



TIBCO® Product and Service Inventory

Web Services Guide

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Contents

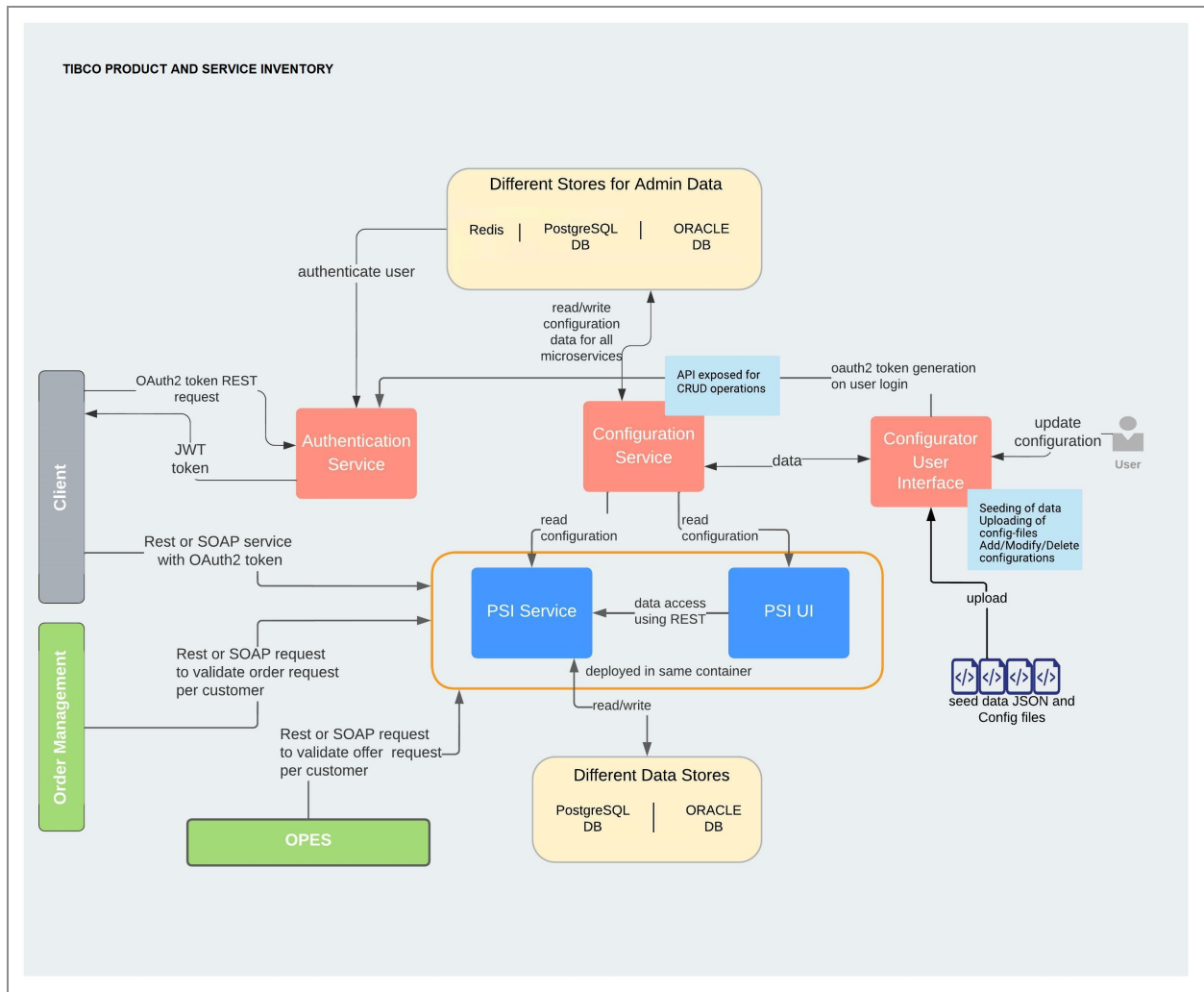
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Architecture

TIBCO® Product and Service Inventory (Formerly TIBCO® Fulfillment Subscriber Inventory) is comprised of a server providing external interfaces and processing inventory entities and a UI client that accesses the server.

The following section describes the architecture of TIBCO Product and Service Inventory.



Services and Operations

The interfaces are organized into services that include related operations. The following interfaces are exposed for any client to invoke the services related to the framework. These services can be invoked over two different channels: SOAP over HTTP and SOAP over JMS.

i Note: The supported encoding style in the web service request is UTF-8.

The web services endpoint URL has the following format:

`http://<hostname>:<port>/soapapi/v1/service`

These services can be invoked over two different channels: SOAP over HTTP and SOAP over JMS.

The naming convention for SOAP action is
`/WebServices/Service/Inventory/<ServiceName>`.

The naming convention for JMS destination is `com.tibco.inventory.soap.api.jms.queue`.

Integration Channels

To provide maximum flexibility for exposing services to the enterprise, service implementation is separated from the interface. This allows services to be invoked from different transport mechanisms. The following transports are supported:

- [SOAP over HTTP](#)
- [SOAP over JMS](#)

SOAP Over HTTP

SOAP over HTTP service calls use the standard synchronous web services message format.

In the SOAP over HTTP pattern, a service client makes a synchronous service call to the TIBCO Product and Service Inventory component.

SOAP Over JMS

SOAP works over a variety of transports and is not restricted to HTTP web services. JMS provides a highly available transport mechanism that delivers messages over and above what HTTP provides. SOAP over JMS service calls use the TIBCO proposed specification extension for sending SOAP messages over JMS. TIBCO Product and Service Inventory supports calling SOAP over JMS synchronously using the standard SOAP Request/Reply activity.

HTTP Header

For soap services, when the `enableSecureAPI` flag value is set as `true`, add HTTP "Authorization" header with OAuth token that is generated from Authorization service "Generate OAuth Token" API. For more information, see the "Generating an authorization token" section in *TIBCO® Product and Service Inventory REST Services Guide*.

TIBCO Product and Service Inventory Services

The TIBCO Product and Service Inventory services are the set of services that are related to entities associated with the item or party objects. These services allow you to get information about these entities and perform other operations.

i Note: There is a difference between "item" and "party" when considering the actions of the TIBCO Product and Service Inventory services. Item and party are two different parts of the application. They can go independently or be used together. Many concepts apply to both. The word "entity" is used when the concept applies to both item and party.

Common Elements

Most of the web service requests or response bodies for the application contain the following elements and can be referred to in the following tables. The rest of the elements for each web service are detailed with the respective topics.

The following three elements are included in all the request and response bodies:

Element	Type	Cardinality	Description
businessTransactionId	String	Optional	This is the unique identifier used for tracing across function calls. This is a free-form field and is not used internally.
correlationId	String	Optional	This is the unique identifier used to correlate the request message with a response message. This is a free-form field and is not used internally.

Element	Type	Cardinality	Description
sessionId	String	Optional	This is a free-form field that can be used to track messages.

The following four elements are repeated throughout the responses of the operations whenever there is a per entity status sent back:

Element	Type	Cardinality	Description
severity	String	Mandatory	This is the entity severity result. The following are the valid values: <ul style="list-style-type: none">• S - Success• W - Warning• E - Error
code	String	Mandatory	This is the code indicating the result of this operation for this particular entity.
message	String	Mandatory	This is the message indicating the result of this operation for this particular entity.
parameter	String	Mandatory	This is the substitution parameter used in the message. If there are no substituted parameters, this list is empty. This information can be used to localize the message.

Lock Notification

The lock notifications are published on dedicated topics to indicate lock timeout, removal, or grant.

Granting or expiring a lock is asynchronous. The client applications need channels for receiving lock notifications. These are notifications from TIBCO Product and Service Inventory to the client application on JMS topics.

The following are the three topics per tenant:

- `com.tibco.inventory.notification.lock.obtained.topic.[tenantId]`

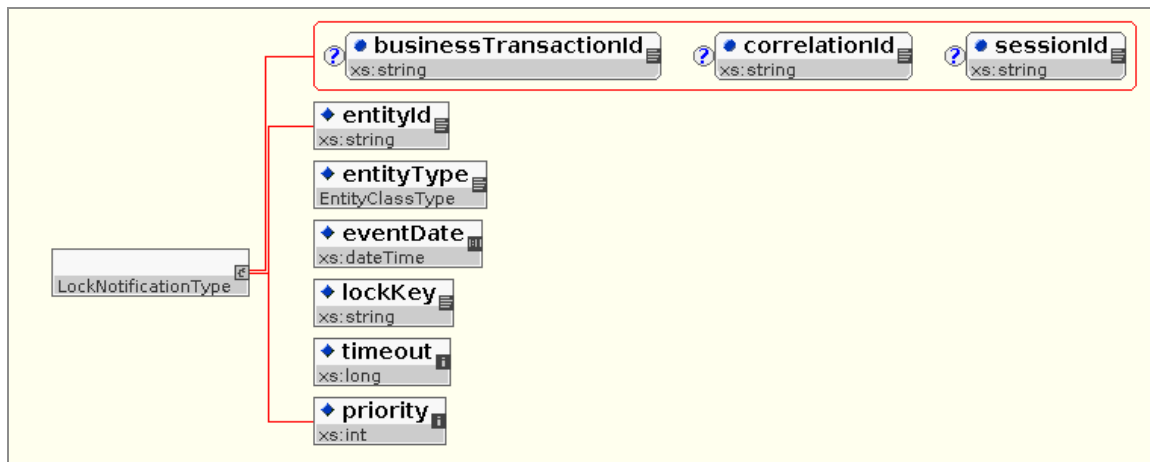
This topic is used for messages indicating that a lock was granted.

- `com.tibco.inventory.notification.lock.removed.topic.[tenantId]`

This topic is used for messages indicating that a lock request was removed by the user or API interaction. This is not sent when the current lock is "unlocked" on an item or party. It is only meant for removal. A new lock request acquiring the lock on the item or party gets a lock obtained notification.

- `com.tibco.inventory.notification.lock.expired.topic.[tenantId]`

This topic is used for messages indicating that a lock request has expired.



The following elements are used on the JMS topics:

Element	Type	Cardinality	Description
entityid	String	Mandatory	This is the ID of the entity for which the notification has been emitted.
entityType	EntityClassType	Mandatory	This is the entity type of the entity the lock notification is referring to. This can either be "PARTY" or "ITEM" (quotes and capitalization is required).
eventDate	dateTime	Opti	This is the event date of the entity the lock notification is referring to.
lockKey	String	Mandatory	This is the key of the lock the

Element	Type	Cardinality	Description
			notification is referring to.
Timeout	Long	Mandatory	This is the timeout of the initial lock in seconds.
Priority	Int	Mandatory	This is the priority of the initial lock.

Start Batch

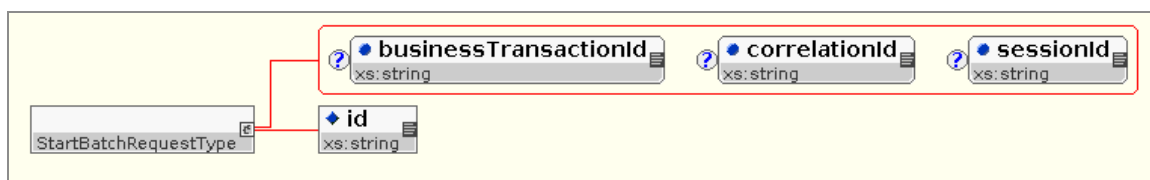
You can use the start batch operation to start batches.

Users must have one of the following permissions to call this operation:

- PERM_START_BATCH
- PERM_READ_BATCH

startBatch Request

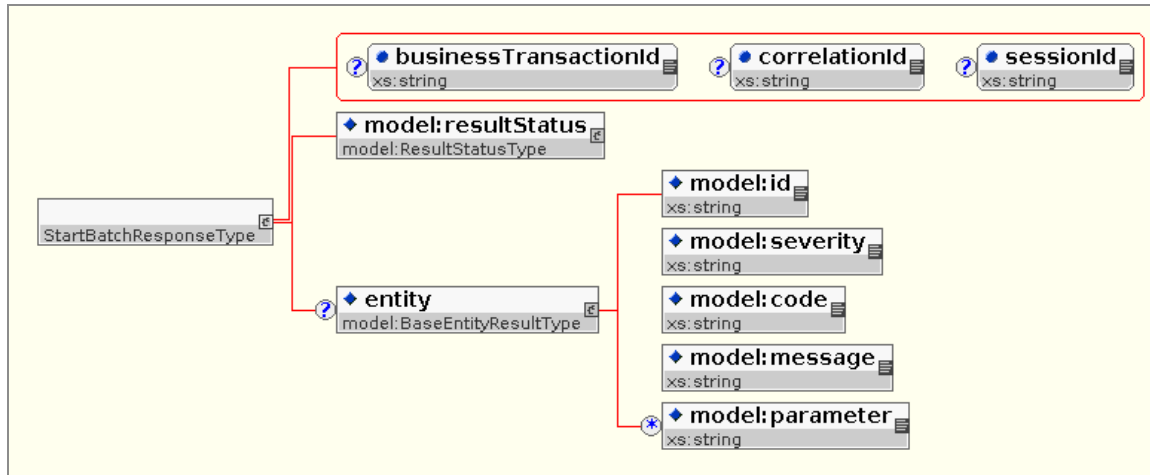
This message is sent by the client application to the TIBCO Product and Service Inventory system. The startBatch request has the following payload:



Element	Type	Cardinality	Description
id	String	Optional	The ID of the batch to start must be unique. If it is absent, the system starts a batch with a random ID and return it.

startBatch Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation. The startBatch response has the following payload:



Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result of the operation.
entity	BaseEntityType	Mandatory	This is the specific result of the requested IDs.
entity/id	String	Mandatory	<p>This is the unique identifier for the created entity.</p> <p>If entityId was specified in the request or was created successfully, this is populated.</p> <p>If entityId was omitted from the request and the entity was not successfully created, this is not returned.</p>

completeBatch

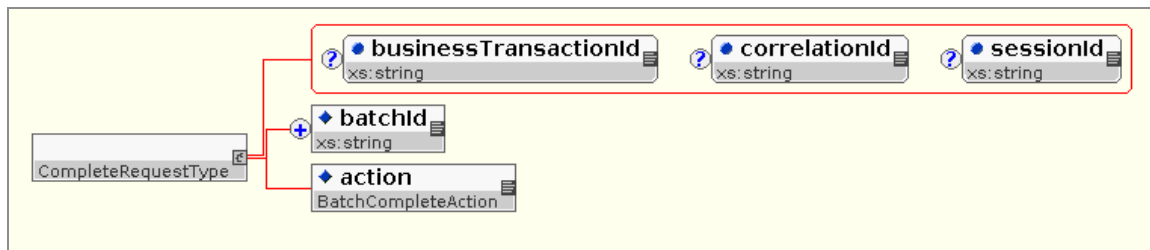
You can use the complete batch operation to complete or rollback batches.

