
- Actively contribute to and taking on responsibility for work packages or requests with timely execution
- Participate in the formal balloting/voting
- Join the formal IEEE Working Group as a paying member for two years

First OCED Community Call

onboarding Process Mining community into standardization process

When

- Friday 14th November 13:00-14:00 CET

Where

- online > register to participate

Main Topic: Defining Scope of OCED Standard

framework for scope definition **proposed by OCED WG**

- **Usage scenarios for data exchange**
- **Processes and domains**
- **Functional Requirements**
  - scope of concepts, semantic level, consistency, handling extensions, expressing changes, serialization format vs meta-model, compatibility
- **Non-functional Requirements**
  - Ease of re-implementation, ease of use, scalability
  - Reference implementation, guidelines, reference datasets

(see next slide for details)

Community Call Agenda

Refresher – current OCED standard proposal

- overview
- pointer to resources

Inform Process Mining community

- objectives and process of standardization
- opportunities to get involved

Introducing the Extended OCED Working Group

- aim: allow broader community to provide feedback and input to standardization
- call to join the extended OCED WG

Community discussion on scope of the OCED standard

- framework for scope definition by OCED WG
- live Q&A for feedback and input: use cases, requirements, ...

Next steps of OCED WG

Framework for OCED Scope Definition proposed by OCED WG

Dimensions to consider when deciding scope of OCED

Choosing a too small scope makes standard irrelevant
Choosing a too large scope makes standard too complex and costly

What is essential now? What can be worked out later?
The dimensions have cross-dependencies and partly overlap

- **Dimension:**
  Usage scenarios for data exchange
  - Possible options:
  - focus only on event data extraction for historic Process Mining analysis?
  - Or also process monitoring
  - Or also execution support (in the context of AI agents)?

- **Processes and domains**
  - Standard end-to-end business processes (O2C, P2P, Customer Service)
  - Standard multi-object, interconnected systems (ERP, CRM, MES integration)
  - other application areas (Manufacturing, Logistics, …?)

- **Non-Functional Requirements (with sub-dimensions)**
  - **Interchangeable: ease of re-implementation by any developer** (boundary of complexity, expected clarity)
  - **Ease of use** (aid users in scoping what to export for a particular goal/aim)
  - **Scalability** (size of data, acceptable speed, compressibility)
  - **Open-source reference implementation, guidelines (extraction, interpretation), reference datasets**

Functional Requirements (with sub-dimensions)

- **Semantic level of exchanged data** (raw data only or with semantic/domain model, semantic information/schema part of OCED or not, scope of semantic information (objects, relations, qualifiers, ..?))
- **Scope of supported concepts** (OCED Core Model or further concepts essential?, specify and develop everything OCED vs build basic foundations useful now while leaving path for further additions and scenarios open)
- **Handling foreseeable need for extensions** (documented usage patterns to express extensions, explicit extension mechanism, support domain-specific extensions?)
- **Consistency of any dataset** (any producer and any consumer agree on interpretation, strategies to ensure orthogonality of information stored)
- **Allow expressing changes** (to objects, to relations, as native construct or implicitly through usage patterns)
- **Serialization Format vs Meta-Model** (prescribe as JSON/XML, focus on efficient stores such as Parquet format, only define meta-model and leave serialization o individual implementations, files only vs streams, tool-internal vs data export/exchange for analysis use case)
- **Compatibility** (migration from XES and other object-centric formats)