ARTS POSLog V6.0

Volume 16: Layaway/Layby Technical Specification
February 10, 2014 – Last Call Working Draft

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ARTS POSLog V6.0 Volume 16: Layaway/Layby Technical Specification

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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

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3. ARTS Common Header

BusinessErrorCommonData
-@Severity[0..1]
-ErrorID[0..1]
-Code[0..1]
-Description[0..1]
-RelatedErrorID[0..*]

ResponseCommonData
-@ResponseCode[0..1]
-RequestID[1]
-ResponseTimestamp[0..1]
-ResponseDescription[0..1]
-+BusinessError[0..*]

ARTSHeaderCommonData
-@ActionCode[0..1]
-@MessageType[0..1]
-MessageID[1]
-DateTime[0..1]
-+Response[0..1]
-+Requestor[0..1]
-+BusinessUnit[0..*]
-+OrganizationalHierarchy[0..*]
-WorkstationID[0..1]
-TillID[0..1]

BusinessUnitCommonData
-@Name[0..1]
-@TypeCode[1]

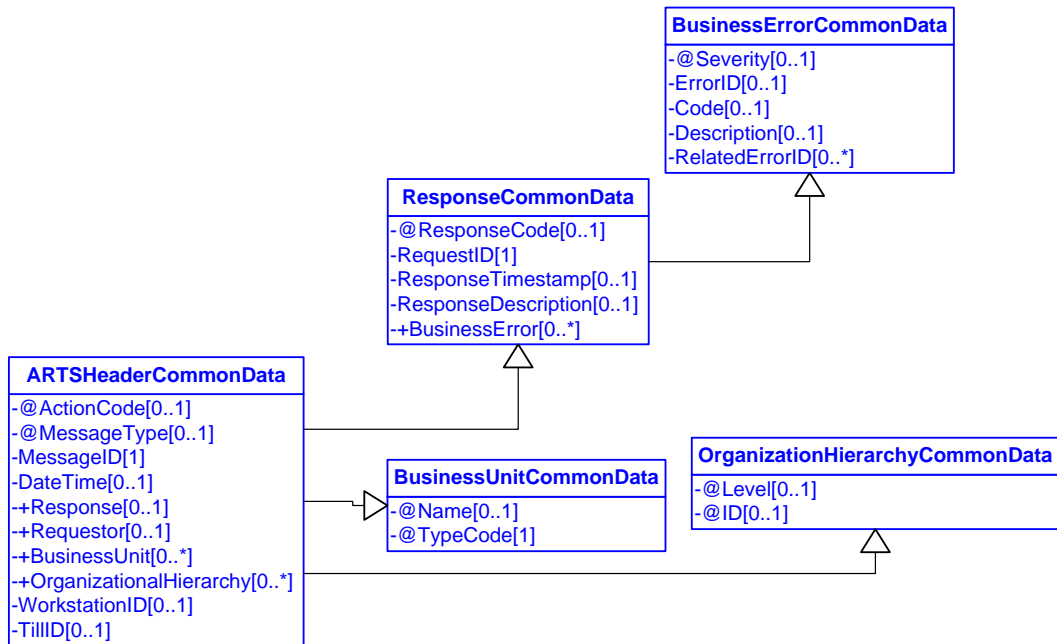**OrganizationHierarchyCommonData**
-@Level[0..1]
-@ID[0..1]

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.

ARTS Common Header

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 on layaway/layby

Customer wants to purchase an item but can't afford to pay for it right now. The customer pays a portion of the purchase price as a deposit, and the store keeps the item in a separate inventory location. The customer makes subsequent payments for the item, and when the purchase price has been paid the customer receives the item. The customer may change their mind at any time, and receive some or all of the money paid as a refund or gift certificate.

4.1 Scenario: Customer Commences Layaway (V2.1)

Brief Description

Customer wishes to purchase an item over a (short) period of time, the retailer provides a way for the customer to commence a layaway account.