Users must have the following permissions to call this operation:

- PERM_COMPLETE_BATCH

completeBatch Request

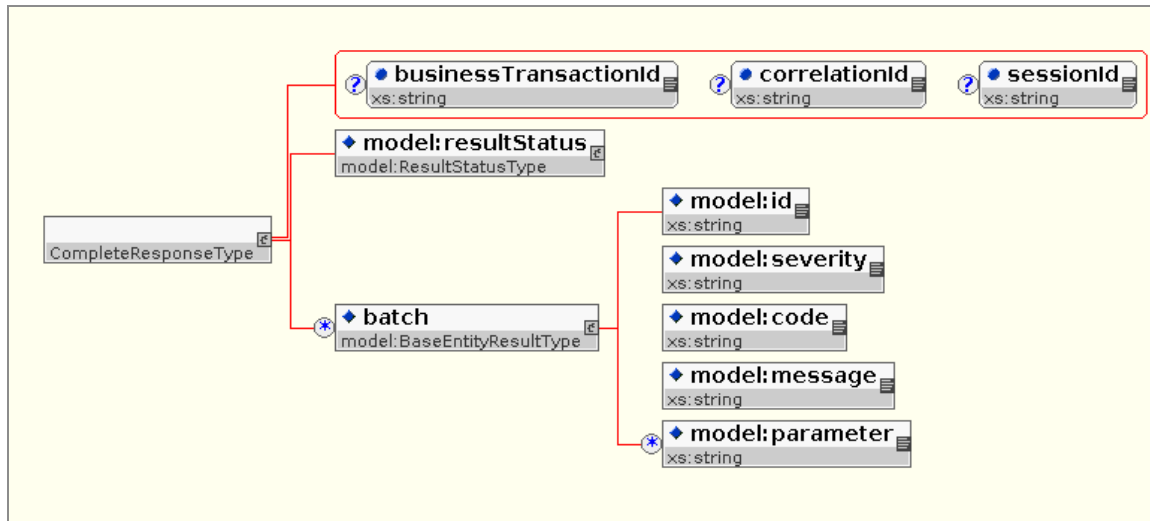
This message is sent by the client application to the TIBCO Product and Service Inventory system. The completeBatch request has the following payload:



Element	Type	Cardinality	Description
batchId	String	Mandatory (1..N)	This is the ID of the batch to complete.
Action	BatchCompleteAction	Mandatory	This is the batch action to complete. It can either be commit or rollback.

completeBatch Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation. The completeBatch response has the following payload:



Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status.
batch	BaseEntityResultType	Optional	This represents the result for particular batch completion.
batch/id	String	Optional	This is the ID of the batch completed.

Create

Create makes one-to-many new entities in TIBCO Product and Service Inventory. For items only, you can also use this operation to create orders, associated characteristics, and relationships, as well as a link to other items; this is item specific, and cannot be done for parties. Referential integrity is assured for an item-to-item relationship.

This operation also provides the option of locking the newly created entity using a defined lock key.

Users must have one of the following permissions for the respective action (create item or party) to call this operation:

- PERM_CREATE_ITEM

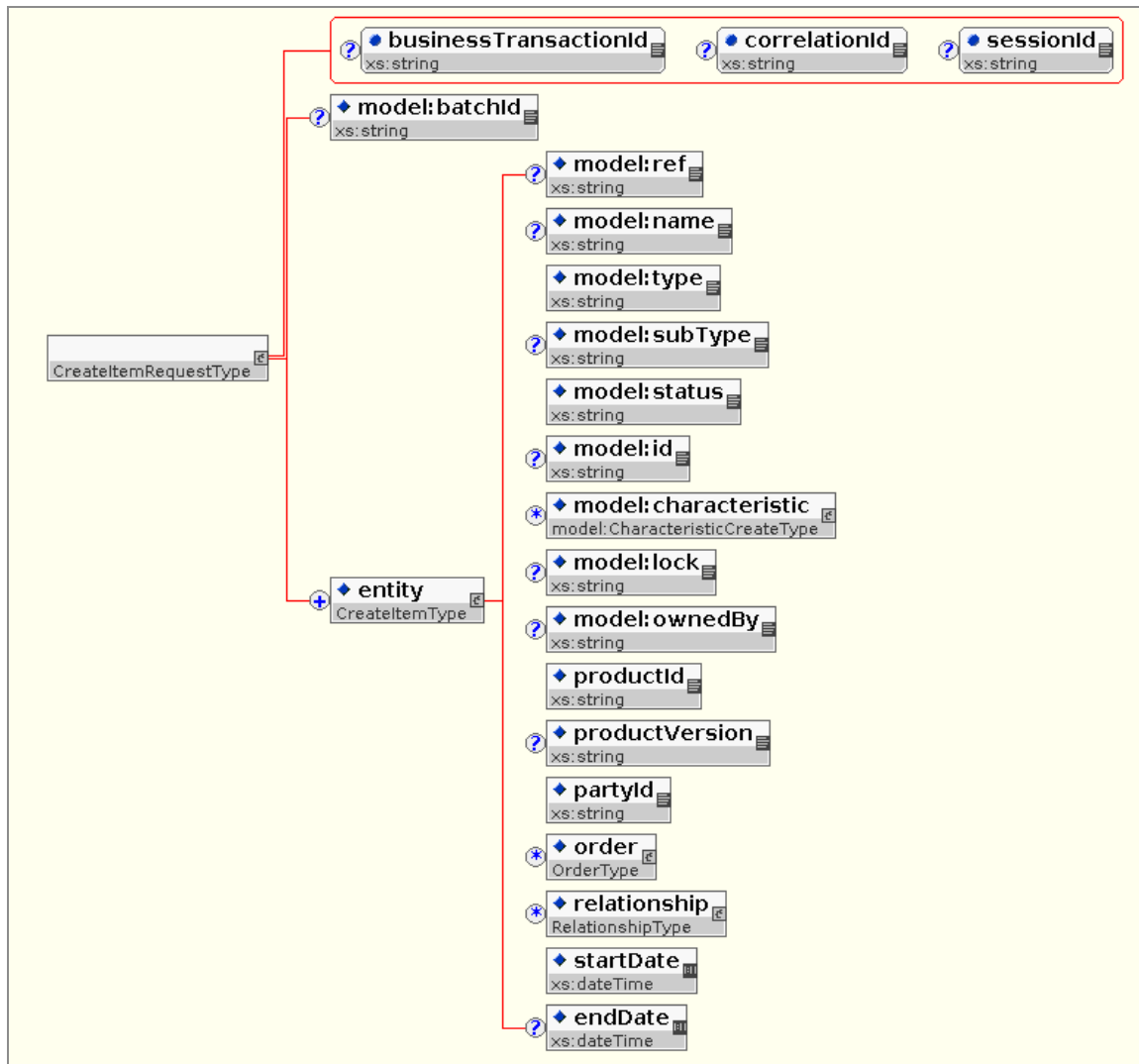
- PERM_CREATE_PARTY

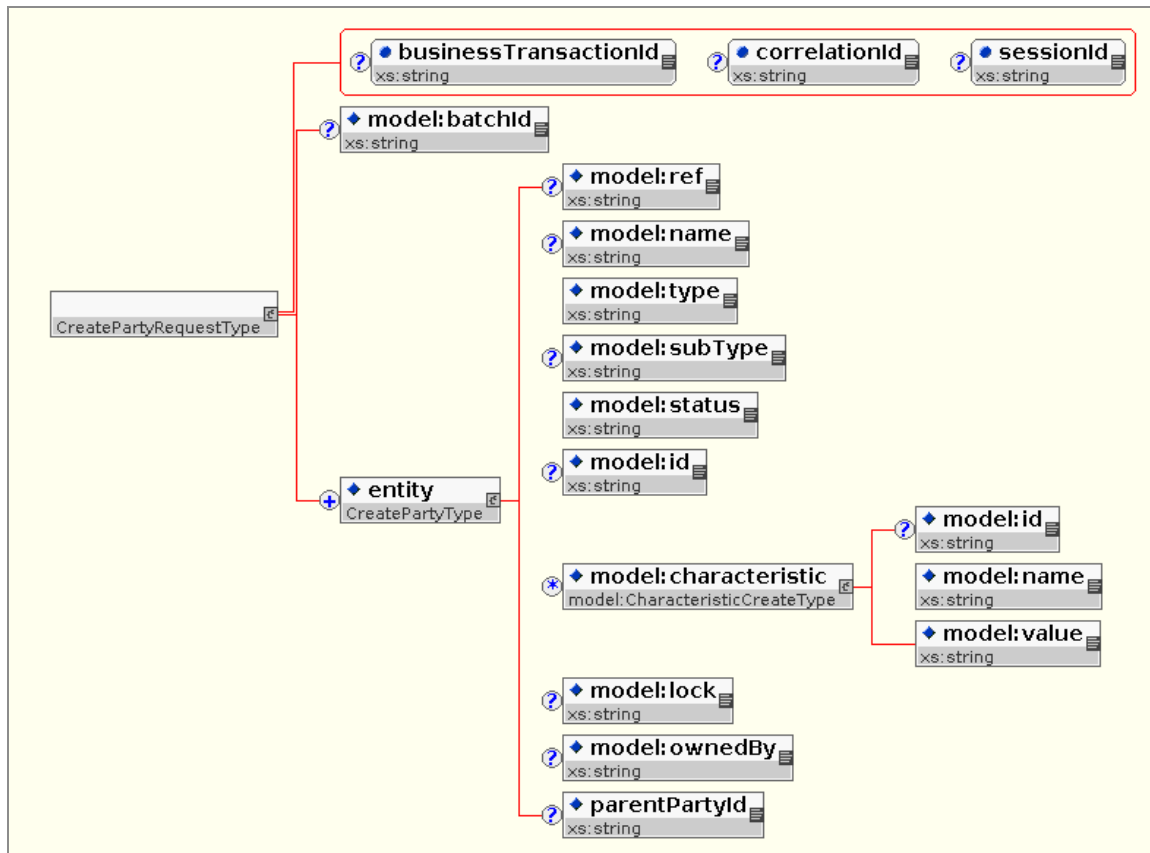
The following table describes the performance implications of using this operation:

Activity	Impact	Description
Creating multiple entities in a single operation call	Low	The more entities that are created in a single call, the longer the operation takes to complete. Creating multiple entities in a single call is still be less time than creating each entity individually when using separate operation calls.
Creating items with large numbers of characteristics, orders, and relationships	Medium	The more characteristics, orders, and relationships that are created with an item results in a longer processing time.

Create Request

This message is sent by the client application to the TIBCO Product and Service Inventory system.

Create **Item** Request Payload

Create **Party** Request Payload

Element	Type	Cardinality	Description
batchId	String	Optional	This is the batch this item creation belongs to.
entity	CreateItemtype	Mandatory	This is the item create type and the list of entities to create.
entity/ref	String	Optional	This is the reference of the entity being created.

Element	Type	Cardinality	Description
entity/name	String	Optional	This is the name of the entity being created.
entity/type	String	Mandatory	This is the type of entity being created.
entity/subType	String	Optional	This is the subtype of the entity being created.
entity/status	String	Mandatory	This is the status of the entity being created.
entity/id	String	Optional	<p>This is the unique identifier for the entity to be created.</p> <p>If entityId was specified in the request or was created successfully, this is populated.</p> <p>If entityId was omitted from the request and the entity was not successfully created, this is not returned.</p>
entity/characteristic	CharacteristicCreateType	Optional	This defines the characteristics of the entity being created, such as ID, name, and value.

Element	Type	Cardinality	Description
entity/lock	String	Optional	This is the key of the immediate lock to apply to the created entity.
entity/ownedBy	String	Optional	This defines who owns the entity. This defaults to the current user if it is omitted.
characteristic/id	String	Optional	This is the identifier of the characteristic within the entity. If this is empty, an identifier is created.
characteristic/name	String	Mandatory	This is the name of the characteristic.
characteristic/value	String	Mandatory	This is the value of the characteristic.

