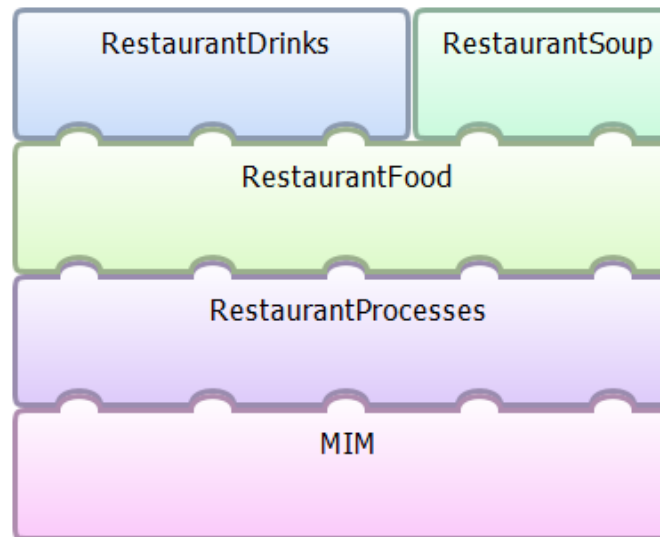


# Project Modular Restaurant



# 1. Module MIM



## Information

<b>Name:</b>	Standard MOM and Initialization Module (MIM) for HLA IEEE 1516-2010
<b>Type:</b>	FOM
<b>Version:</b>	1.0
<b>Modification Date:</b>	2008-12-11
<b>Security Classification:</b>	Unclassified
<b>Purpose:</b>	Standard MOM and Initialization Module for HLA IEEE 1516-2010
<b>Application Domain:</b>	HLA General
<b>Description:</b>	The MOM Object Classes and Interaction Classes of this object model may be extended.
<b>Use Limitation:</b>	-
<b>Other:</b>	-

## Standards Sponsor Point Of Contact

<b>Name:</b>	Simulation Interoperability Standards Organization
<b>Organization:</b>	SISO
<b>Telephone:</b>	+1 (407) 882-1348
<b>Email:</b>	info@sisostds.org

*Note that the standard MOM classes and data types are currently hidden in this project.*

## 1.1. Datatypes

### 1.1.1. Basic Datatypes

#### **HLAinteger16BE**

Size in bits: 16

Interpretation: *Integer in the range  $[-2^{15}, 2^{15} - 1]$*

Endian: Big

Encoding: *16-bit two's complement signed integer. The most significant bit contains the sign.*

#### **HLAinteger32BE**

Size in bits: 32

Interpretation: *Integer in the range  $[-2^{31}, 2^{31} - 1]$*

Endian: Big

Encoding: *32-bit two's complement signed integer. The most significant bit contains the sign.*

#### **HLAinteger64BE**

Size in bits: 64

Interpretation: *Integer in the range  $[-2^{63}, 2^{63} - 1]$*

Endian: Big

Encoding: *64-bit two's complement signed integer first. The most significant bit contains the sign.*

#### **HLAfloat32BE**

Size in bits: 32

Interpretation: *Single-precision floating point number*

Endian: Big

Encoding: *32-bit IEEE normalized single-precision format. See IEEE Std 754-1985*

**HLAfloat64BE**

Size in bits: 64  
Interpretation: *Double-precision floating point number*  
Endian: Big  
Encoding: *64-bit IEEE normalized double-precision format. See IEEE Std 754-1985*

**HLAoctetPairBE**

Size in bits: 16  
Interpretation: *16-bit value*  
Endian: Big  
Encoding: *Assumed to be portable among devices.*

**HLAinteger16LE**

Size in bits: 16  
Interpretation: *Integer in the range  $[-2^{15}, 2^{15} - 1]$*   
Endian: Little  
Encoding: *16-bit two's complement signed integer. The most significant bit contains the sign.*

**HLAinteger32LE**

Size in bits: 32  
Interpretation: *Integer in the range  $[-2^{31}, 2^{31} - 1]$*   
Endian: Little  
Encoding: *32-bit two's complement signed integer. The most significant bit contains the sign.*

**HLAinteger64LE**

Size in bits: 64  
Interpretation: *Integer in the range  $[-2^{63}, 2^{63} - 1]$*   
Endian: Little

Encoding: *64-bit two's complement signed integer first. The most significant bit contains the sign.*

### **HLAfloat32LE**

Size in bits: 32

Interpretation: *Single-precision floating point number*

Endian: Little

Encoding: *32-bit IEEE normalized single-precision format. See IEEE Std 754-1985*

### **HLAfloat64LE**

Size in bits: 64

Interpretation: *Double-precision floating point number*

Endian: Little

Encoding: *64-bit IEEE normalized double-precision format. See IEEE Std 754-1985*

### **HLAoctetPairLE**

Size in bits: 16

Interpretation: *16-bit value*

Endian: Little

Encoding: *Assumed to be portable among hardware devices.*

### **HLAoctet**

Size in bits: 8

Interpretation: *8-bit value*

Endian: Big

Encoding: *Assumed to be portable among hardware devices.*

## 1.1.2. Simple Datatypes

### HLAASCIIchar

Representation: [HLAoctet](#)  
Units: NA  
Resolution: NA  
Accuracy: NA  
Semantics: Standard ASCII character (see ANSI Std x3.4-1986)

### HLAunicodeChar

Representation: [HLAoctetPairBE](#)  
Units: NA  
Resolution: NA  
Accuracy: NA  
Semantics: Unicode UTF-16 character (see The Unicode Standard, Version 3.0)

### HLAbyte

Representation: [HLAoctet](#)  
Units: NA  
Resolution: NA  
Accuracy: NA  
Semantics: Uninterpreted 8-bit byte

### HLAinteger64Time

Representation: [HLAinteger64BE](#)  
Units: NA  
Resolution: 1  
Accuracy: NA

Semantics:        Standardized 64 bit integer time

### **HLAfloat64Time**

Representation: [HLAfloat64BE](#)

Units:            NA

Resolution:     4.9E-308

Accuracy:        NA

Semantics:        Standardized 64 bit float time

## **1.1.3. Enumerated Datatypes**

### **HLAboolean**

Representation: [HLAinteger32BE](#)

Semantics:        *Standard boolean type*

Enumerators:

Enumerator	Value
HLAfalse	0
HLAtrue	1

## **1.1.4. Array Datatypes**

### **HLAASCIIstring**

Element Type: [HLAASCIIchar](#)

