FISSAC Chain of Custody Manager Ekodenge (EKOD) - Task 4.6

UNITED CIRCLES

FISSAC Process - provides a chain of custody for a facility to digital manage process data in a standardised manner and record the conversion between inputs and outputs.

Software value propositions

User need	Software value proposition	Benefit
As a company producing a product with a specific quality, such as recycled content, I want to obtain a chain of custody record based on ISO 22095 to make the input-outputs traceable and verifiable for my process.	The software provides for a qualitative + quantitative way of representing a process and a chain of processes in a facility, to calculate conversion records from inputs to output.	Companies can standardise and digitalise their resource offerings, improving visibility and trust in secondary material quality, while making transactions more efficient and traceable on the marketplace.
As a 3rd party verifier, I want to receive the conversion records with the details of the inputs and outputs of conversions in the facility, so that I can issue a chain of custody certificate	The software provides for a machine and human readable conversion record dataset to 3rd party verifiers for issuing chain of custody certificates for the products from the facility.	3rd Party verifiers can lower their cost of issuing chain of custody certificates by having standardised conversion data linking inputs and outputs readily available in an automatically machine and human readable format
As a company that wants to evaluate new technologies for my facility or future facilities, I want to be able to exchange process data of my existing processes with a process simulation type tool	The software provides for a standardised way to manage process data and conversions from inputs to outputs, that is exchangeable with process simulation and mapping software.	Companies can lower the cost of representing and exchanging their processes in a digital record in a standardised manner, to reduce the cost of managing their process data for external outside of company purposes with 3rd parties.

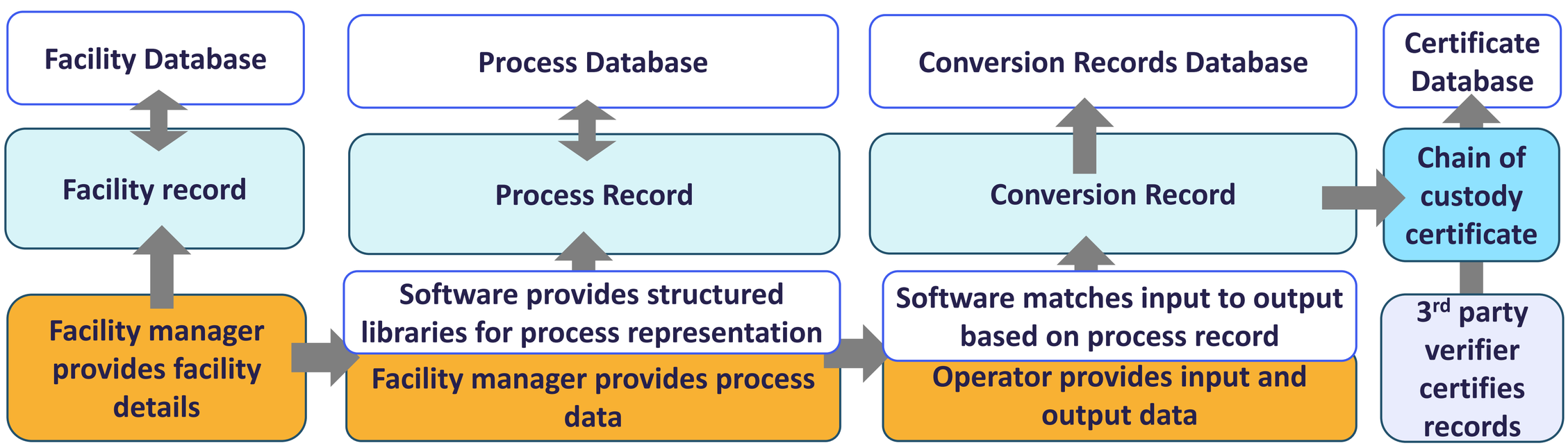
User Interface
(under development)

Software development has started with defining the Data models, with as guidance *ASTM E3012-22 Standard guide for characterizing environmental aspects of manufacturing processes*

Process Record Attributes

Attribute	Date Type	Description
id	String	Unique descriptor to identify the Process
ProcessName	String	Name to identify the Process
CreationDate	Date Type	Date of ProcessRecord creation
version	Integer	Version number for the ProcessRecord
reviewed	Boolean	Indication of whether the record has been reviewed
ProcessType	String	Designation to classify the process
description	String	Textual description of the process
keywords	String	Textual description to aid for queries
modelBound	UseBound	bounds of use of the ProcessModel
Relationship	**Cardinality**	**Concept**
acceptsInput	1..*	InputOutput
generatesOutput	1..*	InputOutput
usesProductProcessIn	1	ProductProcessInformation
usesResource	0..*	Resource
hasTransformation	1	Transformation
includesReview	0..*	Review
hasAuthor	1..*	Person

User journey - How do you operate the software



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