



ARTS POSLog V6.0

Volume 5: Deposit Line Items 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

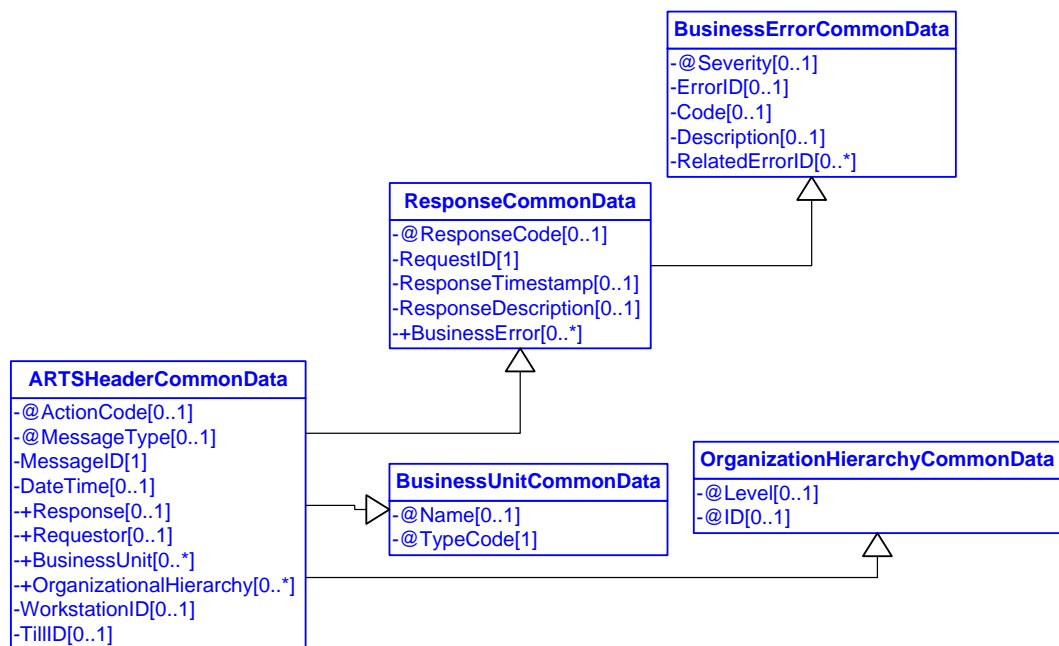


Figure 1: ARTS Common Header Domain View

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.

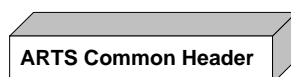


Figure 2: ARTS Common Header Representation

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: Item purchase with refillable containers

Brief Description

Propane gas is sold in large refillable containers. Typically the customer brings in an empty container for refill, although the retailer can also sell them a refillable container. The main point to note is that the containers are sold, and there is no deposit on empty containers.

4.1 Scenario: Item Purchase with Refillable Container (V2.1)

Brief Description

The customer has bought in one or more approved empty containers, each of which hold 15 Kg of propane, for refill.

Data

- Transaction header data, including:
 - Identifiers for Store, Workstation, & Operator performing the transaction.
 - The date the transaction was performed
 - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
 - An identifier for the propane being sold.
 - The amount of propane being put into each container, including unit of measure. (15 Kg)
 - The number of containers being filled.
 - The unit price for propane.
 - The extended amount (i.e. unit price * amount of propane * number of containers)

4.1 Conformance XML Instance Document - Item Purchase With Refillable Container

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase with refillable container -->
<!-- Note: Addition of Units to denote 3 containers each holding 15Kg -->
<!-- Addition of UnitsOfMeasureCode to denote it is sold by the Kg -->
<!-- ExtendedAmount = 1.63 * 3 * 15 = 73.35 -->
<!-- No extra lineItem selling customer containers (they weren't bought) -->
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
../POSLogV6.0.0.xsd"
  MajorVersion="6" MinorVersion="0" FixVersion="0">
  <Transaction>
    <BusinessUnit>
      <UnitID>HighStreet</UnitID>
    </BusinessUnit>
    <WorkstationID>POS5</WorkstationID>
    <SequenceNumber>4294967295</SequenceNumber>
    <OperatorID>John</OperatorID>
    <RetailTransaction>
      <LineItem>
        <Sale ItemType="Stock">
```