Cardinality:     Dynamic

Encoding:        HLAvariableArray

Semantics:        *ASCII string representation*

## **HLAunicodeString**

Element Type: [HLAunicodeChar](#)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Unicode string representation*

## **HLAopaqueData**

Element Type: [HLAbyte](#)

Cardinality: Dynamic

Encoding: HLAvariableArray

Semantics: *Uninterpreted sequence of bytes*

## **HLAtoken**

Element Type: [HLAbyte](#)

Cardinality: 0

Encoding: HLAfixedArray

Semantics:



## ***1.2. Transportation Types***

### **HLAreliable**

Reliability: Reliable

Semantics: *Provide reliable delivery of data in the sense that TCP/IP delivers its data reliably*

### **HLAbestEffort**

Reliability: Best effort

Semantics: *Make an effort to deliver data in the sense that UDP provides best-effort delivery*

## 2. Module RestaurantProcesses



### Information

<b>Name:</b>	Serving processes for Restaurant FOM
<b>Type:</b>	FOM
<b>Version:</b>	3.0
<b>Modification Date:</b>	2010-09-09
<b>Security Classification:</b>	Unclassified
<b>Purpose:</b>	To define a processes module for a restaurant federation
<b>Application Domain:</b>	Restaurant operations
<b>Description:</b>	Processes for the modular restaurant.
<b>Use Limitation:</b>	Derived models must reference this document
<b>Other:</b>	See Mobil International Restaurant Guide for more information

### Keywords

Keyword	Taxonomy
Restaurant	Food Service Industry Taxonomy
Menu	Food Service Industry Taxonomy
Waiter	Food Service Industry Taxonomy

**Sponsor Point Of Contact**

<b>Name:</b>	Mr. Joseph Doe
<b>Organization:</b>	Joe's Place
<b>Telephone:</b>	1-977-555-1234
<b>Email:</b>	doej@fedfoods.com

**Author Point Of Contact**

<b>Name:</b>	Mr. Sven Swede
<b>Organization:</b>	Federated Foods
<b>Telephone:</b>	
<b>Email:</b>	

**References**

<b>HTML document</b>	<a href="http://www.fedfoods.com/restsim.html">www.fedfoods.com/restsim.html</a>
<b>Federation Agreements</b>	<a href="http://www.fedfoods.com/restsimAgreement.pdf">www.fedfoods.com/restsimAgreement.pdf</a>

**Release Restrictions**

Other organizations not related to Federated Foods
--

**Use History**

Originally used as an example in the DoD HLA 1.3 specification
Used as an example in the HLA IEEE1516.2-2000 specification
Used as an example in the HLA IEEE1516.2-2010 specification after conversion to a FOM module (MIM information stripped out)

## 2.1. Object Classes



### 2.1.1. HLAobjectRoot

Full Name: HLAobjectRoot

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 2.1.2. Customer

[Note1](#)

Full Name: HLAobjectRoot.Customer

Sharing: Publish/Subscribe

Semantics: *Statement of money owed by the customer*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 2.1.3. Order

Full Name: HLAobjectRoot.Order

Sharing: Publish/Subscribe

Semantics: *Specific items requested by a customer*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

#### 2.1.4. Employee

Full Name: HLAobjectRoot.Employee

Sharing:

Semantics: *A person working for the restaurant*

Attributes:

PayRate	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Merit increase				
	Semantics					
	Amount the employee is paid per hour					
YearsOfService	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">Years</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Periodic	1/year				
	Semantics					
	Number of years the employee has worked for the restaurant					

HomeNumber	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAASCIIstring</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home phone number					
HomeAddress	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home address					
HLA privilege To Delete Object <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLA token</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 2.1.5. Greeter

Full Name: HLAobjectRoot.Employee.Greeter

Sharing: Publish/Subscribe

Semantics:

Attributes:

<b>PayRate</b>  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Merit increase				
	Semantics					
	Amount the employee is paid per hour					
<b>YearsOfService</b>  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">Years</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Periodic	1/year				
	Semantics					
	Number of years the employee has worked for the restaurant					
<b>HomeNumber</b>  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAASCIIstring</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home phone number					
<b>HomeAddress</b>  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home address					



<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 2.1.6. Waiter

Full Name: HLAobjectRoot.Employee.Waiter

Sharing: Publish/Subscribe

Semantics:

Attributes:

Efficiency	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">WaiterValue</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Performance review				
	Semantics					
	Efficiency rating of waiter					
Cheerfulness	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">WaiterValue</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Performance review				
	Semantics					
	Cheerfulness of waiter					

State	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">WaiterTasks</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Conditional	Work flow				
	Semantics					
	What the waiter is doing					
PayRate  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Conditional	Merit increase				
	Semantics					
	Amount the employee is paid per hour					
YearsOfService  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">Years</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Periodic	1/year				
	Semantics					
	Number of years the employee has worked for the restaurant					
HomeNumber  <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLA ASCII string</a>	PS		TS	<a href="#">HLA reliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home phone number					

<b>HomeAddress</b>  <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Employee request</i>				
	<b>Semantics</b>					
	<i>Employee home address</i>					
<b>HLAprivilegeToDeleteObject</b>  <i>Inherited from HLAobjectRoot in MIM</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Static	<i>NA</i>				
	<b>Semantics</b>					

### 2.1.7. Cashier

Full Name: HLAobjectRoot.Employee.Cashier

Sharing: Publish/Subscribe

Semantics: *Employee who collects money*

Attributes:

<b>PayRate</b>  <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Merit increase</i>				
	<b>Semantics</b>					
	<i>Amount the employee is paid per hour</i>					

<b>YearsOfService</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">Years</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Periodic	<i>1/year</i>				
	<b>Semantics</b>					
	<i>Number of years the employee has worked for the restaurant</i>					
<b>HomeNumber</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">HLAASCIIstring</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Employee request</i>				
	<b>Semantics</b>					
	<i>Employee home phone number</i>					
<b>HomeAddress</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Employee request</i>				
	<b>Semantics</b>					
	<i>Employee home address</i>					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Static	<i>NA</i>				
	<b>Semantics</b>					

### 2.1.8. Dishwasher

Full Name: HLAobjectRoot.Employee.Dishwasher

Sharing: Publish/Subscribe

Semantics: *Cleaner of plates, pots, and utensils*

## Attributes:

<b>PayRate</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Merit increase</i>				
	<b>Semantics</b>					
	<i>Amount the employee is paid per hour</i>					
<b>YearsOfService</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">Years</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Periodic	<i>1/year</i>				
	<b>Semantics</b>					
	<i>Number of years the employee has worked for the restaurant</i>					
<b>HomeNumber</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">HLAASCIIstring</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Employee request</i>				
	<b>Semantics</b>					
	<i>Employee home phone number</i>					
<b>HomeAddress</b> <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Employee request</i>				
	<b>Semantics</b>					
	<i>Employee home address</i>					