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
- Layaway Item data, including:
  - An identifier for the item.
  - The number of items to be purchased over time.
  - Unit price for the item.
  - Extended amount (i.e. unit price * number of items)
  - Deposit paid.
- Customer data, including:
  - Name
  - Address
  - Telephone Numbers
  - New customer account number

4.1.a Conformance XML Instance Document - Customer Commences Layaway

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Customer puts item on Layaway          -->
<!-- Note: Layaway item type.                         -->
<!--       Addition of PaymentOnAccount line item for deposit -->
<!--       Addition of Customer in transaction header       -->
<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>765433</UnitID>
     </BusinessUnit>
     <WorkstationID>POS3245</WorkstationID>
     <SequenceNumber>4294967295</SequenceNumber>
     <OperatorID>John</OperatorID>
     <RetailTransaction>
       <LineItem>
         <Layaway ItemType="Stock">
           <POSIdentity>
             <POSItemID>01234567890123</POSItemID>
           </POSIdentity>
           <ExtendedAmount>495.00</ExtendedAmount>
           <Quantity>1</Quantity>
         </Layaway>
         <SequenceNumber>1</SequenceNumber>
```

```xml
          </LineItem>
          <LineItem>
            <PaymentOnAccount>
              <AccountNumber>34905832-45</AccountNumber>
              <Amount>100.00</Amount>
            </PaymentOnAccount>
            <SequenceNumber>2</SequenceNumber>
          </LineItem>
          <Total TotalType="TransactionGrossAmount">100.00</Total>
          <Customer>
            <Name>
              <MailingName>Stuart McGrigor</MailingName>
            </Name>
            <Address>
              <AddressLine>325 7th St. NW.</AddressLine>
              <AddressLine>Suite 1100</AddressLine>
              <City>Washington</City>
              <Territory>D.C.</Territory>
            </Address>
            <TelephoneNumber>
              <AreaCode>202</AreaCode>
              <LocalNumber>5555957</LocalNumber>
              <ITUCountryCode>1</ITUCountryCode>
            </TelephoneNumber>
          </Customer>
        </RetailTransaction>
      </Transaction>
</POSLog>
```

4.1 b Alternative Conformance XML Instance Document - Customer Commences Layaway

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Customer puts item on Layaway              -->
<!-- Note: Layaway item type.                            -->
<!--       Inclusion of Deposit & AccountNumber tags in Layaway instead -->
<!--       of a separate PaymentOnAccount line item      -->
<!--       Addition of Customer in transaction header    -->
<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>765433</UnitID>
    </BusinessUnit>
    <WorkstationID>POS3245</WorkstationID>
    <SequenceNumber>4294967295</SequenceNumber>
    <OperatorID>John</OperatorID>
```

```
        <RetailTransaction>
          <LineItem>
            <Layaway ItemType="Stock">
              <POSIdentity>
                 <POSItemID>01234567890123</POSItemID>
              </POSIdentity>
              <ExtendedAmount>495.00</ExtendedAmount>
              <Quantity>1</Quantity>
              <AccountNumber>24905832-45</AccountNumber>
              <Deposit>100.00</Deposit>
            </Layaway>
            <SequenceNumber>1</SequenceNumber>
          </LineItem>
          <Total TotalType="TransactionGrossAmount">100.00</Total>
          <Customer>
            <Name>
              <MailingName>Stuart McGrigor</MailingName>
            </Name>
            <Address>
              <AddressLine>325 7th St. NW.</AddressLine>
              <AddressLine>Suite 1100</AddressLine>
              <City>Washington</City>
              <Territory>D.C.</Territory>
            </Address>
            <TelephoneNumber>
              <AreaCode>202</AreaCode>
              <LocalNumber>5555957</LocalNumber>
              <ITUCountryCode>1</ITUCountryCode>
            </TelephoneNumber>
          </Customer>
        </RetailTransaction>
      </Transaction>
</POSLog>
```

4.2 Scenario: Progress Payment (V2.1)

Brief Description

The customer makes a progress payment on a layaway that does not complete the layaway.

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
- Layaway Account Number
- Payment details.

