



ARTS POSLog V6.0

Volume 18: Fresh Item Management Technical Specification
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1. Abstract

1.1 Overview

1.2 In Scope

1.3 Out of Scope

2. Referenced Documents

- **ARTS Technical Committees Development Process V6.0.4 2009/11/30**
- **ARTS XML Best Practices V2.2 2010/11/11**
- **ARTS Best Practice for Process Modeling V1.0.0 2011/01/04**
- **A RTS SOA Best Practices Technical Report V1.2**
- **ARTS XML Interface Conformance Tool Manual V1.0 2005/08/11**

These documents are available for download from <http://nrf.com>

3. ARTS Common Header

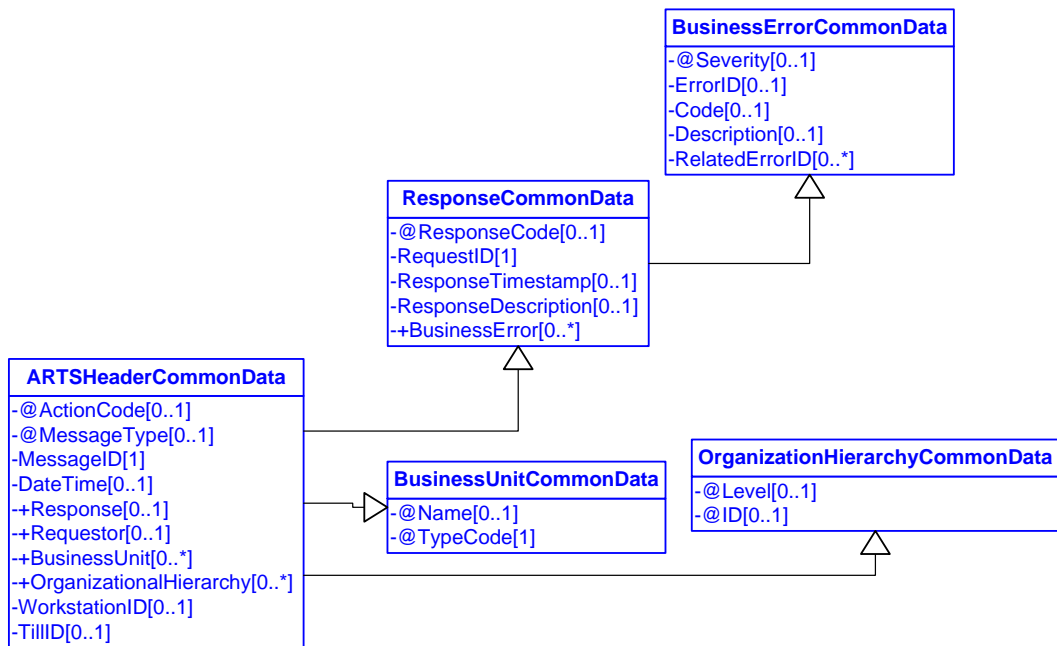


Figure 1: ARTS Common Header Domain View

The ARTS common header is used in all service name schemas. It provides the ability to set session level information and return business error information in one standard format to all SOA implementations.



Figure 2: ARTS Common Header Representation

Since this structure is common to all service name schemas, it will not be replicated below. In place of the details, the attached box will be used to represent this complex type structure.

4. USE Case: Country of Origin Labeling (COOL) (V6.0)

Brief Description

Country of Origin Labeling is part of a global product labeling requirement. The data structures have to be addressed globally and the output (printed label) may vary according to local legal regulations. The labeling must capture and convey the data necessary to meet regulatory requirements of Country of Origin Labeling. COOL regulations can be met with special labeling capabilities that include country identification on received units and display of that information on retail units. COOL attributes may be implemented at the Item ID or Item ID/Lot level.

By adding COOL attributes to POSLog, processing systems are able to track and re-print information.

4.1 Scenario: Add Product to shopping basket with Country of Origin data

Brief Description

Scenario Description

Customer is a frequent shopper at a local food retailer. He prefers shopping with a self scanning device. Today he decides to buy prepacked bananas. The label shows that these bananas are from Costa Rica, packed in Canada.