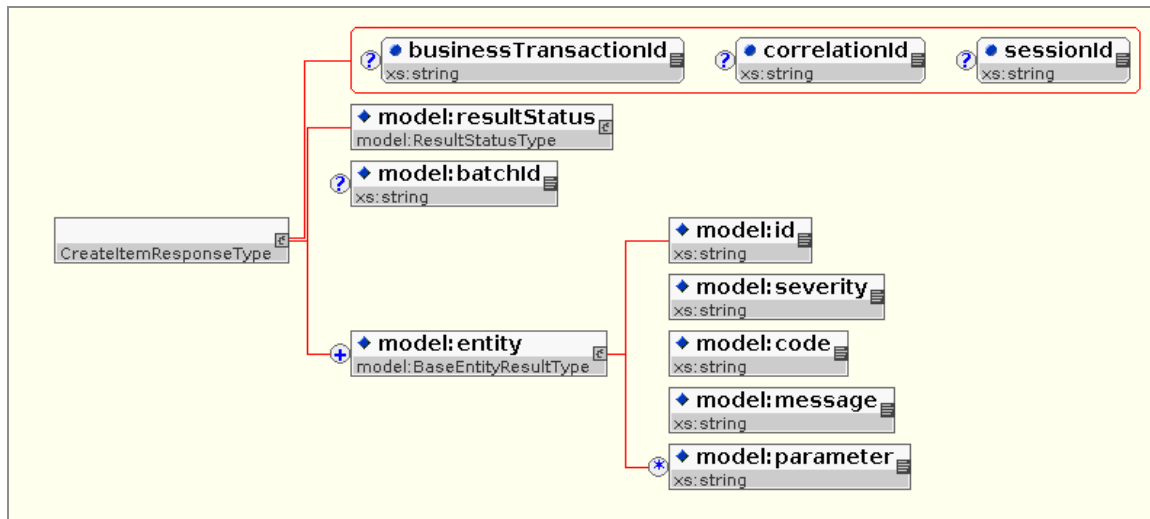
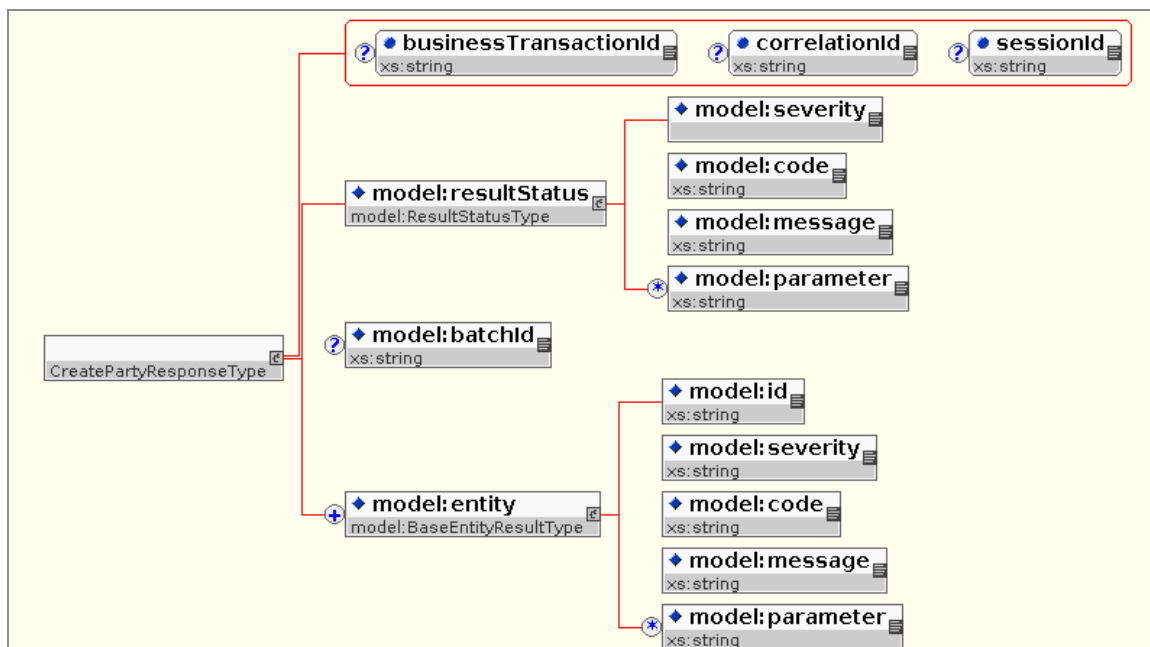
Create Request Body Details for Item Only

Element	Type	Cardinality	Description
entity/productid	String	Optional	This is the ID of the product represented by the item.
entity/productVersion	String	Optional	This is the product version number of the product being created.
entity/partyId	String	Optional	This item field represents the party of the item it

Element	Type	Cardinality	Description
			belongs to. It may or may not represent a valid party ID.
entity/order	OrderType	Optional	This is the order or orders related to this item. See the Create Sub Elements topic for details on the order of sub-elements.
entity/relationship	RelationshipType	Optional	This is the relationship for the item (no referential integrity). See the Create Sub Elements topic for details on the relationship sub-elements.
entity/startDate	dateTime	Mandatory	This is the start date for the entity being created.
entity/endDate	dateTime	Optional	This is the end date for the entity being created.

Create Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Create **Item** Response PayloadCreate **Party** Response Payload

Create Response Body Details for Item and Party

Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation

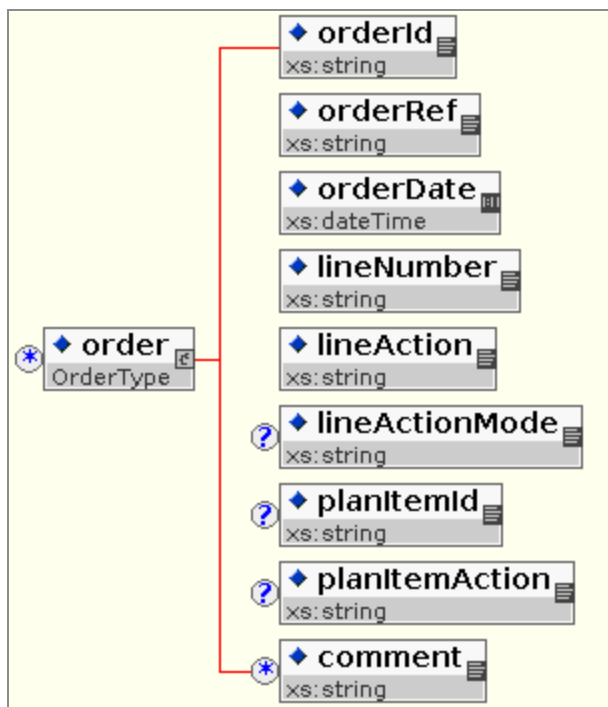
Element	Type	Cardinality	Description
			invocation status.
batchId	String	Optional	This is the unique identifier for the batch that the request was included in. This is only be returned if it is included in the request.
entity	BaseEntityType	Optional	<p>This is the entity type returning the individual result status.</p> <p>If none of the entities could be created due to a system error, this set is empty.</p> <p>If any of the entities could be created, there is one entity for each requested create entity.</p>
entity/id	String	Optional	<p>This is the unique identifier for the created entity.</p> <p>If <code>entityId</code> is specified in the request or is created successfully, this is to be populated.</p> <p>If <code>entityId</code> was omitted from the request and the entity was not successfully created, this is not returned.</p>

Element	Type	Cardinality	Description
entity/parentPartyId	String	Optional	This is the ID of the parent party of this party. It may or may not be the ID of an existing party.

Create Sub Elements

The following are the sub-elements for the create operation.

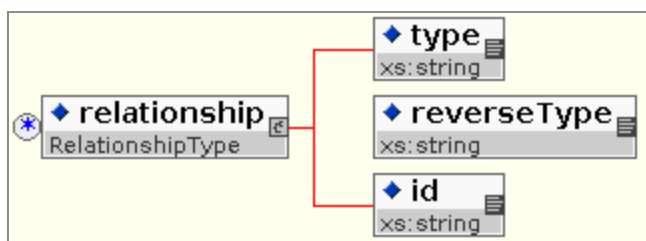
Create Order



Element	Type	Cardinality	Description
entity/order/orderId	String	Mandatory	ID of the order being

Element	Type	Cardinality	Description
			created.
entity/order/orderRef	String	Mandatory	External ref for the order.
entity/order/orderDate	dateTime	Mandatory	Date for the order.
entity/order/lineNumber	String	Mandatory	The line referencing this item.
entity/order/lineAction	String	Mandatory	The action of the line referencing this item.
entity/order/lineActionMode	String	Optional	The action mode.
entity/order/planItemId	String	Optional	The planItemId referencing the item.
entity/order/planItemAction	String	Optional	The action for the plan item.
entity/order/comment	String	Optional	A list of comments.

Create Relationship



Element	Type	Cardinality	Description
entity/relationship/type	String	Mandatory	The forward type of relationship.

Element	Type	Cardinality	Description
entity/relationship/reverseType	String	Mandatory	The reverse type of the relationship.
entity/relationship/id	String	Mandatory	The ID of the item this relationship is pointing to. The Item ID must exist in TIBCO Product and Service Inventory.

Delete

Delete performs a logical delete of one-to-many items in TIBCO Product and Service Inventory. The records are not physically deleted at this time. Instead, a flag is set on the items, and they are only be physically deleted when the Purge operation is invoked. Records can also be undeleted using the Update operation.

The associated items and parties are not deleted by this operation.

Users must have one of the following permissions for the respective action (delete item or party) to call this operation:

- PERM_DELETE_ITEM
- PERM_DELETE_PARTY

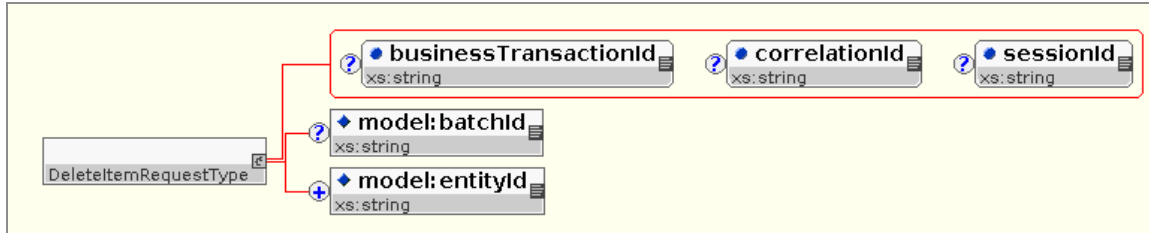
The following table describes the performance implications of using this operation:

Activity	Impact	Description
Deleting multiple items in a single operation call	Low	The more items that are deleted in a single call, the longer the operation takes to complete. Deleting multiple items in a single call still takes less time than deleting each item individually using separate operation calls.

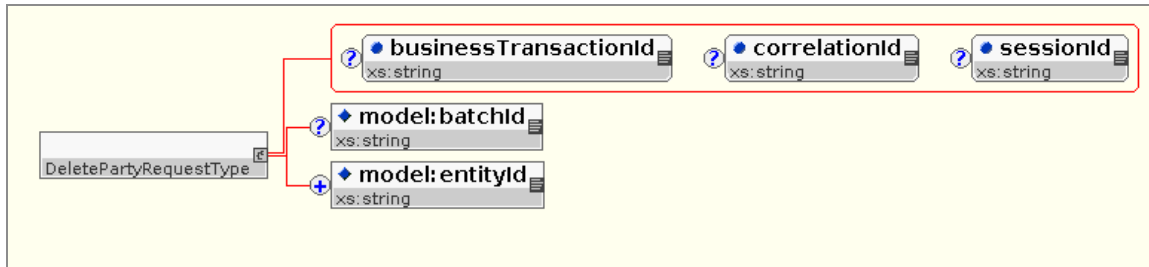
Delete Request

This message is sent by the client application to the TIBCO Product and Service Inventory system.

Delete **Item** Request Payload



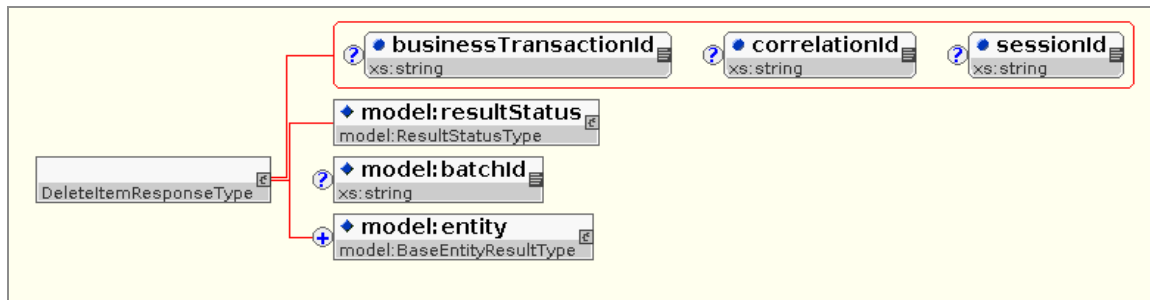
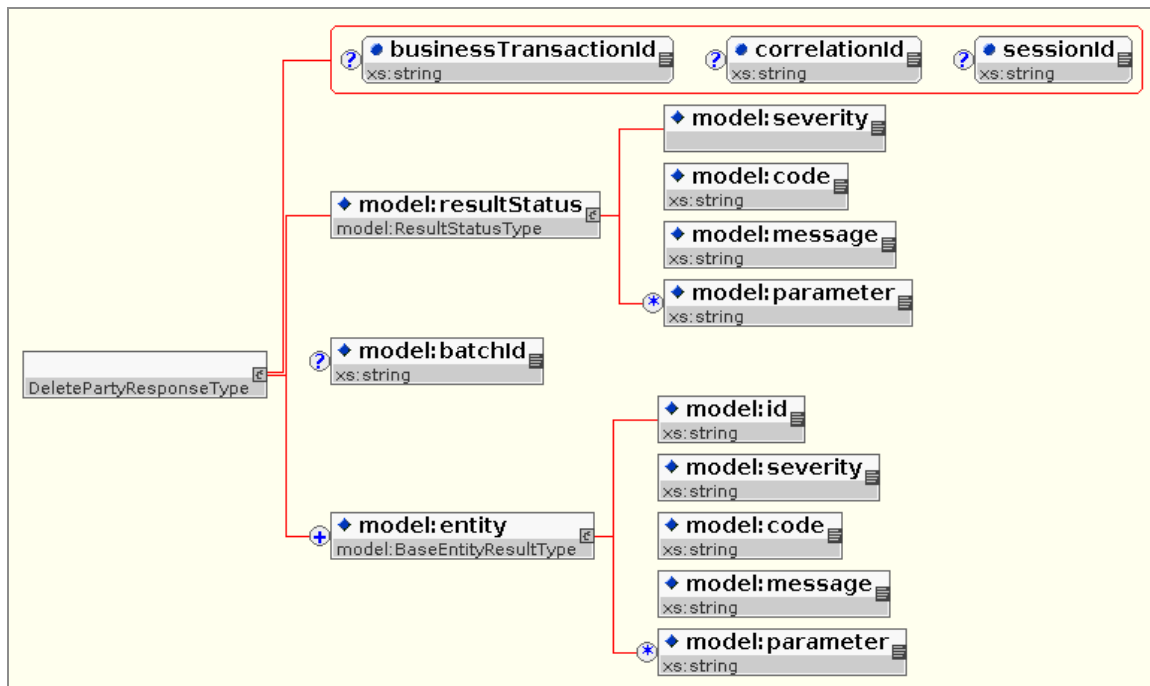
Delete **Party** Request Payload



Element	Type	Cardinality	Description
batchId	String	Optional	This is the ID of the batch this deletion is happening in.
entityId	String	1...M	This is the unique identifier for the entity to delete.

Delete Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Delete **Item** Response PayloadDelete **Party** Response Payload

Delete Response Body Details for Item and Party

Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status.
batchId	String	Optional	This is the ID of the batch this deletion is happening in.

Element	Type	Cardinality	Description
entity	Type	Mandatory	This is the entity type returning the individual result status. If none of the entities could be deleted due to a system error, this set is empty. If any of the entities could be deleted, there is one entity for each requested delete entity.
entity/id	String	Optional	This is the unique identifier for the deleted entity.

Purge

The purge performs a physical delete of entities in the application that has previously been marked for deletion through the delete operation.

The associated child or parent entities are not deleted by this operation.