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 2.1.9. Cook

Full Name: HLAobjectRoot.Employee.Cook

Sharing: Publish/Subscribe

Semantics: *Preparer of the meal*

Attributes:

<b>PayRate</b>  <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">DollarRate</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Merit increase</i>				
	<b>Semantics</b>					
	<i>Amount the employee is paid per hour</i>					
<b>YearsOfService</b>  <i>Inherited from Employee in RestaurantProcesses</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">Years</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Periodic	<i>1/year</i>				
	<b>Semantics</b>					
	<i>Number of years the employee has worked for the restaurant</i>					

<b>HomeNumber</b> <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAASCIIstring</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home phone number					
<b>HomeAddress</b> <i>Inherited from Employee in RestaurantProcesses</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">AddressType</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Conditional	Employee request				
	Semantics					
	Employee home address					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

## 2.2. Interaction Classes

### 2.2.1. HLAinteractionRoot

Full Name: HLAinteractionRoot

Sharing:

Transportation type: [HLAreliable](#)

Order: Receive

Dimensions:

Semantics:

Parameters:

### 2.2.2. CustomerTransactions

Full Name: HLAinteractionRoot.CustomerTransactions

Sharing: Publish

Transportation type: [HLAreliable](#)

Order: Timestamp

Dimensions:

Semantics: *The base class of interactions between customers and employee*

Parameters:

### 2.2.3. CustomerSeated

Full Name: HLAinteractionRoot.CustomerTransactions.CustomerSeated

Sharing: Publish/Subscribe

Transportation type: [HLAreliable](#)

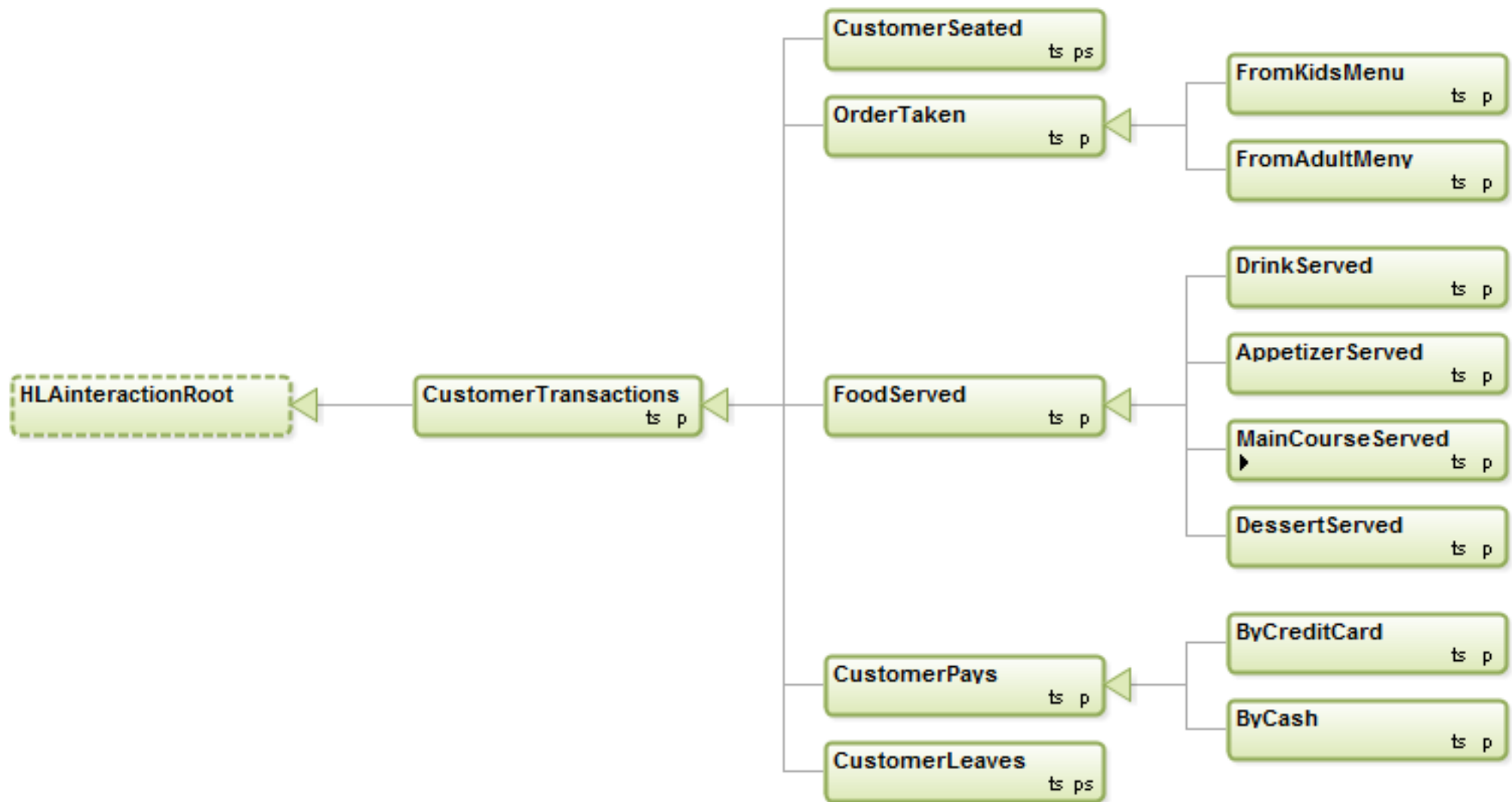
Order: Timestamp

Dimensions:

Semantics: *Customer has occupied a table*

Parameters:





#### 2.2.4. OrderTaken

Full Name: HLAinteractionRoot.CustomerTransactions.OrderTaken  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Waiter has taken customers order*  
Parameters:

#### 2.2.5. FromKidsMenu

Full Name: HLAinteractionRoot.CustomerTransactions.OrderTaken.FromKidsMenu  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Customer ordered from children menu*  
Parameters:

#### 2.2.6. FromAdultMeny

Full Name: HLAinteractionRoot.CustomerTransactions.OrderTaken.FromAdultMeny  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Customer ordered from normal menu*  
Parameters:

### 2.2.7. FoodServed

Full Name: HLAinteractionRoot.CustomerTransactions.FoodServed  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Waiter has served food*  
Parameters:

### 2.2.8. DrinkServed

Full Name: HLAinteractionRoot.CustomerTransactions.FoodServed.DrinkServed  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Waiter has served a drink*  
Parameters:

### 2.2.9. AppetizerServed

Full Name: HLAinteractionRoot.CustomerTransactions.FoodServed.AppetizerServed  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Waiter has served appetizers*  
Parameters:

**2.2.10. MainCourseServed**

Full Name: HLAinteractionRoot.CustomerTransactions.FoodServed.MainCourseServed

Sharing: Publish

Transportation type: [HLAreliable](#)

Order: Timestamp

Dimensions: [WaiterId](#)Semantics: *Waiter has served entree*

Parameters:

Name	Datatype	Semantics
<b>TemperatureOk</b>	<a href="#">ServiceStat</a>	<i>Whether the food was the correct temperature</i>
<b>AccuracyOk</b>	<a href="#">ServiceStat</a>	<i>Whether the correct food was served</i>
<b>TimlinessOk</b>	<a href="#">HLAboolean</a>	<i>Whether the food was served in a reasonable amount of time</i>

**2.2.11. DessertServed**

Full Name: HLAinteractionRoot.CustomerTransactions.FoodServed.DessertServed

Sharing: Publish

Transportation type: [HLAreliable](#)

Order: Timestamp

Dimensions:

Semantics: *Waiter has served dessert*

Parameters:

**2.2.12. CustomerPays**

Full Name: HLAinteractionRoot.CustomerTransactions.CustomerPays

Sharing: Publish

Transportation type: [HLAreliable](#)

Order: Timestamp

Dimensions:

Semantics: *Customer has paid bill*  
Parameters:

#### 2.2.13. **ByCreditCard**

Full Name: HLAinteractionRoot.CustomerTransactions.CustomerPays.ByCreditCard  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Credit card payment*  
Parameters:

#### 2.2.14. **ByCash**

Full Name: HLAinteractionRoot.CustomerTransactions.CustomerPays.ByCash  
Sharing: Publish  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Cash payment*  
Parameters:

#### 2.2.15. **CustomerLeaves**

Full Name: HLAinteractionRoot.CustomerTransactions.CustomerLeaves  
Sharing: Publish/Subscribe  
Transportation type: [HLAreliable](#)  
Order: Timestamp  
Dimensions:  
Semantics: *Customer departs restaurant*

Parameters:

## 2.3. Datatypes

### 2.3.1. Basic Datatypes

#### UnsignedShort

Size in bits: 16

Interpretation: *Integer in the range  $[0, 2^{16} - 1]$*

Endian: Big

Encoding: *16-bit unsigned integer.*

### 2.3.2. Simple Datatypes

#### TimeType

Representation: [HLAfloat32BE](#)

Units: Minutes

Resolution: 0.01667

Accuracy: NA

Semantics: Time representation

#### LAType

Representation: [HLAfloat32BE](#)

Units: Minutes

Resolution: 0.01667

Accuracy: NA

Semantics: Time interval (non-negative)

#### DollarRate

Representation: [HLAfloat32BE](#)  
Units: \$/hour  
Resolution: 0.01  
Accuracy: Perfect  
Semantics: Cost per hour

## Years

Representation: [HLAinteger32BE](#)  
Units: Years  
Resolution: 1  
Accuracy: Perfect  
Semantics: Elapsed time in years

## DrinkCount

Representation: [UnsignedShort](#)  
Units: Cups  
Resolution: 1  
Accuracy: Perfect  
Semantics: Measure of number of drinks

## EmplId

Representation: [HLAinteger32BE](#)  
Units: NA  
Resolution: 1  
Accuracy: Perfect  
Semantics: Employee identifier



**RateScale**Representation: [HLAinteger32BE](#)

Units: NA

Resolution: 1

Accuracy: Perfect

Semantics: Evaluation of staff where 1 = best

**2.3.3. Enumerated Datatypes****WaiterTasks**Representation: [HLAinteger32BE](#)Semantics: *Possible activities of waiters*

Enumerators:

Enumerator	Value
TakingOrder	1
Serving	2
Cleaning	3
CalculatingBill	4
Other	5

**ExperienceLevel**Representation: [HLAinteger32BE](#)Semantics: *Level of experience of waiters*

Enumerators:

Enumerator	Value
Trainee	0
Apprentice	1

Enumerator	Value
Journeyman	2
Senior	3
Temporary	4
Master	5

## FlavorType

Representation: [HLAinteger32BE](#)

Semantics: *Possible flavors of soda*

Enumerators:

Enumerator	Value
Cola	101
Orange	102
RootBeer	103
Cream	104

## 2.3.4. Array Datatypes

### Employees

Element Type: [EmplId](#)

Cardinality: 10

Encoding: HLAfixedArray

Semantics: *Identifiers of employees currently working*

### AddressBook

Element Type: [AddressType](#)

Cardinality: Dynamic

Encoding: An HLAinteger32BE followed by a set of index-value tuples. Each tuple consists of an HLAinteger32BE indicating the array index, followed by the element for that index. The initial HLAinteger32BE indicates the number of index-value pairs to follow, since all array elements need not be included.

Semantics: *Collection of all employee addresses*

### 2.3.5. Fixed Record Datatypes

#### ServiceStat

Encoding: HLAfixedRecord

Semantics: *Check-off on whether the server performed properly on elements of the meal*

Fields:

Name	Type	Semantic
EntreeOk	<a href="#">HLAboolean</a>	<i>Entree status</i>
Veggy1Ok	<a href="#">HLAboolean</a>	<i>Vegetable 1 status</i>
Veggy2Ok	<a href="#">HLAboolean</a>	<i>Vegetable 2 status</i>

#### AddressType

Encoding: HLAfixedRecord

Semantics: *Mailing address*

Fields:

Name	Type	Semantic
Name	<a href="#">HLAASCIIstring</a>	<i>Employee name</i>
Street	<a href="#">HLAASCIIstring</a>	<i>Street address</i>
City	<a href="#">HLAASCIIstring</a>	<i>City name</i>
State	<a href="#">HLAASCIIstring</a>	<i>State abbreviation</i>
Zip	<a href="#">HLAASCIIstring</a>	<i>Postal code</i>