When scanning the pack of banana, the mobile self scanning device shows that the customer has bananas grown in Costa Rica, packed in Canada, placed in his shopping basket.

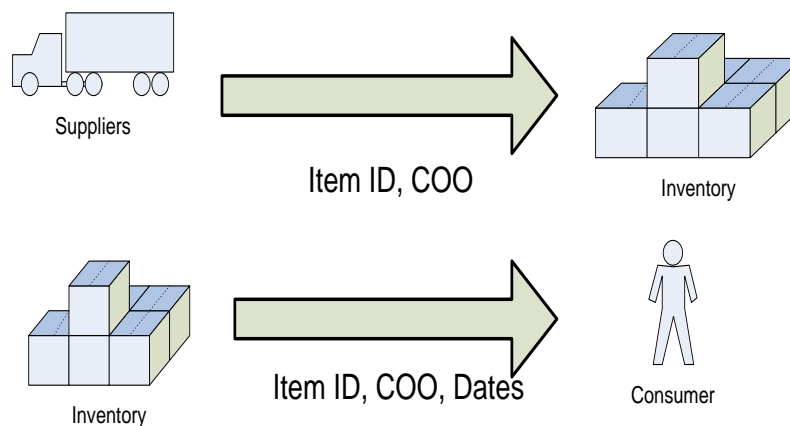


Figure 3: Add Product to shopping basket with Country of Origin data Scenario Drawing

Pre-Conditions

Retailer has COOL information for item in inventory.

Post-Conditions

Assumption

This use case addresses only the COOL incremental data as required by the product labeling.

Data - (Mandatory minimal set for this use case)**Item ID**

Date Attributes – one to many

- Date Type Code (e.g. Sell By)
- Date Description (e.g. 2009-09-31)
- Date Type Code (e.g. Packaging Date)
- Date Description (e.g. 2009-09-01)

COO Attributes - one to many

- COO Type Code (e.g. GS1 Country of Grower)
- COO Description (e.g. Costa Rica)
- COO Type Code (e.g. GS1 Country of Processing)
- COO Description (e.g. Canada)

