

PML RESEARCH UPDATE

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CHRISTIAN FLOERKEMEIER

ROBIN KOH

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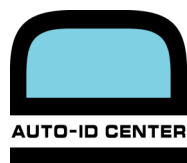
OVERVIEW

- Objectives of PML
- Division into PML Core and PML Extensions
- Main use cases of PML
- Current status and next steps



OBJECTIVE OF PML

- Provide a common standardized vocabulary to distribute and represent information related to Auto-ID enabled objects



PML OVERVIEW

**LOCATION
INFORMATION**

**TELEMETRY
INFORMATION**

**COMPOSITION
INFORMATION**



PML Core

Used to describe data directly
generated by the Auto-ID infrastructure

**PRODUCT-RELATED
INFORMATION**

**PROCESS-RELATED
INFORMATION**

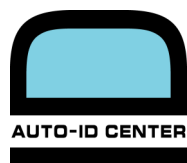
**PML COMMERCE
EXTENSION**

**OTHER PML
EXTENSIONS**



PML Extensions

Used to provide information
describing Auto-ID enabled objects



PML OVERVIEW

- RF-ID LOCATION DATA
- INFERRED LOCATION DATA

- PHYSICAL PROPERTY OF
- AN OBJECT
 - AN ENVIRONMENT

ONE OBJECT IS THE PARENT OF
TWO OTHER OBJECTS



PML Core

Used to describe data directly
generated by the Auto-ID infrastructure

UNIT OF MEASURE (E.G. GROSS
WEIGHT, PACKAGING WEIGHT)

CLASSIFICATION

PARTY

ORDER

DESPATCH ADVICE

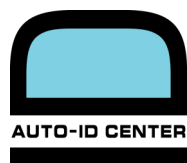
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**OTHER PML
EXTENSIONS**



PML Extensions

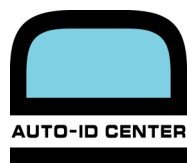
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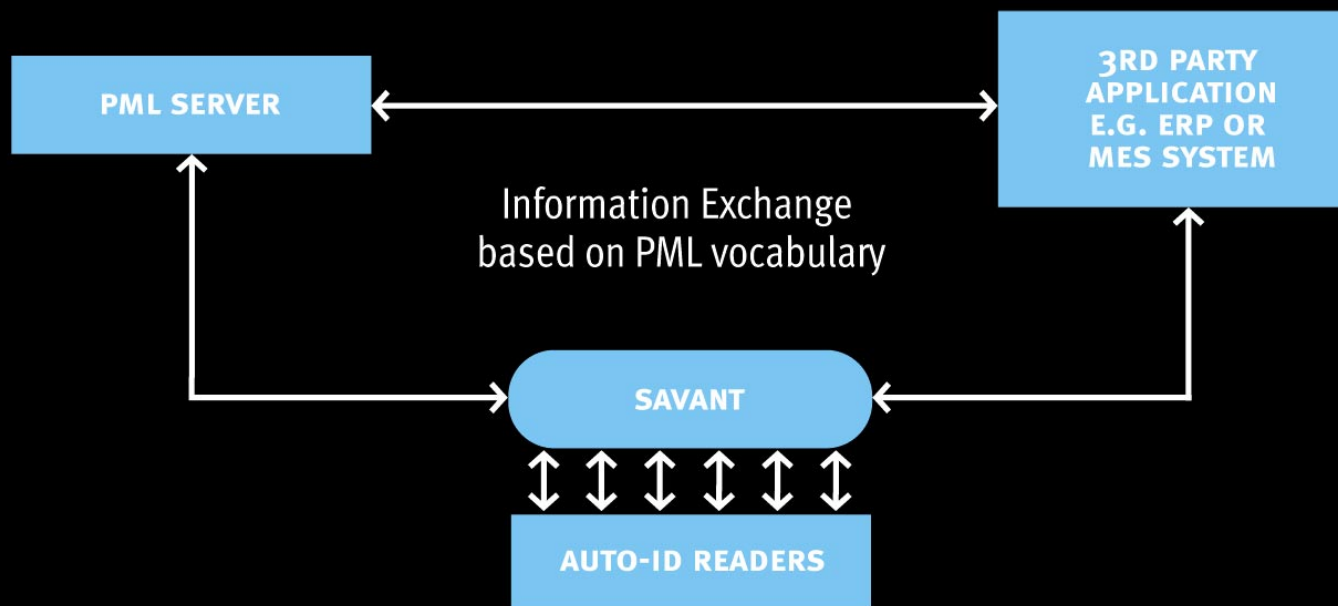
RATIONALE FOR PML CORE AND EXTENSIONS

	EBXML	RNET	UDDI	GCI	UCCNET	EANUCC	AUTO-ID
BUSINESS PROCESS		○		○	○	○	→ ○ ¹
TECHNICAL DICTIONARY STRUCTURE & CONTENT	○	○		○	○	○	→ ○ ¹
BUSINESS DICTIONARY STRUCTURE & CONTENT	○	○		○	○	○	→ ○ ¹
REGISTRY & REPOSITORY	○		○	○	○		
MESSAGING SERVICE	○	○		○	○	○	○
AUTO-ID PROCESSES							○
AUTO-ID DATA DICTIONARY							○ ²

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MAIN USE CASES

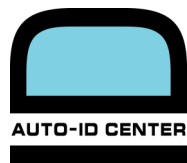


- Basic Auto-ID Event Communication
- Auto-ID Track&Trace on PML Core and Extensions Elements
- Auto-ID Controls featuring alarms and triggers



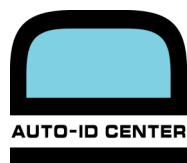
NEXT STEPS

- Finish UML models and XML Schemas for Core PML
- Review with the help of:
 - Oat Systems
 - SUN's XML Team
 - UCC
 - End user sponsors
- Continue evaluation of E-Commerce standards and start integration into Auto-ID infrastructure
- Timelines:
 - Integrate PML Core into Phase III of the Field Test
 - Integrate PML Extensions into Phase IV of the Field Test



PML

- Provide a common standardized vocabulary to distribute and represent information related to Auto-ID enabled objects



CURRENT STATUS

Use Case	Use Case Definition	Class model	XML Schema
Basic Auto-ID Event Notification			
Communicate Object Appearance	3	3	3
Communicate Object Disappearance	3	3	3
Communicate Aggregation of objects	3	3	3
Communicate Disaggregation of objects	3	3	3
Communicate Physical Property of an object	3	3	3
Communicate Environment Property			
Auto-ID Track&Trace			
Show RFIDReadRange Events	3	3	3
Show inferred location	3		
Show aggregation information of a certain object	3		
Show physical properties of a certain object	3		
Show environment properties of a certain location			

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