```
<POSIdentity>
  <POSItemID>01234567890123</POSItemID>
</POSIdentity>
<ActualSalesUnitPrice>1.63</ActualSalesUnitPrice>
<ExtendedAmount>73.35</ExtendedAmount>
<Quantity Units="15" UnitOfMeasureCode="Kg">3</Quantity>
</Sale>
<SequenceNumber>1</SequenceNumber>
</LineItem>
</RetailTransaction>
</Transaction>
</POSLog>
```

4.2 Scenario: Item Purchase without Refillable Container (V2.1)

Brief Description

The customer purchases one or more approved empty containers, each of which holds 15 Kg of propane, and has them filled.

Data

- Transaction header data, including:
 - Identifiers for Store, Workstation, & Operator performing the transaction.
 - The date the transaction was performed
 - A workstation assigned sequence number identifying the transaction
- Item sale data, including:
 - An identifier for the container being sold.
 - Number of containers being purchased. (e.g. 3 containers)
 - The unit price for the container.
 - The extended amount (i.e. unit price * quantity)
 - An identifier for the propane being sold.
 - The amount of propane being put into each container, including unit of measure. (15 Kg)
 - The unit price for propane.
 - The extended amount (i.e. unit price * amount of propane * number of containers)

4.2 Conformance XML Instance Document: Item Purchase Without Refillable Container

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase without refillable container --->
<!-- Note: Addition of Units to denote 3 containers each holding 15Kg --->
<!-- Inclusion of UnitOfMeasureCode to denote it is sold by the Kg -->
<!-- ExtendedAmount = 1.63 * 3 * 15 = 73.35 -->
<!-- An extra line item selling 3 containers, which is linked to other line item -->
<POSLog xmlns="http://www.nrf-arts.org/IXRetail/namespace/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.nrf-arts.org/IXRetail/namespace/
  ../POSLogV6.0.0.xsd"
  MajorVersion="6" MinorVersion="0" FixVersion="0">
  <Transaction>
```

```
<BusinessUnit>
  <UnitID>HighStreet</UnitID>
</BusinessUnit>
<WorkstationID>POS5</WorkstationID>
<SequenceNumber>4294967295</SequenceNumber>
<OperatorID>John</OperatorID>
<RetailTransaction>
  <LineItem>
    <Sale ItemType="Stock">
      <POSIdentity>
        <POSItemID>01234567890123</POSItemID>
      </POSIdentity>
      <ExtendedAmount>73.35</ExtendedAmount>
      <Quantity Units="15" UnitOfMeasureCode="Kg">3</Quantity>
    </Sale>
    <SequenceNumber>1</SequenceNumber>
  </LineItem>
  <LineItem>
    <Sale ItemType="Stock">
      <POSIdentity>
        <POSItemID>01234567890168</POSItemID>
      </POSIdentity>
      <ExtendedAmount>81.00</ExtendedAmount>
      <Quantity>3</Quantity>
      <ItemLink>1</ItemLink>
    </Sale>
    <SequenceNumber>2</SequenceNumber>
  </LineItem>
</RetailTransaction>
</Transaction>
</POSLog>
```

4.3 Scenario: Return Empties (V2.1)

Brief Description

Customer returns a crate of bottles to retrieve the deposit.

Data

- Transaction header data, including:
 - Identifiers for Store, Workstation, and Operator performing the transaction.
 - The date the transaction was performed
 - A workstation assigned sequence number identifying the transaction.
- Item return data for the wooden crate and the 12 bottles, including:
 - An identifier for the items being returned.
 - The number of multiples of item being returned.
 - The unit price for the empties being returned.
 - The extended amount for the empties being returned.

4.3 Conformance XML Instance Document - Return Empties

```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- UseCase: Purchase Crate of Beer *without* empties -->
<!-- Note: Empties are recorded as deposit return sale line items at: -->
<!-- $0.05 for each of 12 bottles -->
<!-- $1.40 for the crate -->
<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/" MajorVersion="6"
  MinorVersion="0" FixVersion="0">
  <Transaction>
    <BusinessUnit><UnitID Name="High Street">234</UnitID></BusinessUnit>
    <WorkstationID>POS5</WorkstationID>
    <SequenceNumber>4294967295</SequenceNumber>
    <OperatorID>John</OperatorID>
    <RetailTransaction>
      <!-- 33cl beer bottle -->
      <LineItem>
        <Return ItemType="DepositRefund">
          <POSIdentity>
            <POSItemID>01234567890123</POSItemID>
          </POSIdentity>
          <ExtendedAmount>0.60</ExtendedAmount>
          <Quantity>12</Quantity>
          <Disposal Method="ReturnToStock"/>
        </Return>
        <SequenceNumber>1</SequenceNumber>
      </LineItem>
      <!-- Crate -->
      <LineItem>
        <Return ItemType="DepositRefund">
          <POSIdentity>
            <POSItemID>101</POSItemID>
          </POSIdentity>
          <ExtendedAmount>1.40</ExtendedAmount>
          <Quantity>1</Quantity>
          <Disposal Method="ReturnToStock"/>
        </Return>
        <SequenceNumber>2</SequenceNumber>
      </LineItem>
      <LineItem>
        <Tender TenderType="Cash" TypeCode="Refund">
          <Amount>2.00</Amount>
        </Tender>
        <SequenceNumber>2</SequenceNumber>
      </LineItem>
    </RetailTransaction>
  </Transaction>
```

</POSLog>

5. Document History

6. Version History

Version 1.0

Overview

New Features

Sections	Description of Change
	-

Minor fixes

Deprecation

Sections	Description of Change
	-

Compatibility/Dependencies Issues

Previous Document

7. GLOSSARY

Term	Definition