The entities to be purged can be controlled by setting additional input parameters on the request.

Users must have one of the following permissions for the respective action (delete item or party) to call this operation:

- PERM_PURGE_ITEM
- PERM_PURGE_PARTY

The following table describes the performance implications of using this operation:

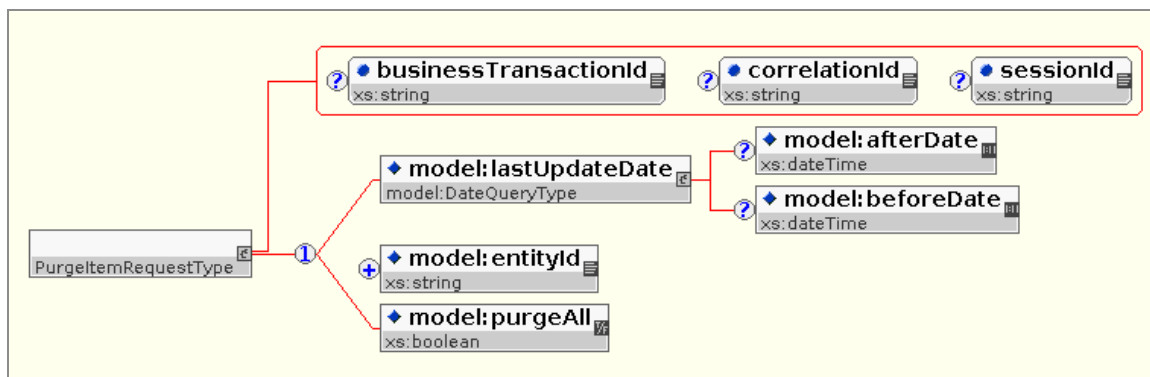
Activity	Impact	Description
Purging multiple parties in a single operation call	Low	The more parties that are purged in a single call, the longer the operation takes to complete. Purging multiple parties in a single call takes less time than purging each

Activity	Impact	Description
		party individually using separate operation calls.
Purging by lastUpdatedDate or using purgeAll	Medium	Purging using these options requires a query against the database before purging objects.

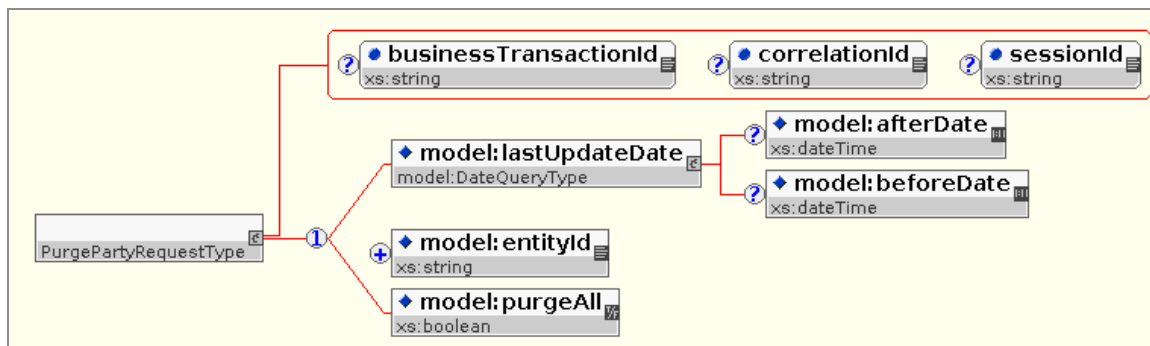
Purge Request

This message is sent by the client application to the TIBCO Product and Service Inventory system.

Purge **Item** Request Payload



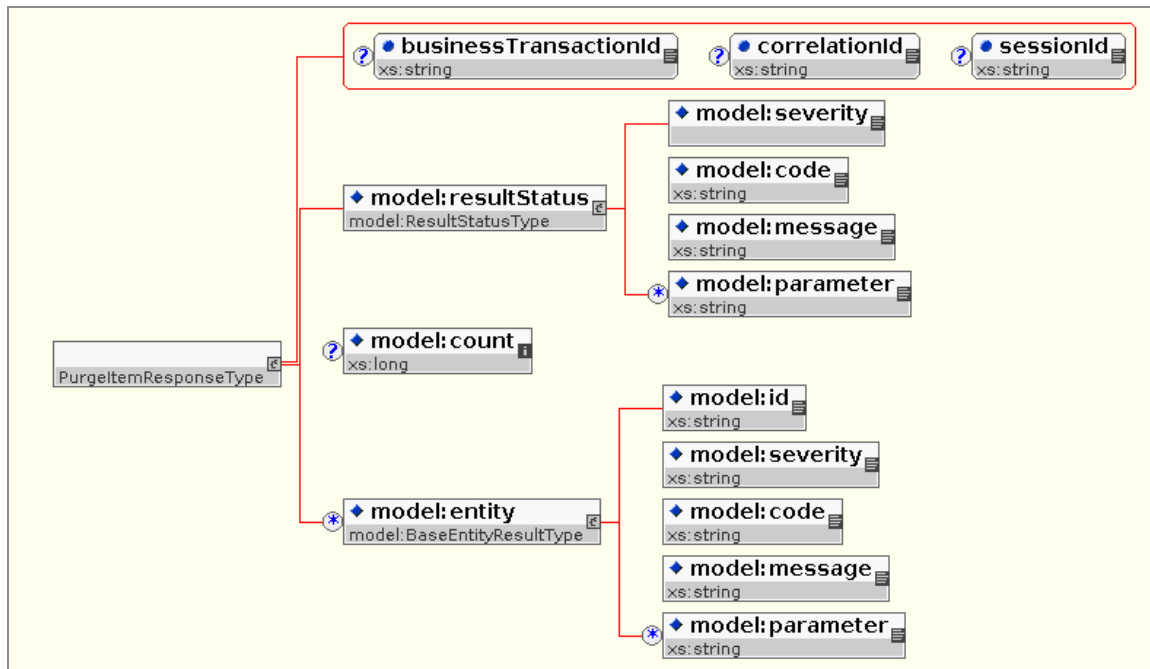
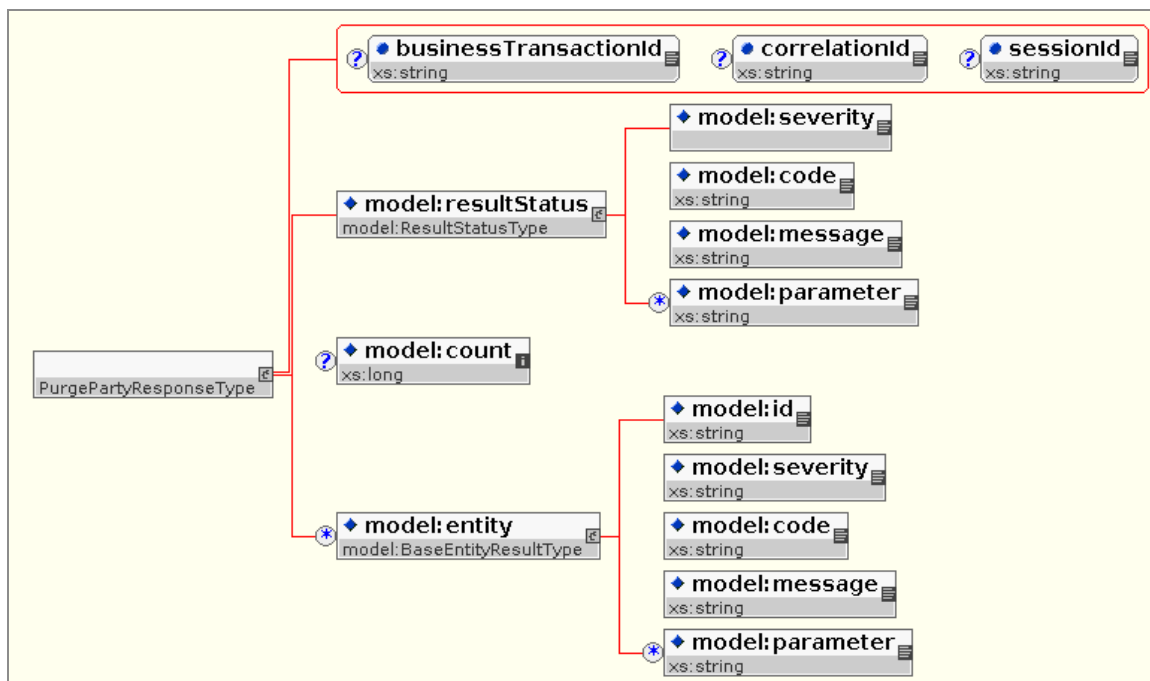
Purge **Party** Request Payload



Element	Type	Cardinality	Description
lastUpdateDate	DateQueryType	Choice	This is a range of dates for the purge.
lastUpdateDate/afterDate	dateTime	Optional	The search is referring to elements modified after the specified date.
lastUpdateDate/beforeDate	dateTime	Optional	The search is referring to elements modified before the specified date.
entityId	String	Choice	This is the unique identifier for the deleted entity.
purgeAll	Boolean	Choice	This indicates purging all logically deleted entities.

Purge Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Purge **Item** Response PayloadPurge **Party** Response Payload

Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result of the request.
count	long	Optional	This is the number of purged entities.
entity		Mandatory	<p>This is the entity type returning the individual result status.</p> <p>If none of the entities could be purged due to a system error, this set is empty.</p> <p>If any of the entities could be deleted, there is one entity for each requested delete entity.</p>
entity/id	String	Mandatory	This is the unique identifier for the purged entity.

Get

Get retrieves items from TIBCO Product and Service Inventory by a primary key. The amount of information included in the returned data can be controlled by setting flags on the request message. For performance reasons, it is best practice to retrieve as little information as required as part of a Get operation invocation.

This operation also provides the option of locking the retrieved item by using a defined lock key.

Users must have one of the following permissions for the respective action (get item or party) to call this operation:

- PERM_READ_ITEM
- PERM_READ_PARTY

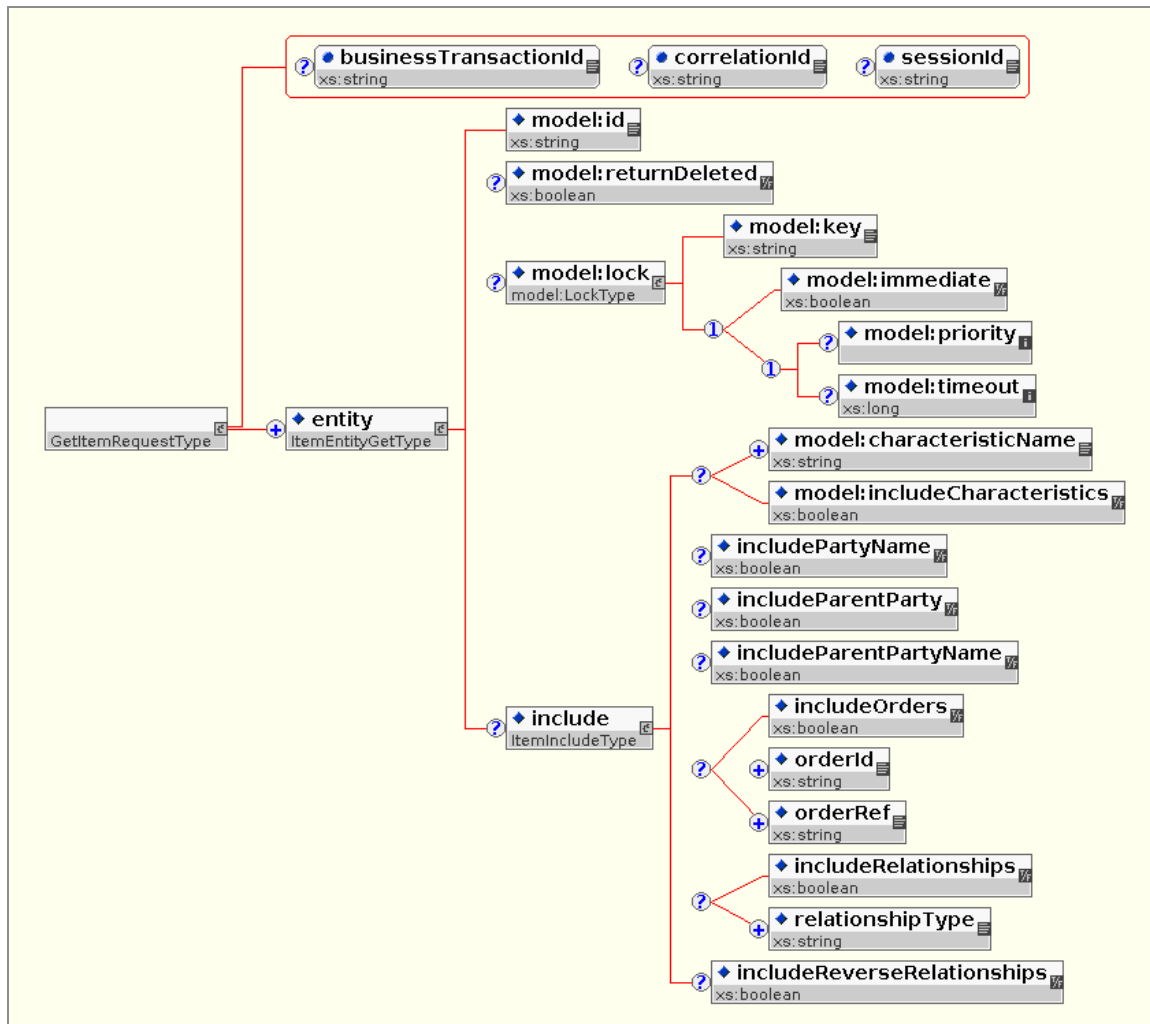
The following table describes the performance implications of using this operation:

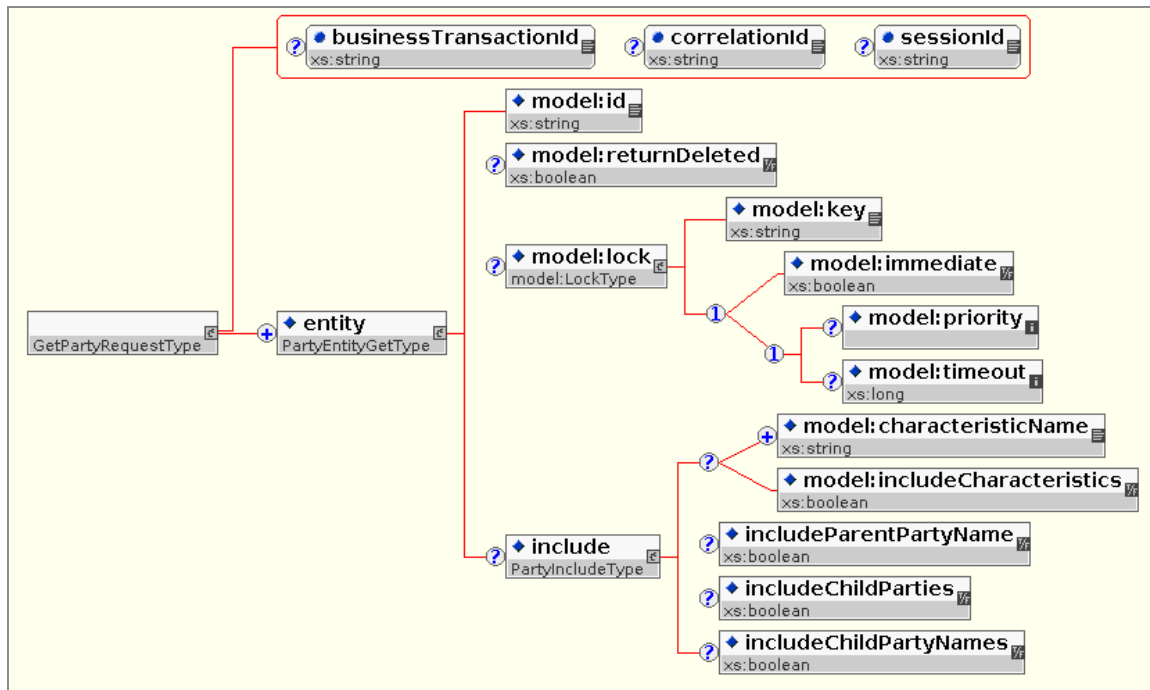
Activity	Impact	Description
Retrieving multiple entities in a single operation call	Low	The more entities that are retrieved in a single call, the longer the operation takes to complete. Retrieving multiple items in a single call still takes less time than retrieving each item individually using separate operation calls.
Including party name	High	Including party name requires a query against the database.
Including parent party	High	Including parent party requires a query against the database.
Including parent party name	Low	Including parent party is only relevant if the parent parties are included. Setting this flag has a low incremental impact over the high impact of including the parent party because the names are retrieved at the same time during the same query.
Including characteristics or characteristic names	Low	Including characteristics or characteristic names increases the size of the response message.
Including orders, orderIds, or orderRefs	Low	Including orders, order IDs, or orderRefs increases the size of the response message.
Including relationships or relationship types	Low	Including relationships, relationship types, or reverse relationships increases the size of the response message.
Including reverse relationships	High	Including reverse relationships requires a query against the database.
Returning	Low	Returning deleted entities increases the number of records in

Activity	Impact	Description
deleted entities		the response message.
Locking entities	Medium	Locking any entity on a request requires a multi-step process rather than a simple data retrieve. This causes the operation to take longer to return.

Get Request

This message is sent by the client application to the TIBCO Product and Service Inventory system.

Get **Item** Request Payload

Get **Party** Request Payload

Get Request Body Details for Item and Party

Element	Type	Cardinality	Description
entity	ItemEntityType or PartyEntityGetType	Mandatory	This is the entity definition retrieved.
entity/Id	String	Mandatory	This is the unique identifier for the item to retrieve.
entity/returnDeleted	Boolean	Optional	If this element is true and an item has been logically deleted, it is returned. If this element is

Element	Type	Cardinality	Description
			<p>false or omitted and an item has been logically deleted, it is not returned.</p> <p>If an item has been physically deleted using the Purge operation, it is never returned.</p>
entity/lock	LockType	Optional	This is the lock request type. If this is omitted, no lock attempt occurs.
entity/lock/key	String	Mandatory	This is the key for the lock.
entity/lock/immediate	Boolean	Choice	This indicates an immediate lock request.
entity/lock/priority	int	Choice / Optional default=5 (from 1 to 10)	This is the priority of the lock request.
entity/lock/timeout	int	Choice / Optional default=no timeout	This is the timeout of the lock request in seconds.
entity/include	ItemIncludeType or	Optional	This is the include type and the definition of what

Element	Type	Cardinality	Description
	PartyIncludeType		to include in the response.
entity/characteristicName	String	Choice	This is the list of characteristics to return.
entity/includeCharacteristics	Boolean	Choice	This indicates if all or no characteristics must be returned.
includeParentPartyName	Boolean	Optional	This indicates if the parent party name must be searched.

Get Request Body Details for Item Only

Element	Type	Cardinality	Description
include/includePartyName	Boolean	Optional	This indicates if the party name must be returned.
include/includeParentParty	Boolean	Optional	This indicates if the parent party must be returned.
include/includeOrders	Boolean	Optional	This indicates if all or no orders must be returned.
include/orderId	String	Choice	This is to search for specific order IDs.
include/orderRef	String	Choice	This is to search for specific order references.
includeRelationships	Boolean	Choice	This indicates if all or no

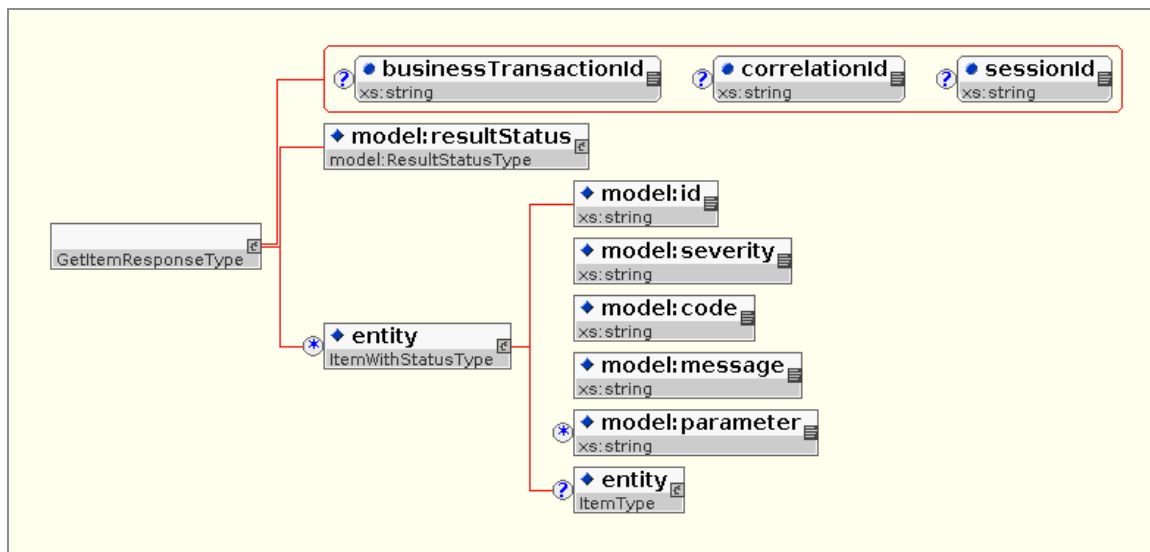
Element	Type	Cardinality	Description
			characteristics must be returned.
relationshipType	String	Choice	This indicates the array of relationship types to return.
includeReverseRelationships	Boolean	Optional	This indicates if the reverse relationships must be returned.

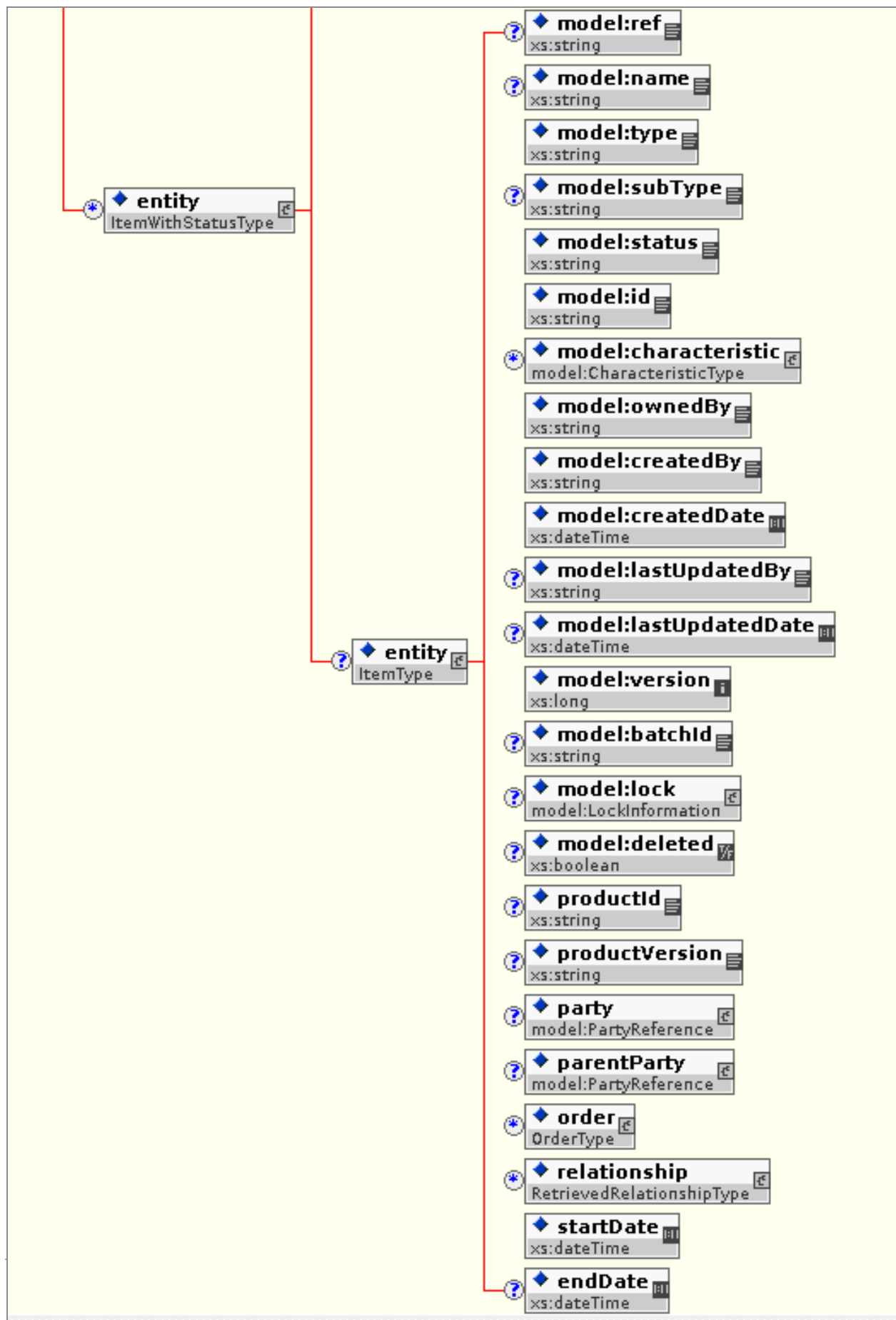
Get Request Body Details for Party Only

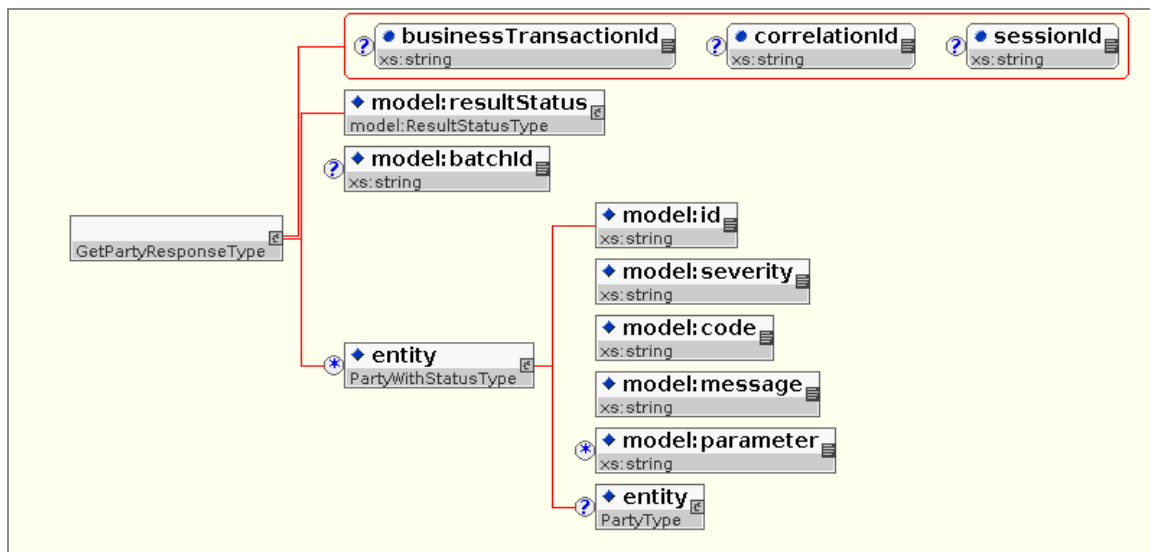
Element	Type	Cardinality	Description
includeChildParties	Boolean	Choice	This indicates if child parties must be returned.
includeChildPartyNames	Boolean	Choice	This indicates if the child party names must be returned.