## 2.3.6. Variant Record Datatypes

### WaiterValue

Encoding: HLAvariantRecord

Discriminant name: ValIndex

Discriminant type: [ExperienceLevel](#)

Semantics: *Datatype for waiter performance rating value*

Alternatives:

Name	Enumerator	Type	Semantics
CoursePassed	Trainee	<a href="#">HLAboolean</a>	<i>Ratings scale for employees under training</i>
Rating	[Apprentice .. Senior], Master	<a href="#">RateScale</a>	<i>Ratings scale for permanent employees</i>
Other	HLAother	<a href="#">HLAtoken</a>	<i>All others</i>

## 2.4. User Supplied Tags

### Update/Reflect

Datatype: NA

Semantics: NA

### Send/Receive

Datatype: NA

Semantics: NA

### Delete/Remove Note3

Datatype: [HLAASCIIstring](#)

Semantics: *Reason for deletion*

### Divestiture Request

Datatype: NA

Semantics: NA

### Divestiture Completion

Datatype: NA

Semantics: NA

### Acquisition Request

Datatype: NA

Semantics: NA

### Request Update

Datatype: NA

Semantics: NA

## 2.5. Dimensions

### SodaFlavor

Datatype: [FlavorType](#)  
Dimension upper bound: 3  
Normalisation function: *linearEnumerated (Flavor, [Cola, Orange, RootBeer])*  
Value when excluded: [0..3)

### BarQuantity

Datatype: [DrinkCount](#)  
Dimension upper bound: 25  
Normalisation function: *linear (NumberCups, 1, 25)*  
Value when excluded: [0)

### WaiterId

Datatype: [EmplId](#)  
Dimension upper bound: 20  
Normalisation function: *linear (WaiterId, 1, 20)*  
Value when excluded: Excluded

## 2.6. Time Representation

### Timestamp

Datatype: [TimeType](#)

Semantics: *Floating point value expressed in minutes*

### Lookahead

Datatype: [LAType](#)

Semantics: *Floating point value expressed in minutes (non-negative)*



## 2.7. Synchronization Points

### InitialPublish

Tag Datatype: NA

Capability: Not Applicable

Semantics: *Achieved when all classes are published and subscribed, and all initially present objects are registered*

### InitialUpdate

Tag Datatype: NA

Capability: Not Applicable

Semantics: *Achieved when instance attribute values for all initially present objects are updated*

### BeginTimeAdvance

Tag Datatype: NA

Capability: Not Applicable

Semantics: *Achieved when time management services are invoked*

### PauseExecution

Tag Datatype: [TimeType](#)

Capability: Not Applicable

Semantics: *Achieved when the time advance after the time in the user-supplied tag is attained; time advance requests should then cease*

## ***2.8. Transportation Types***

### **LowLatency**

Reliability: Best effort

Semantics: *Choose the delivery mechanism that results in the lowest latency from service initiation to callback invocation at the receiving federate*

## ***2.9. Update Rates***

### **Low**

Maximum update rate: 10.56

Semantics:

### **Hi**

Maximum update rate: 60.0

Semantics:

## 2.10. Switches

Auto Provide	Enabled
Convey Region Designator Sets	Disabled
Convey Producing Federate	Disabled
Attribute Scope Advisory	Disabled
Attribute Relevance Advisory	Disabled
Object Class Relevance Advisory	Enabled
Interaction Relevance Advisory	Enabled
Service Reporting	Disabled
Exception Reporting	Disabled
Delay Subscription Evaluation	Disabled
Automatic Resign Action	CancelThenDeleteThenDivest

## 2.11. Notes

### Note1

Semantics: *Example of a note attached to the entire object model*

### Note2

Semantics: *Example of a note attached to an entire table*

### Note3

Semantics: *Example of a note attached to a table cell*

### Note4

Semantics: *Merit raises are not provided according to any regular time interval; they are provided on a supervisor's recommendation based on evidence of exceptional effort and performance*

### Note5

Semantics: *Years of service are a factor in any merit raise. This value is only changed on the anniversary of the employee's hire.*

### 3. Module RestaurantFood



#### Information

<b>Name:</b>	RestaurantFood
<b>Type:</b>	FOM
<b>Version:</b>	3.0
<b>Modification Date:</b>	2010-09-09
<b>Security Classification:</b>	Unclassified
<b>Purpose:</b>	To define a food module for a restaurant federation
<b>Application Domain:</b>	Restaurant operations
<b>Description:</b>	Food for the modular restaurant.
<b>Use Limitation:</b>	Derived models must reference this document
<b>Other:</b>	See Mobil International Restaurant Guide for more information

#### Keywords

Keyword	Taxonomy
<b>Restaurant</b>	Food Service Industry Taxonomy
<b>Menu</b>	Food Service Industry Taxonomy
<b>Waiter</b>	Food Service Industry Taxonomy

#### Sponsor Point Of Contact

<b>Name:</b>	Mr. Joseph Doe
<b>Organization:</b>	Joe's Place
<b>Telephone:</b>	1-977-555-1234

<b>Email:</b>	doej@fedfoods.com
---------------	-------------------

### Author Point Of Contact

<b>Name:</b>	Mr. Sven Swede
<b>Organization:</b>	Federated Foods
<b>Telephone:</b>	
<b>Email:</b>	

### References

<b>HTML document</b>	<a href="http://www.fedfoods.com/restsim.html">www.fedfoods.com/restsim.html</a>
<b>Federation Agreements</b>	<a href="http://www.fedfoods.com/restsimAgreement.pdf">www.fedfoods.com/restsimAgreement.pdf</a>
<b>Dependency</b>	RestaurantProcesses

### Release Restrictions

Other organizations not related to Federated Foods
--

### Use History

Originally used as an example in the DoD HLA 1.3 specification
Used as an example in the HLA IEEE1516.2-2000 specification
Used as an example in the HLA IEEE1516.2-2010 specification after conversion to a FOM module (MIM information stripped out)

