



PML RESEARCH UPDATE

JUNE 4, 2002

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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

...

OTHER PML EXTENSIONS



PML Extensions

Used to provide information describing Auto-ID enabled objects



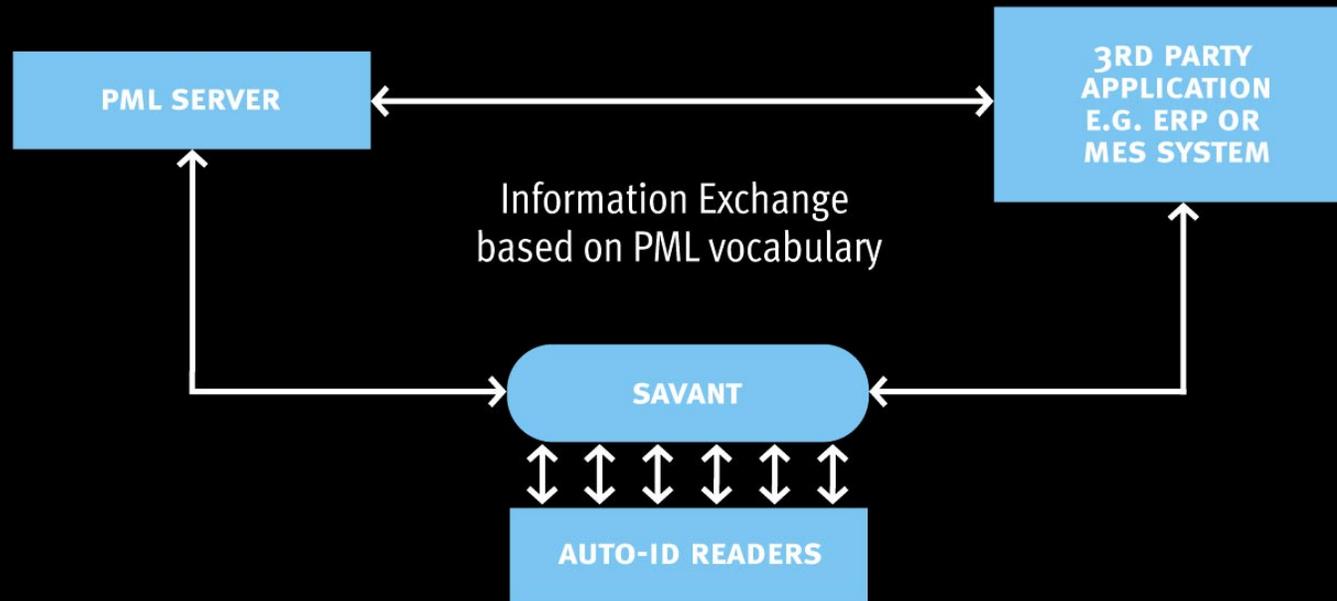
RATIONALE FOR PML CORE AND EXTENSIONS

	EBXML	RNET	UDDI	GCI	UCCNET	EANUCC	AUTO-ID
BUSINESS PROCESS		<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/> ¹
TECHNICAL DICTIONARY STRUCTURE & CONTENT	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/> ¹
BUSINESS DICTIONARY STRUCTURE & CONTENT	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/> ¹
REGISTRY & REPOSITORY	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
MESSAGING SERVICE	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AUTO-ID PROCESSES							<input type="radio"/>
AUTO-ID DATA DICTIONARY							<input type="radio"/> 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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