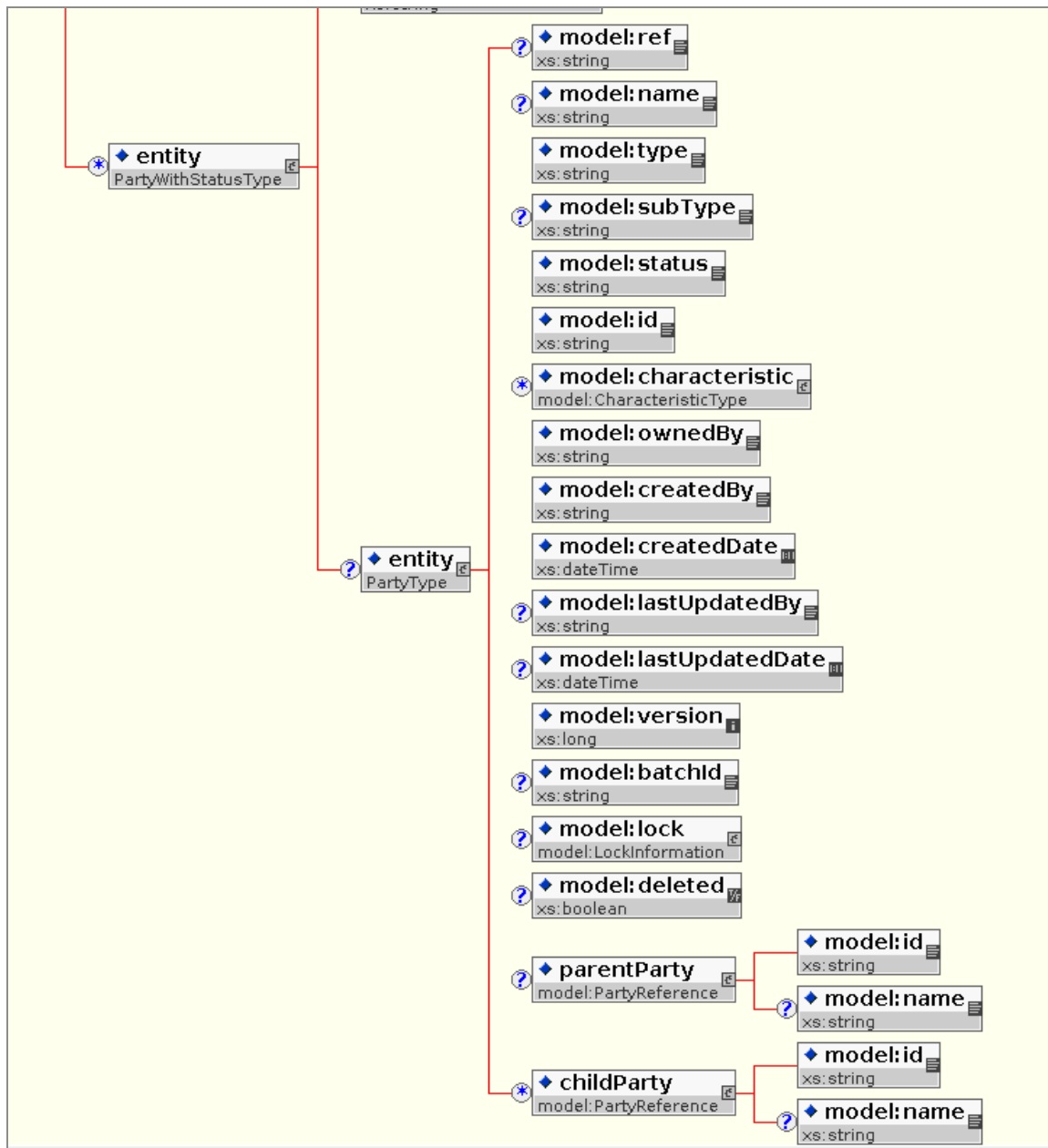
Get Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Get **Item** Response Payload



Get **Party** Response Payload



Get Response Body Details for Item and Party

Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation

Element	Type	Cardinality	Description
			status.
entity	ItemWithStatusType or PartyWithStatusType	Mandatory	<p>This is the entity type returning the individual result status.</p> <p>If none of the entities could be retrieved due to a system error, this set is empty.</p> <p>If any of the entities could be retrieved, there is one entity for each requested item. The returned entity order is the same as the original requested item order.</p>
entity/Id	String	Optional	This is the unique identifier for the retrieved entity.
entity/entity	ItemType or PartyType	Optional	<p>This is the entity type of the retrieved entity.</p> <p>If the entity was not found, this is omitted.</p>

Element	Type	Cardinality	Description
entity/entity/ref	entity/entity/ref	String	This is the reference of the retrieved entity.
entity/entity/name	String	Optional	This is the name of the retrieved entity.
entity/entity/type	String	Optional	This is the type of the retrieved entity.
entity/entity/subType	String	Optional	This is the sub type of the retrieved entity.
entity/entity/status	String	Optional	This is the status of the retrieved entity.
entity/entity/id	String	Optional	This is the unique identifier for the retrieved entity.
entity/entity/characteristic	CharacteristicType	Optional	This defines the characteristics of the retrieved entity, such as ID, name, and value.
entity/entity/ownedBy	String	Optional	This defines who owns the retrieved entity.
entity/entity/createdBy	String	Optional	This defines who

Element	Type	Cardinality	Description
			created the retrieved entity.
entity/entity/createdDate	dateTime	Optional	This is the date the retrieved entity was created.
entity/entity/lastUpdatedBy	String	Optional	This defines who last updated the retrieved entity.
entity/entity/lastUpdatedDate	dateTime	Optional	This is the date the retrieved entity was last updated.
entity/entity/version	Long	Optional	This is the version of the retrieved entity.
entity/entity/batchId	String	Optional	This is the batch ID associated with the retrieved entity.
entity/entity/lock	LockInformation	Optional	This is the lock information for the retrieved entity. See the "Lock Information" section in Get Sub-Elements for more details on the sub-elements of this

Element	Type	Cardinality	Description
			element.
entity/entity/deleted	Boolean	Optional	This indicates if the retrieved entity is logically deleted.
entity/entity/parentParty	PartyReference	Optional	This defines the parent party of the retrieved entity.

Get Response Body Details for Item Only

Element	Type	Cardinality	Description
entity/entity/productId	String	Optional	This is the product ID associated with the retrieved item.
entity/entity/productVersion	String	Optional	This is the product version associated with the retrieved item.
entity/entity/party	PartyReference	Optional	This is the party reference associated with the retrieved item.
entity/entity/order	OrderType	Optional	This is the order type associated with the

Element	Type	Cardinality	Description
			retrieved item. See the "Get Order" section in Get Sub-Elements for more details on the sub-elements of this element.
entity/entity/relationship	RetrievedRelationshipType	Optional	This is the relationship type associated with the retrieved item.
entity/entity/startDate	dateTime	Optional	This is the start date of the retrieved item.
entity/entity/endDate	dateTime	Optional	This is the end type of the retrieved item.
entity/entity/parentParty	PartyReference	Optional	This is the parent party reference associated with the retrieved item.
relationship/reverse	Boolean	Optional	Set this to true to indicate a reverse relationship. It is set to false by

Element	Type	Cardinality	Description
			default (meaning forward relationship). This is used to differentiate forward and reverse relationships when relationships are fetched. Reverse relationship/id contains the originator item.

Get Response Body Details for Party Only

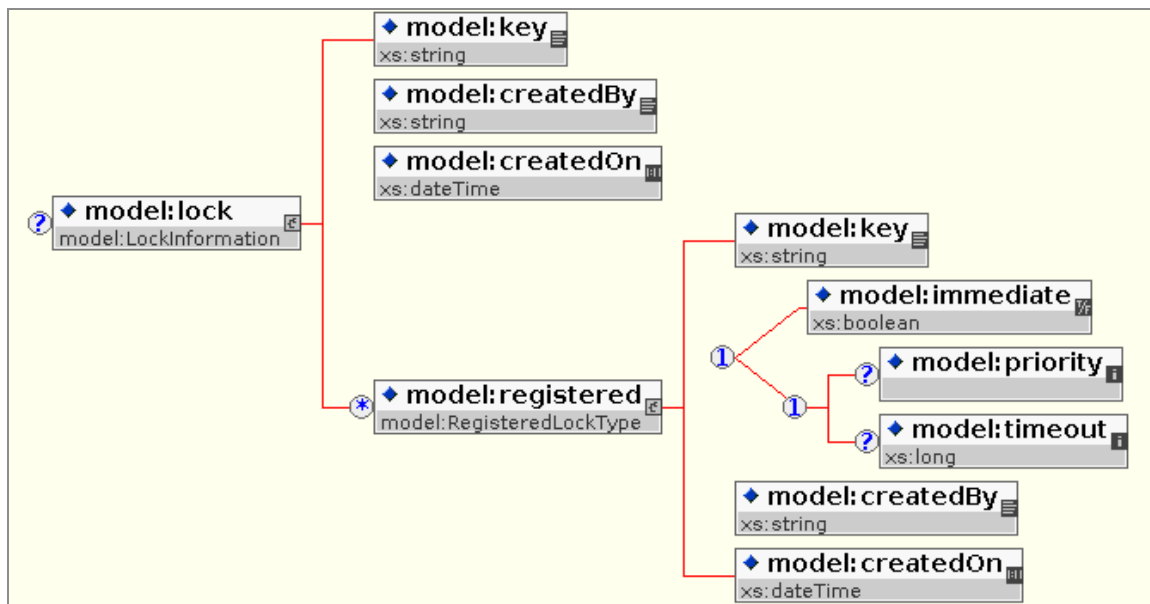
Element	Type	Cardinality	Description
entity/entity/childParty	PartyReference	Optional	This is the child party reference associated with the retrieved party.
parentParty/id	String	Optional	This is the parent party ID associated with the retrieved party.
parentParty/name	String	Optional	This is the parent party name associated with the retrieved party.
childParty/id	String	Optional	This is the child party ID associated with the retrieved party.

Element	Type	Cardinality	Description
childParty/name	String	Optional	This is the child party name associated with the retrieved party.

Get Sub Elements

The following are the sub elements for the get operation.

Lock Information

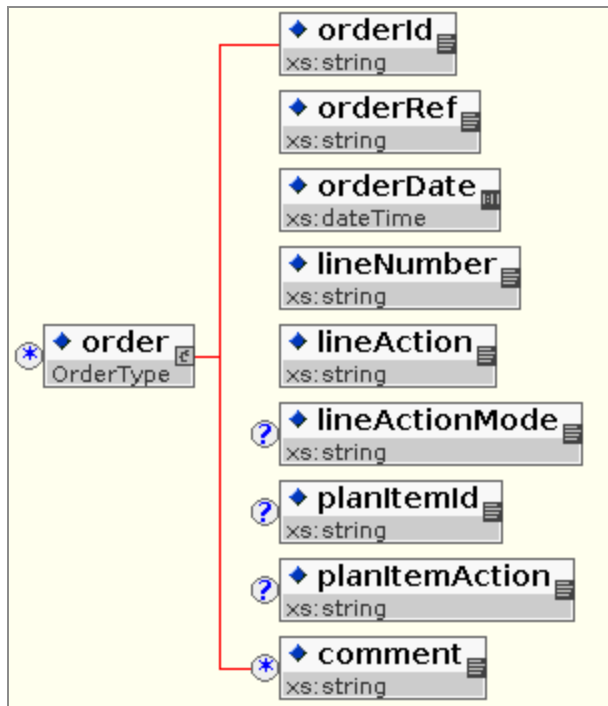


Element	Type	Cardinality	Description
entity/entity/lock/key	String	Mandatory	This is the key for the current lock.
entity/entity/lock/createdBy	String	Optional	This indicates

Element	Type	Cardinality	Description
			who created the current lock on the entity (user id).
entity/entity/lock/createdOn	dateTime	Optional	This indicates the date the lock was created.
entity/entity/lock/registered	RegisteredLockType	Optional	This indicates the list of pending locks that are waiting for acquisition. In this list, there are no immediate locks. It is similar to LockType with the notable addition of createdOn / createdBy (user id) indications.
entity/entity/lock/registered/key	String	Mandatory	This is the key of the registered lock type.

Element	Type	Cardinality	Description
entity/entity/lock/registered/immediate	Boolean	Choice	This indicates an immediate lock request.
entity/entity/lock/registered/priority	Int	Choice / Optional default=5 (from 1 to 10)	This is the priority of the lock request.
entity/entity/lock/registered/timeout	Int	Choice / Optional default=no timeout	This is the timeout of the lock request.
entity/entity/lock/registered/createdBy	String	Optional	This indicates who created the registered lock type. (user id).
entity/entity/lock/registered/creation	dateTime	Optional	This indicates the date the registered lock type was created.

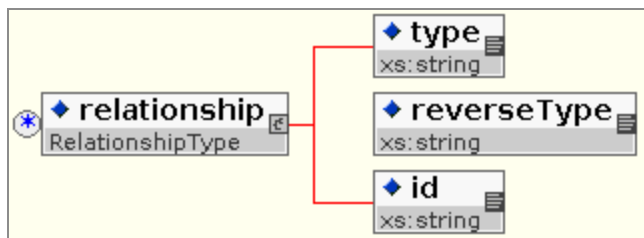
Get Order



Element	Type	Cardinality	Description
order/orderId	String	Optional	This is the order ID of an order associated with the retrieved item.
order/orderRef	String	Optional	This is the order reference of the order associated with the retrieved item.
order/orderDate	dateTime	Optional	This is the order date of the order.
order/lineNumber	String	Optional	This is the line referencing the order associated with the retrieved item.
order/lineAction	String	Optional	This is the action of the line referencing the order associated

Element	Type	Cardinality	Description
			with the retrieved item.
order/lineActionMode	String	Optional	This is the action mode of the order associated with the retrieved item.
order/planItemId	String	Optional	This is the plan item ID referencing the order associated with the retrieved item.
order/planItemAction	String	Optional	This is the action for the plan item of the order associated with the retrieved item.
order/comment	String	Optional	This is the list of comments on the order associated with the retrieved item.

Get Relationship



Element	Type	Cardinality	Description
entity/relationship/type	String	Mandatory	This is the relationship type of the relationship associated with the retrieved item.
entity/relationship/reverseType	String	Mandatory	This is the reverse type of

Element	Type	Cardinality	Description
			the relationship associated with the retrieved item.
entity/relationship/id	String	Mandatory	This is the ID of the relationship associated with the retrieved item.

Update

The `update` modifies one-to-many existing items in the application. The operation specifies a delta of what to change on the current entity rather than a full snapshot. Only fields that need updating need to be included in the request.