## 3.1. Object Classes

### 3.1.1. HLAobjectRoot

Full Name: HLAobjectRoot

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.2. Food

Full Name: HLAobjectRoot.Food

Sharing: Subscribe

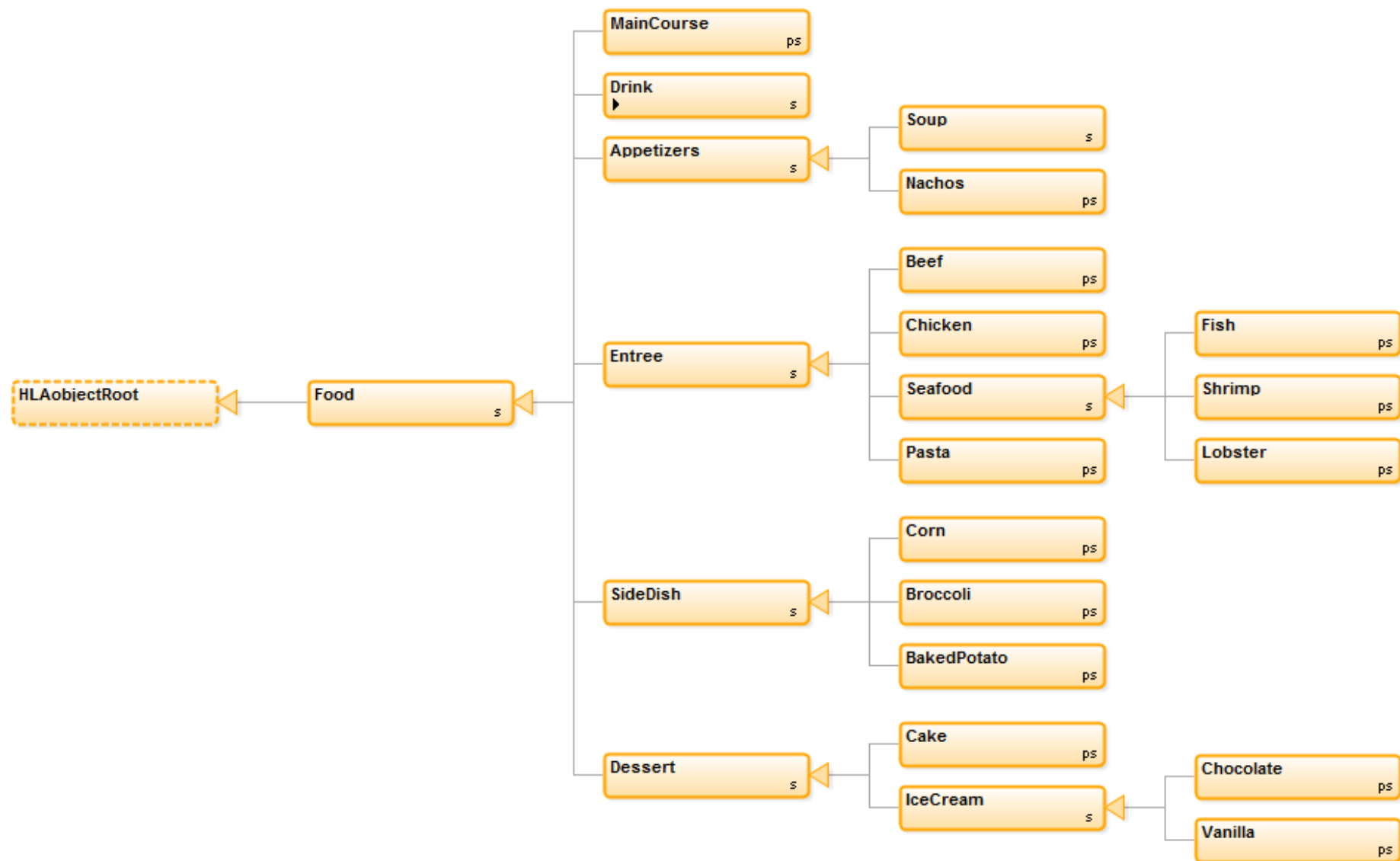
Semantics: *Products served at the restaurant*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.3. MainCourse





Full Name: HLAobjectRoot.Food.MainCourse

Sharing: Publish/Subscribe

Semantics: *Principal dish*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.4. Drink

Full Name: HLAobjectRoot.Food.Drink

Sharing: Subscribe

Semantics: *Liquid accompaniment to meal*

Attributes:

NumberCups	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DrinkCount</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">BarQuantity</a>
	Update type	Update Condition				
	Conditional	Customer request				
	Semantics					
	Number of drinks					
HLAprivilegeToDeleteObject <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.5. Appetizers

Full Name: HLAobjectRoot.Food.Appetizers

Sharing: Subscribe

Semantics: *Portion served before main course*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.6. Soup

Full Name: HLAobjectRoot.Food.Appetizers.Soup

Sharing: Subscribe

Semantics: *Soup course*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.7. Nachos

Full Name: HLAobjectRoot.Food.Appetizers.Nachos

Sharing: Publish/Subscribe

Semantics: *Nachos*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

**3.1.8. Entree**

Full Name: HLAobjectRoot.Food.Entree

Sharing: Subscribe

Semantics: *Principal dish*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

**3.1.9. Beef**

Full Name: HLAobjectRoot.Food.Entree.Beef

Sharing: Publish/Subscribe

Semantics: *Beef entree*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.10. Chicken

Full Name: HLAobjectRoot.Food.Entree.Chicken

Sharing: Publish/Subscribe

Semantics: *Chicken entree*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.11. Seafood

Full Name: HLAobjectRoot.Food.Entree.Seafood

Sharing: Subscribe

Semantics: *Seafood entree*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.12. Fish

Full Name: HLAobjectRoot.Food.Entree.Seafood.Fish

Sharing: Publish/Subscribe

Semantics: *Fish of the day*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliaible</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.13. Shrimp

Full Name: HLAobjectRoot.Food.Entree.Seafood.Shrimp

Sharing: Publish/Subscribe

Semantics: *Shrimp scampi*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.14. Lobster

Full Name: HLAobjectRoot.Food.Entree.Seafood.Lobster

Sharing: Publish/Subscribe

Semantics: *Lobster thermador*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.15. Pasta

Full Name: HLAobjectRoot.Food.Entree.Pasta

Sharing: Publish/Subscribe

Semantics: *Pasta entree*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.16. SideDish

Full Name: HLAobjectRoot.Food.SideDish

Sharing: Subscribe

Semantics: *ala carte dishes*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type		Update Condition			
	Static		NA			
	Semantics					

### 3.1.17. Corn

Full Name: HLAobjectRoot.Food.SideDish.Corn

Sharing: Publish/Subscribe

Semantics: *Corn side dish*

Attributes:



<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.18. Broccoli

Full Name: HLAobjectRoot.Food.SideDish.Broccoli

Sharing: Publish/Subscribe

Semantics: *Broccoli side dish*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.19. BakedPotato

Full Name: HLAobjectRoot.Food.SideDish.BakedPotato

Sharing: Publish/Subscribe

Semantics: *Baked potato side dish*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.20. Dessert