4.2 Conformance XML Instance Document - Progress Payment

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase on Layaway Flow: Customer makes progress payment on
Layaway -->
<!-- Note:    Transaction has only a single PaymentOnAccount lineItem             -->
<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>765433</UnitID>
     </BusinessUnit>
     <WorkstationID>POS3245</WorkstationID>
     <SequenceNumber>4294967295</SequenceNumber>
     <OperatorID>John</OperatorID>
     <RetailTransaction>
        <LineItem>
          <PaymentOnAccount>
             <AccountNumber>34905832-45</AccountNumber>
             <Amount>100.00</Amount>
          </PaymentOnAccount>
          <SequenceNumber>1</SequenceNumber>
        </LineItem>
     </RetailTransaction>
   </Transaction>
</POSLog>
```

4.3 Scenario: Customer Completes a Layaway (V2.1)

Brief Description

Customer makes a final payment on a layaway account and receives the items being sold.

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 data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
- Layaway Account Number.
- Payment details.

4.3 Conformance XML Instance Document - Customer Completes a Layaway

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase on Layaway Flow: Customer makes final payment on
```

```
Layaway  -->
<!--      Transaction may include PreviousLayaway LineItems listing merchandise  -->
<!--      with no prices, as well as a PaymentOnAccount lineItem recording the    -->
<!--      final payment.                                         -->
<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>765433</UnitID>
    </BusinessUnit>
    <WorkstationID>POS3245</WorkstationID>
    <SequenceNumber>4294967295</SequenceNumber>
    <OperatorID>John</OperatorID>
    <RetailTransaction>
      <LineItem>
        <PreviousLayaway Action="Completed" ItemType="Stock">
          <POSIdentity>
             <POSItemID>01234567890123</POSItemID>
          </POSIdentity>
          <ExtendedAmount>495.00</ExtendedAmount>
          <Quantity>1</Quantity>
        </PreviousLayaway>
        <SequenceNumber>3</SequenceNumber>
      </LineItem>
      <LineItem>
        <PaymentOnAccount>
          <AccountNumber>34905832-45</AccountNumber>
          <Amount>100.00</Amount>
        </PaymentOnAccount>
        <SequenceNumber>2</SequenceNumber>
      </LineItem>
    </RetailTransaction>
  </Transaction>
</POSLog>
```

4.4 Scenario: Cancellation (V2.1)

Brief Description
Customer wishes to cancel the Layaway and receives a (partial) refund, layaway items are returned to stock.

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 data, including:
  - An identifier for the item being sold.
  - The number of multiples of the item being sold.
- Layaway Account Number.
- Refund details.

4.4 **Conformance XML Instance Document – Cancellations**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- UseCase: Item Purchase on Layaway Flow: Customer cancels layaway, and
receives refund  -->
<!-- Note:   Transaction may include PreviousLayaway LineItems listing merchandise  -->
<!--         with no prices, as well as a PaymentOnAccount lineItem recording the    -->
<!--         refund made to the customer -->
<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>765433</UnitID>
     </BusinessUnit>
     <WorkstationID>POS3245</WorkstationID>
     <SequenceNumber>4294967295</SequenceNumber>
     <OperatorID>John</OperatorID>
     <RetailTransaction>
       <LineItem>
         <PreviousLayaway Action="Cancelled" ItemType="Stock">
           <POSIdentity>
              <POSItemID>01234567890123</POSItemID>
           </POSIdentity>
           <ExtendedAmount>495.00</ExtendedAmount>
           <Quantity>1</Quantity>
         </PreviousLayaway>
         <SequenceNumber>3</SequenceNumber>
       </LineItem>
       <LineItem>
         <PaymentOnAccount Refund="true">
           <AccountNumber>34905832-45</AccountNumber>
           <Amount>100.00</Amount>
         </PaymentOnAccount>
         <SequenceNumber>2</SequenceNumber>
       </LineItem>
     </RetailTransaction>
   </Transaction>
</POSLog>
```

4.5 Scenario: Lost Layaway (V2.2)

Brief Description

The store lost the layaway or the item got broken. The store returns the money to the customer.

Data
   - Cancel the layaway

- Refund the money

4.5 Conformance XML Instance Document – Lost Layaway

```xml
<?xml version="1.0" encoding="UTF-8"?>
<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>765433</UnitID>
        </BusinessUnit>
        <WorkstationID>POS3245</WorkstationID>
        <SequenceNumber>4294967295</SequenceNumber>
        <OperatorID>John</OperatorID>
        <RetailTransaction>
            <LineItem>
                <PreviousLayaway Action="Cancelled" ItemType="Stock">
                    <POSIdentity>
                        <POSItemID>01234567890123</POSItemID>
                    </POSIdentity>
                    <ExtendedAmount>495.00</ExtendedAmount>
                    <Quantity>1</Quantity>
                </PreviousLayaway>
                <SequenceNumber>3</SequenceNumber>
            </LineItem>
            <LineItem>
                <Tender TypeCode="Refund">
                    <Amount>75.00</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