This operation also provides the option of locking the updated entity using a defined lock key. The order of operations for locking and unlocking using this operation determines whether or not other elements of the update is applied correctly:

1. Lock the entity using the specified key.
If the entity could not be locked, then the remainder of the update does not occur. An exception is returned.
2. Validate if all specified unlock keys exist.
If any of the unlock keys do not exist, then the remainder of the update does not occur. An exception is returned.
3. Apply all other field updates except the `unlock`.
4. Unlock the item using the specified keys

Users must have one of the following permissions for the respective action (update item or party) to call this operation:

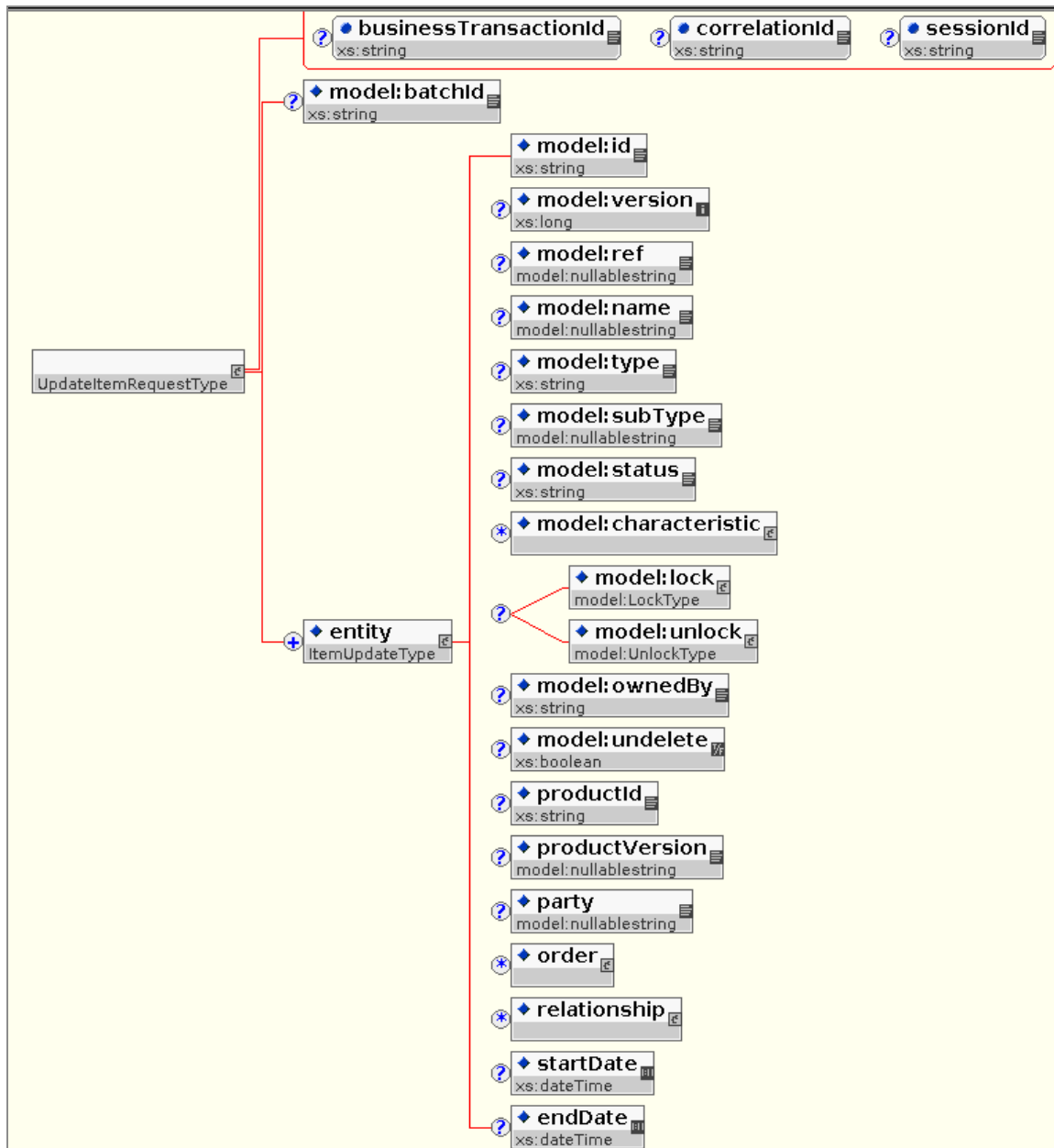
- `PERM_UPDATE_ITEM`
- `PERM_UPDATE_PARTY`

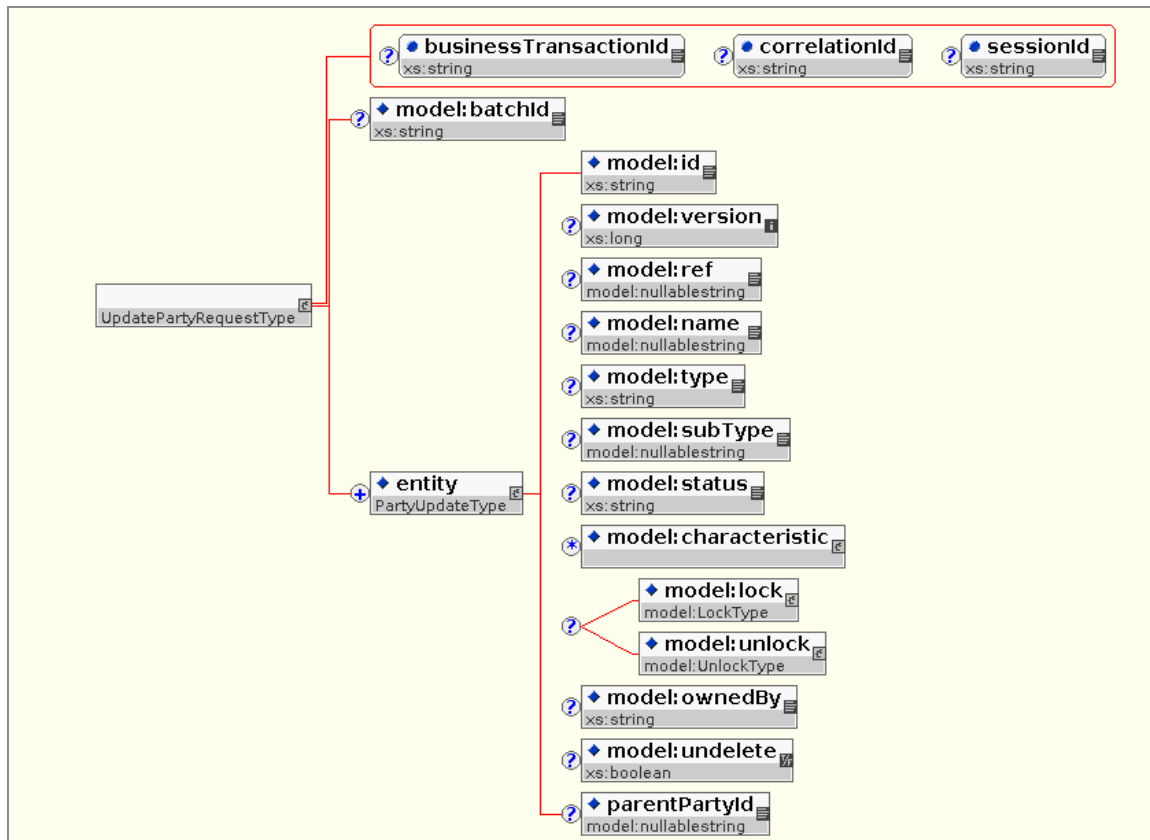
The following table describes the performance implications of using this operation:

Activity	Impact	Description
Updating multiple items in a single operation call	Low	<p>The more entities that are updated in a single call, the longer the operation takes to complete. Updating multiple entities in a single call still takes less time than updating each entity individually using separate operation calls.</p> <p>Update performance is slower than the create performance.</p>
Updating items with large numbers of characteristics, orders, and relationships	Medium	<p>The more characteristics, orders, and relationships that are updated on an item, the longer the processing time is.</p>

Update Request

This message is sent by the client application to the TIBCO Product and Service Inventory system.

Update **Item** Request Payload

Update **Party** Request Payload

Update Request Body Details for Item and Party

Element	Type	Cardinality	Description
batchId	String	Optional	This is the ID of the batch this update belongs to.
entity	Type	Mandatory (1..N)	This defines the updates to perform.
entity/Id	String	Mandatory	This is the unique identifier for the updated entity.
entity/version	Long	Optional	This field must represent the current version of the entity. If there is a version mismatch, the

Element	Type	Cardinality	Description
			update fails.
entity/ref	Nullable String	Optional	This is the reference to the entity being updated.
entity/name	Nullable String	Optional	This is the name of the updated entity.
entity/type	String	Optional	This is the type of the updated entity.
entity/subtype	Nullable String	Optional	This is the subtype of the updated entity.
entity/status	String	Optional	This is the status of the updated entity.
entity/characteristic	N/A	Optional	This defines characteristics of the entity being updated. See the "Update Characteristic" section in Update Sub Elements for more details on the sub elements of this element.
entity/lock	LockType	Optional	This is the lock information for the entity. See the "Update Lock" section in Update Sub Elements for more details on the sub elements of this element.
entity/unlock	UnlockType	Optional	This is the unlock information for the entity. See the "Update Lock" section in Update Sub Elements for more details on the sub-elements of this element.
entity/ownedBy	String	Optional	This is the owner of the updated

Element	Type	Cardinality	Description
			entity.
entity/undelete	Boolean	Optional	This indicates to logically undelete the entity.

Update Request Body Details for Item Only

Element	Type	Cardinality	Description
entity/productid	String	Optional	This is the product ID for the updated item.
entity/productVersion	Nullable String	Optional	This is the product version for the updated item.
entity/party	Nullable String	Optional	This is the party of the updated item belongs to. (no referential integrity)
entity/order	N/A	Optional	This is the order or orders related to this item. See the "Update Order" section in Update Sub Elements for more details on the sub elements of this element.
entity/relationship	N/A	Optional	This is the relationship for the item. See the "Update Relationship" section in Update Sub Elements for more details on the sub-elements of this element.
entity/startDate	dateTime	Optional	This is the start date for the updated item.
entity/endDate	dateTime	Optional	This is the end date for the updated item.

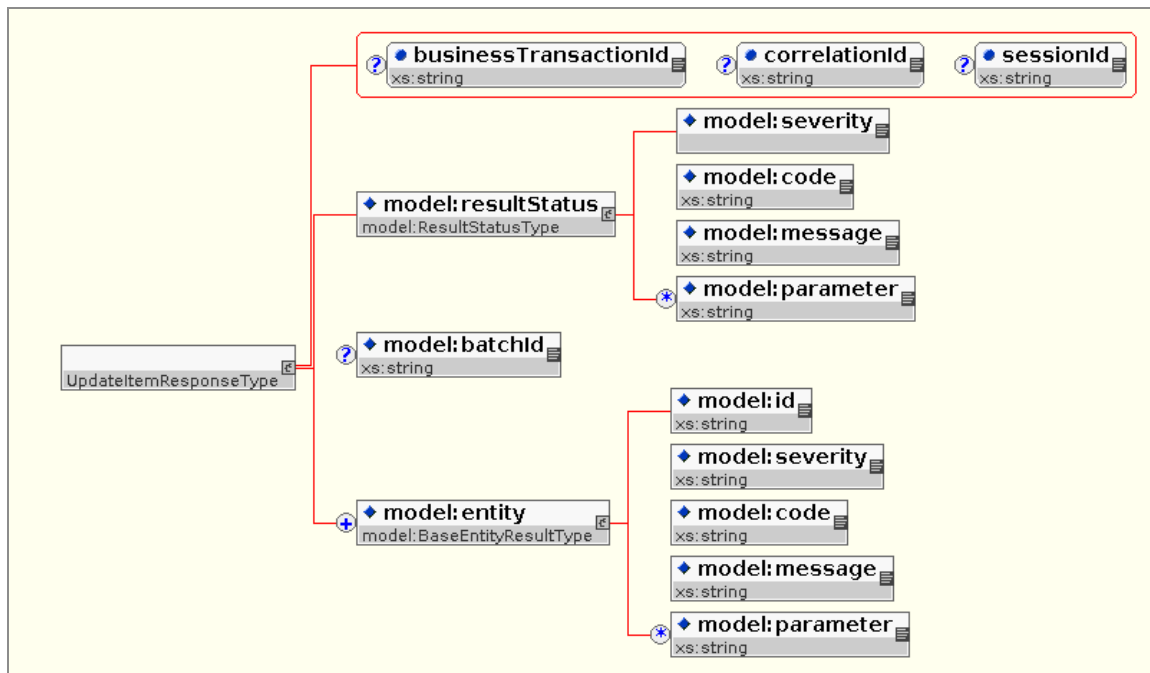
Update Request Body Details for Party Only

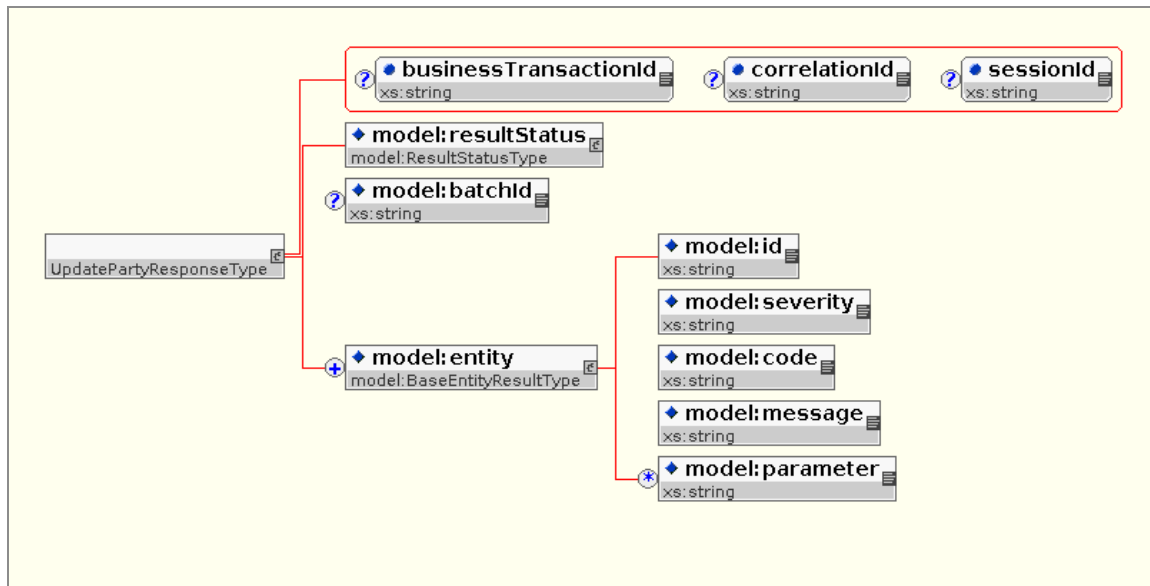
Element	Type	Cardinality	Description
entity/parentPartyid	Nullable String	Optional	This is the parent party ID for the updated party.