4.1 Conformance XML Instance Document – Add item to shopping basket with Country of Origin Data

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
  xmlns="http://www.nrf-arts.org/IXRetail/namespace/" FixVersion="0"
  MajorVersion="6"
  MinorVersion="0">
  <Transaction>
    <SequenceNumber>99</SequenceNumber>
    <CustomerOrderTransaction>
      <LineItem Action="Add">
        <Sale>
          <ItemID Type="GTIN">12345671234567</ItemID>
          <CountryOfOrigin TypeCode="Growing">CR</CountryOfOrigin>
          <CountryOfOrigin TypeCode="Packaging">CA</CountryOfOrigin>
          <Quantity>1</Quantity>
        </Sale>
        <SequenceNumber>1</SequenceNumber>
        <DateTime TypeCode="SellBy">2009-09-30T00:00:00.0Z</DateTime>
        <DateTime TypeCode="Packaging">2009-09-
01T00:00:00.0Z</DateTime>
      </LineItem>
    </CustomerOrderTransaction>
  </Transaction>
</POSLog>
```

5. USE Case: Traceability

Traceability in this document is based on salable item allowing traceability back to previous Item (One Up or One Down).

It is important that the consumer label contain information about the trace identity. This is provided for many reasons:

- To meet legislative requirements – e.g. EU178/2002.
- To reassure the consumer that the source of product is understood by the retailer.
- To provide marketing collateral for retailer on the quality of its product.

To enable manual traceability back to source in the case of a recall by including source identification on consumer labeling.

5.1 Scenario: Add Product to shopping basket with Lot #

Brief Description

Butcher takes a Primal and produces and packages a variety of cuts for resale.

For tracking, the label of packaged items contains Lot # of the Primal.

Customer picks packaged product from shelf.

Scenario Description

Joe is a frequent shopper at butcher “Cheap & Tasty” He prefers shopping with a self-scanning device. Today he decides to take steaks. The label contains a GS1 barcode with item ID and Lot #.

After scanning the barcode of the label placed on the packed steak, the mobile self-scanning device shows that Joe has a steak from Primal with Lot # 42345 placed in his shopping basket.

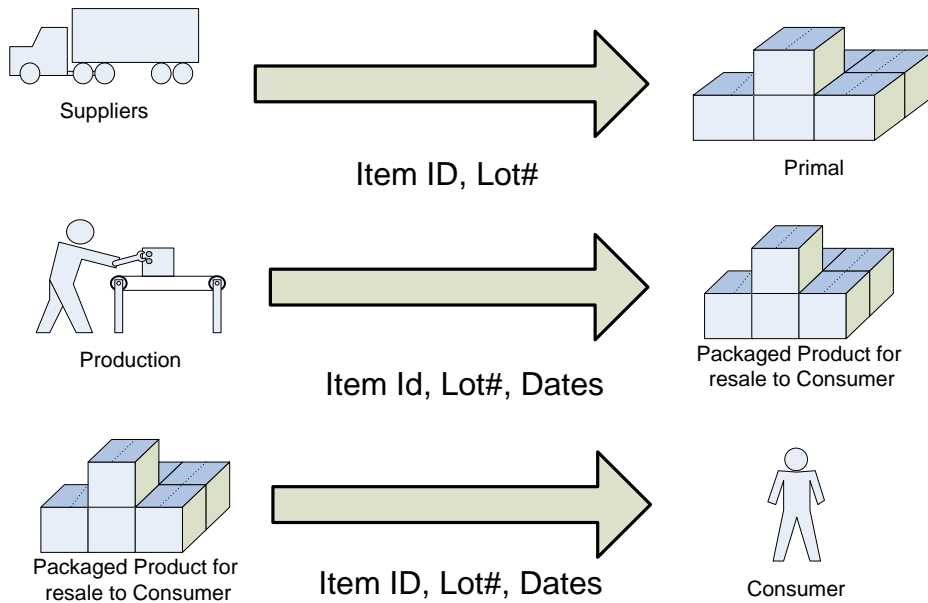


Figure 4: Add Product to shopping basket with Lot # Scenario Drawing

Pre-Conditions

Lot and Attributes from Primal are available.

User has a process to manage lot numbers.

Post-Conditions

Item ID master data and Item ID traceability information for this instance must be stored relevant to the length of time this information is maintained.

Data – (Mandatory minimal set for this use case)

Salable Product information

Item ID

Lot Number – Optional (e.g. Production Batch)

Quantity

Unit of measure

Date Attributes – one to many (optional)

Date Type Code (e.g. Expiration)

Date Description (e.g. 2009-09-30)

Parent Product information One to Many

Item ID

Lot Number

NOTE: Attributes of Lot are passed to end product – direct one to one – parents to child

5.1 ARTS XML Conformance Document – Add Product to shopping basket with Lot

```
<?xml version="1.0" encoding="UTF-8"?>
<POSLog xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
    ../POSLogV6.0.0.xsd"
  xmlns="http://www.nrf-arts.org/IXRetail/namespace/" FixVersion="0"
  MajorVersion="6"
  MinorVersion="0">
  <Transaction>
    <SequenceNumber>99</SequenceNumber>
    <CustomerOrderTransaction>
      <LineItem Action="Add">
        <Sale>
          <ItemID Type="GTIN">12345671234567</ItemID>
          <!-- THE LOT NUMBER IS PULLED FROM THE GS1 BAR
CODE -->
          <LotNumber>42345</LotNumber>
          <Quantity>1</Quantity>
          <!-- Cut from this side of meat -->
          <Parent>
            <ItemID Type="GTIN">12345671234567</ItemID>
            <LotNumber>987</LotNumber>
          </Parent>
        </Sale>
        <SequenceNumber>1</SequenceNumber>
        <DateTime TypeCode="SellBy">2009-09-30T00:00:00.0Z</DateTime>
        <DateTime TypeCode="Packaging">2009-09-
01T00:00:00.0Z</DateTime>
      </LineItem>
    </CustomerOrderTransaction>
  </Transaction>
</POSLog>
```

6. Document History

7. Version History

Version 1.0

Overview

New Features

Sections	Description of Change
	-

Minor fixes

Deprecation

Sections	Description of Change
	-

Compatibility/Dependencies Issues

Previous Document

8. GLOSSARY

Term	Definition