Full Name: HLAobjectRoot.Food.Dessert

Sharing: Subscribe

Semantics: *Deserts*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.21. Cake

Full Name: HLAobjectRoot.Food.Dessert.Cake

Sharing: Publish/Subscribe

Semantics: *Cake dessert*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.22. IceCream

Full Name: HLAobjectRoot.Food.Dessert.IceCream

Sharing: Subscribe

Semantics: *Ice cream dessert*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type		Update Condition			
	Static		NA			
	Semantics					

### 3.1.23. Chocolate

Full Name: HLAobjectRoot.Food.Dessert.IceCream.Chocolate

Sharing: Publish/Subscribe

Semantics: *Chocolate ice cream*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 3.1.24. Vanilla

Full Name: HLAobjectRoot.Food.Dessert.IceCream.Vanilla

Sharing: Publish/Subscribe

Semantics: *vanilla ice cream*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

## **3.2. Datatypes**

### **3.2.1. Simple Datatypes**

#### **DrinkCount**

Representation: [UnsignedShort](#)

Units: Cups

Resolution: 1

Accuracy: Perfect

Semantics: Measure of number of drinks

### **3.3. User Supplied Tags**

#### **Update/Reflect**

Datatype: NA

Semantics: NA

#### **Send/Receive**

Datatype: NA

Semantics: NA

#### **Delete/Remove**

Datatype: [HLAASCIIstring](#)

Semantics: *Reason for deletion*

#### **Divestiture Request**

Datatype: NA

Semantics: NA

#### **Divestiture Completion**

Datatype: NA

Semantics: NA

#### **Acquisition Request**

Datatype: NA

Semantics: NA

#### **Request Update**

Datatype: NA

Semantics: NA

### 3.4. Dimensions

#### SodaFlavor

Datatype: [FlavorType](#)  
Dimension upper bound: 3  
Normalisation function: *linearEnumerated (Flavor, [Cola, Orange, RootBeer])*  
Value when excluded: [0..3)

#### BarQuantity

Datatype: [DrinkCount](#)  
Dimension upper bound: 25  
Normalisation function: *linear (NumberCups, 1, 25)*  
Value when excluded: [0)

#### WaiterId

Datatype: [EmplId](#)  
Dimension upper bound: 20  
Normalisation function: *linear (WaiterId, 1, 20)*  
Value when excluded: Excluded



## 4. Module RestaurantDrinks



### Information

<b>Name:</b>	RestaurantDrinks
<b>Type:</b>	FOM
<b>Version:</b>	4.0
<b>Modification Date:</b>	2010-09-09
<b>Security Classification:</b>	Unclassified
<b>Purpose:</b>	To define a drink module for a restaurant federation
<b>Application Domain:</b>	Restaurant operations
<b>Description:</b>	Drinks for the modular restaurant.
<b>Use Limitation:</b>	Derived models must reference this document
<b>Other:</b>	See Mobil International Restaurant Guide for more information

### Keywords

Keyword	Taxonomy
Restaurant	Food Service Industry Taxonomy
Menu	Food Service Industry Taxonomy

<b>Waiter</b>	Food Service Industry Taxonomy
---------------	--------------------------------

### Sponsor Point Of Contact

<b>Name:</b>	Mr. Joseph Doe
<b>Organization:</b>	Joe's Place
<b>Telephone:</b>	1-977-555-1234
<b>Email:</b>	doej@fedfoods.com

### Author Point Of Contact

<b>Name:</b>	Mr. Sven Swede
<b>Organization:</b>	Federated Foods
<b>Telephone:</b>	
<b>Email:</b>	

### References

<b>HTML document</b>	<a href="http://www.fedfoods.com/restsim.html">www.fedfoods.com/restsim.html</a>
<b>Federation Agreements</b>	<a href="http://www.fedfoods.com/restsimAgreement.pdf">www.fedfoods.com/restsimAgreement.pdf</a>
<b>Dependency</b>	RestaurantFood

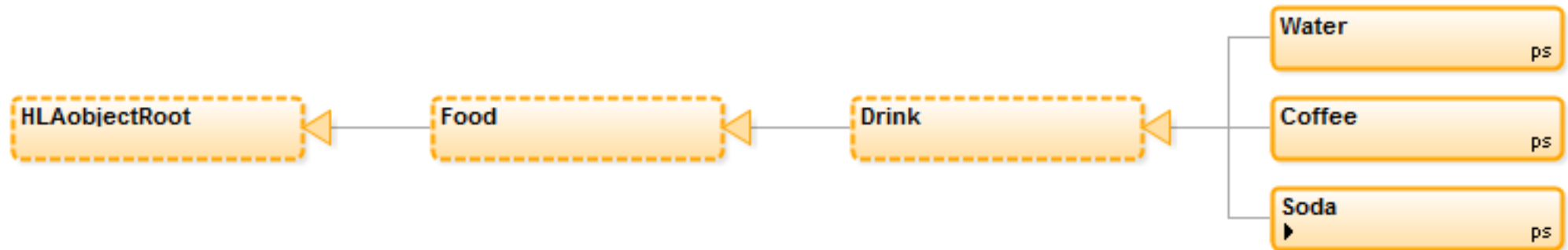
### Release Restrictions

Other organizations not related to Federated Foods
--

### Use History

Originally used as an example in the DoD HLA 1.3 specification
Used as an example in the HLA IEEE1516.2-2000 specification
Used as an example in the HLA IEEE1516.2-2010 specification after conversion to a FOM module (MIM information stripped out)

## 4.1. Object Classes



### 4.1.1. HLAobjectRoot

Full Name: HLAobjectRoot

Sharing:

Semantics:

Attributes:

	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 4.1.2. Food

Full Name: HLAobjectRoot.Food

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

#### 4.1.3. Drink

Full Name: HLAobjectRoot.Food.Drink

Sharing:

Semantics:

Attributes:

<b>NumberCups</b> <i>Inherited from Drink in RestaurantFood</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DrinkCount</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">BarQuantity</a>
	Update type	Update Condition				
	Conditional	<i>Customer request</i>				
	Semantics					
	<i>Number of drinks</i>					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	<i>NA</i>				
	Semantics					

**4.1.4. Water**

Full Name: HLAobjectRoot.Food.Drink.Water

Sharing: Publish/Subscribe

Semantics: *Tap water*

Attributes:

<b>NumberCups</b> <i>Inherited from Drink in RestaurantFood</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DrinkCount</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">BarQuantity</a>
	Update type	Update Condition				
	Conditional	<i>Customer request</i>				
	Semantics					
	<i>Number of drinks</i>					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	<i>NA</i>				
	Semantics					

**4.1.5. Coffee**

Full Name: HLAobjectRoot.Food.Drink.Coffee

Sharing: Publish/Subscribe

Semantics: *Brewed coffee*

Attributes:

<b>NumberCups</b> <i>Inherited from Drink in RestaurantFood</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">DrinkCount</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">BarQuantity</a>
	Update type	Update Condition				
	Conditional	<i>Customer request</i>				
	Semantics					
	<i>Number of drinks</i>					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	<i>NA</i>				
	Semantics					

#### 4.1.6. Soda

Full Name: HLAobjectRoot.Food.Drink.Soda

Sharing: Publish/Subscribe

Semantics: *Carbonated beverage*

Attributes:

Flavor	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">FlavorType</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">SodaFlavor</a> <a href="#">BarQuantity</a>
	Update type	Update Condition				
	Conditional	Customer request				
	Semantics					
	Flavor of soda					

<b>NumberCups</b> <i>Inherited from Drink in RestaurantFood</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">DrinkCount</a>	PS		TS	<a href="#">HLAreliable</a>	<a href="#">BarQuantity</a>
	<b>Update type</b>	<b>Update Condition</b>				
	Conditional	<i>Customer request</i>				
	<b>Semantics</b>					
	<i>Number of drinks</i>					
<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	<b>Datatype</b>	<b>Sharing</b>	<b>Ownership</b>	<b>Order</b>	<b>Transportation</b>	<b>Dimensions</b>
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	<b>Update type</b>	<b>Update Condition</b>				
	Static	<i>NA</i>				
	<b>Semantics</b>					

## 4.2. Datatypes

### 4.2.1. Enumerated Datatypes

#### FlavorType

Representation: [HLAinteger32BE](#)

Semantics: *Possible flavors of soda*

Enumerators:

Enumerator	Value
Cola	101
Orange	102
RootBeer	103
Cream	104



## 5. Module RestaurantSoup



### Information

<b>Name:</b>	RestaurantSoup
<b>Type:</b>	FOM
<b>Version:</b>	1.0
<b>Modification Date:</b>	2010-09-09
<b>Security Classification:</b>	Unclassified
<b>Purpose:</b>	To define a soup module for a restaurant federation
<b>Application Domain:</b>	Restaurant operations
<b>Description:</b>	Soup for the modular restaurant.
<b>Use Limitation:</b>	Derived models must reference this document
<b>Other:</b>	See Mobil International Restaurant Guide for more information

### Keywords

Keyword	Taxonomy
Restaurant	Food Service Industry Taxonomy
Menu	Food Service Industry Taxonomy
Waiter	Food Service Industry Taxonomy

### Sponsor Point Of Contact

<b>Name:</b>	Mr. Joseph Doe
<b>Organization:</b>	Joe's Place
<b>Telephone:</b>	1-977-555-1234
<b>Email:</b>	doej@fedfoods.com

### Author Point Of Contact

<b>Name:</b>	Mr. Sven Swede
<b>Organization:</b>	Federated Foods
<b>Telephone:</b>	
<b>Email:</b>	

### References

<b>Dependency</b>	RestaurantFood
<b>HTML document</b>	<a href="http://www.fedfoods.com/restsim.html">www.fedfoods.com/restsim.html</a>
<b>Federation Agreements</b>	<a href="http://www.fedfoods.com/restsimAgreement.pdf">www.fedfoods.com/restsimAgreement.pdf</a>

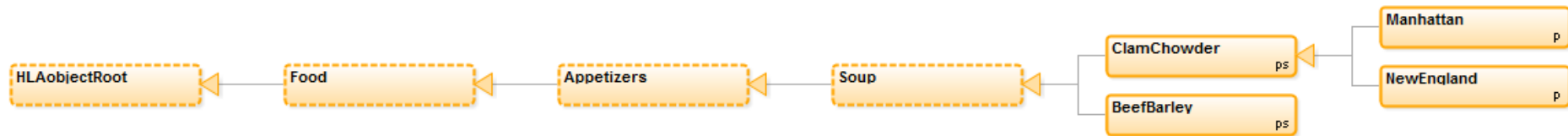
### Release Restrictions

Other organizations not related to Federated Foods
--

### Use History

Originally used as an example in the DoD HLA 1.3 specification
Used as an example in the HLA IEEE1516.2-2000 specification
Used as an example in the HLA IEEE1516.2-2010 specification after conversion to a FOM module (MIM information stripped out)

## 5.1. Object Classes



### 5.1.1. HLAobjectRoot

Full Name: HLAobjectRoot

Sharing:

Semantics:

Attributes:

	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
<b>HLAprivilegeToDeleteObject</b>	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
<i>Inherited from HLAobjectRoot in MIM</i>	Update type	Update Condition				
	Static	NA				
	Semantics					

### 5.1.2. Food

Full Name: HLAobjectRoot.Food

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 5.1.3. Appetizers

Full Name: HLAobjectRoot.Food.Appetizers

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

### 5.1.4. Soup

Full Name: HLAobjectRoot.Food.Appetizers.Soup

Sharing:

Semantics:

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

#### 5.1.5. ClamChowder

Full Name: HLAobjectRoot.Food.Appetizers.Soup.ClamChowder

Sharing: Publish/Subscribe

Semantics: *Clam chowder*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type		Update Condition			
	Static		NA			
	Semantics					

#### 5.1.6. Manhattan

Full Name: HLAobjectRoot.Food.Appetizers.Soup.ClamChowder.Manhattan

Sharing: Publish

Semantics: *Manhattan style clam chowder*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

#### 5.1.7. NewEngland

Full Name: HLAobjectRoot.Food.Appetizers.Soup.ClamChowder.NewEngland

Sharing: Publish

Semantics: *New England style clam chowder*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					

#### 5.1.8. BeefBarley

Full Name: HLAobjectRoot.Food.Appetizers.Soup.BeefBarley

Sharing: Publish/Subscribe

Semantics: *Beef barley soup*

Attributes:

<b>HLAprivilegeToDeleteObject</b> <i>Inherited from HLAobjectRoot in MIM</i>	Datatype	Sharing	Ownership	Order	Transportation	Dimensions
	<a href="#">HLAtoken</a>	PS		TS	<a href="#">HLAreliable</a>	
	Update type	Update Condition				
	Static	NA				
	Semantics					