Update Response

This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Update **Item** Response Payload



Update **Party** Response Payload

Update Response Body Details for Item and Party

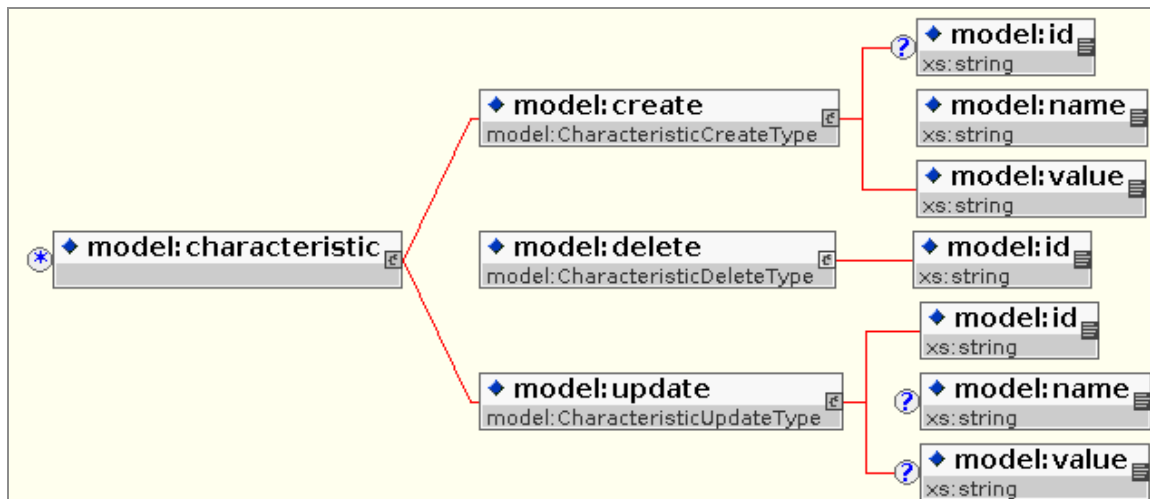
Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status of the query.
batchId	String	Optional	This is the ID of the batch this update belongs to.
entity	BaseEntityResultType	Mandatory (1..N)	<p>This is the entity type returning the individual result status.</p> <p>If none of the entities could be updated due to a system error, then this set is empty.</p> <p>If any of the entities could be updated, then there is one entity for each requested update entity. The returned entity order is the same as the original requested item entity.</p>

Element	Type	Cardinality	Description
entity/Id	String	Mandatory	This is the unique identifier for the updated entity.

Update Sub Elements

The following are the sub elements for the update operation.

Update Characteristic

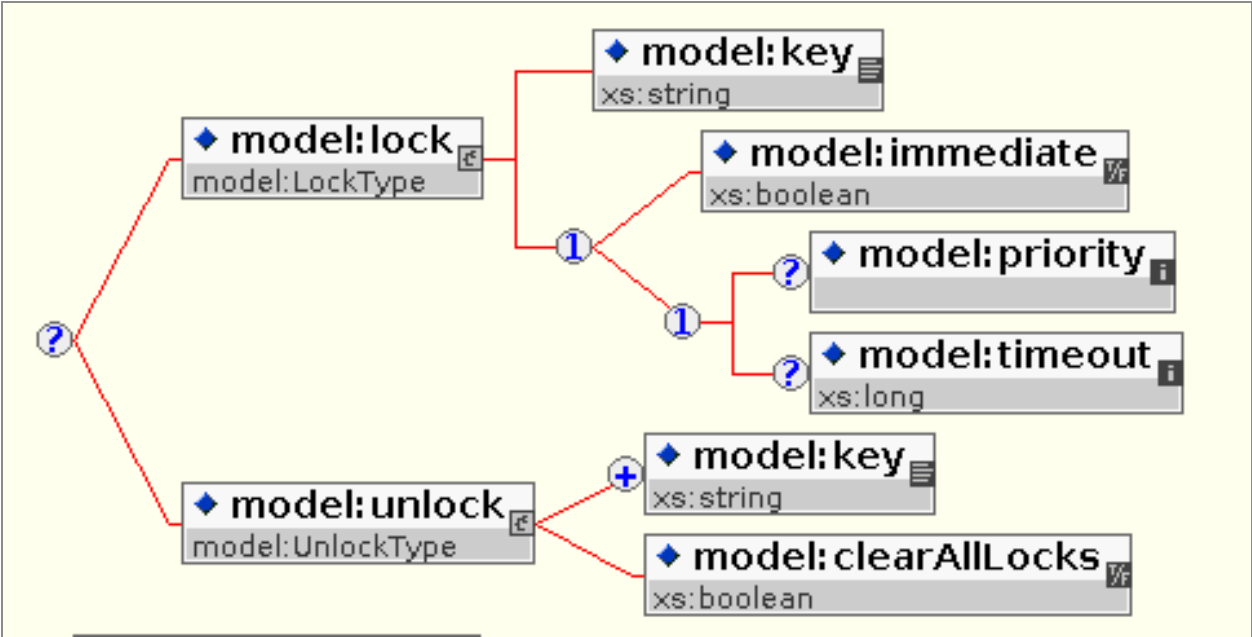


Element	Type	Cardinality	Description
entity/characteristic/create	CharacteristicCreateType	Optional	These are the characteristics to create.
entity/characteristic/create/id	String	Optional	This is the identifier of the characteristic to create.

Element	Type	Cardinality	Description
entity/characteristic/create/name	String	Mandatory	This is the name of the characteristic to create.
entity/characteristic/create/value	String	Mandatory	This is the value of the characteristic to create.
entity/characteristic/delete	CharacteristicDeleteType	Optional	This is the container of the characteristic ID to delete the item.
entity/characteristic/delete/id	String	Mandatory	Only the ID is required for the deletion of an item.
entity/characteristic/update	CharacteristicUpdateType	Mandatory	These are the characteristics to update.
entity/characteristic/update/id	String	Mandatory	The ID is mandatory for updating a characteristic.
entity/characteristic/update/name	String	Optional	This is the updated name of the characteristic.

Element	Type	Cardinality	Description
entity/characteristic/update/name	String	Optional	This is the updated value of the characteristic value

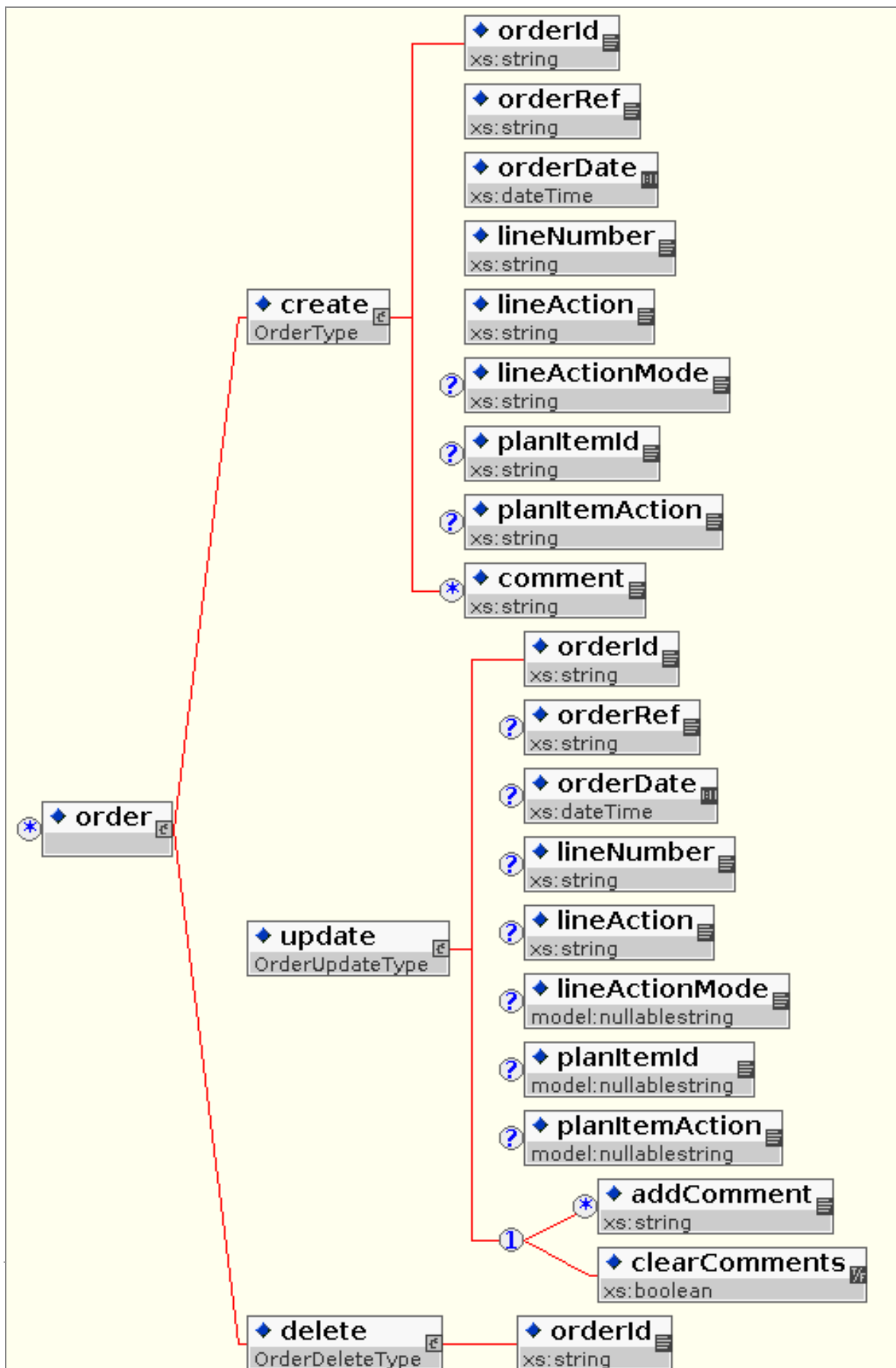
Update Lock



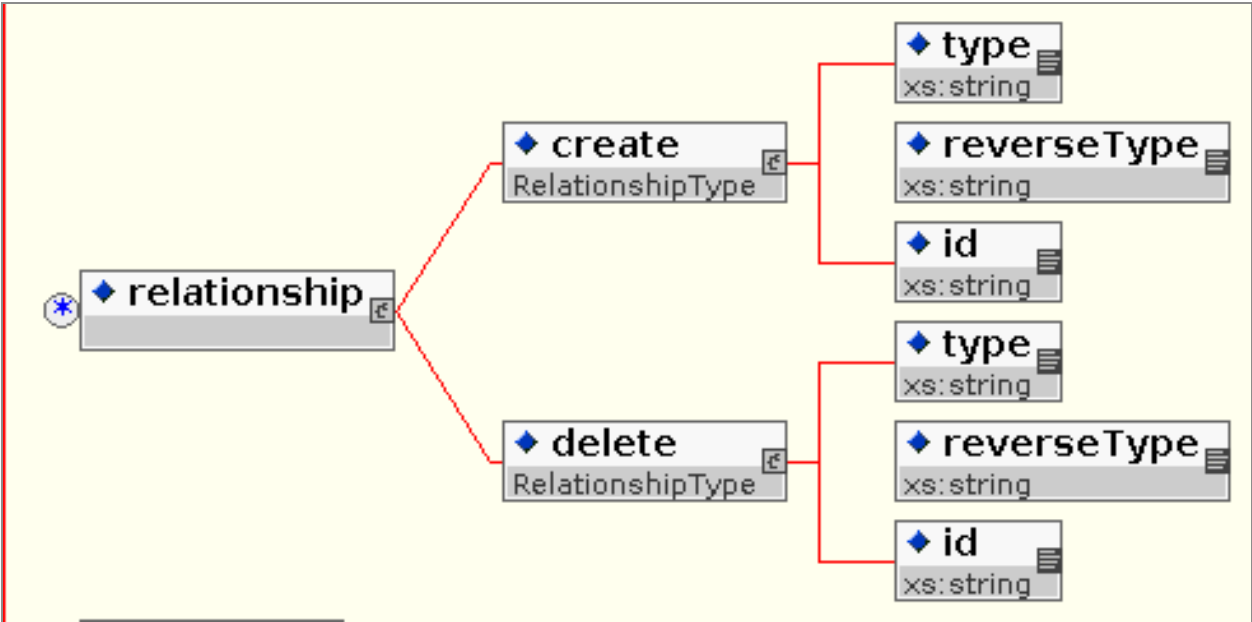
Element	Type	Cardinality	Description
entity/lock	LockType	Optional	This represents a lock request.
entity/lock/key	String	Mandatory	This is the key for the lock.
entity/lock/immediate	Boolean	Choice	This indicates an immediate lock request. If an immediate lock is not

Element	Type	Cardinality	Description
			present in the request, the lock is delayed. If immediate=true, the lock is immediated.
entity/lock/priority	Int	Choice / Optional default=5 (from 1 to 10)	This is the priority of the lock request.
entity/lock/timeout	Int	Choice / Optional default=no timeout	This is the timeout of the lock request. The timeout is in seconds.
entity/unlock	UnlockType	Optional	This represents an unlock from the registered list request.
entity/unlock/key	String	Choice (1..N)	This is the key to remove from the current or registered lock.
entity/unlock/clearAllLocks	Boolean	Choice	This indicates to clear all locks.

Update Order



Update Relationship



Element	Type	Cardinality	Description
entity/relationship/create	RelationshipType	Optional	This is the relationship to create in this item.
entity/relationship/create/type	String	Mandatory	This is the forward type of relationship to create.
entity/relationship/create/reverseType	String	Mandatory	This is the reverse type of relationship to create.

Element	Type	Cardinality	Description
entity/relationship/create/id	String	Mandatory	This is the ID of the relationship to create.
entity/relationship/delete	RelationshipType	Optional	This is the relationship related to this item to delete.
entity/relationship/delete/type	String	Mandatory	This is the forward type of relationship to delete.
entity/relationship/delete/reverseType	String	Mandatory	This is the reverse type of the relationship to delete.
entity/relationship/delete/id	String	Mandatory	This is the ID of the relationship to delete.

Query

The query operation retrieves entities from the application by a list of filtering criteria. The amount of information included in the returned data can be controlled by setting flags on the request message. For performance reasons, it is best practice to retrieve as little information as required as part of a query operation invocation.

If you want to retrieve an item using the primary key, the Get operation must be used as it is optimized for this particular type of query. The Query operation exhibits longer latency

than the Get operation, so the Get operation must be used whenever possible.

This operation supports pagination and sorting. Pagination can be used to retrieve subsets of matched data in a paged format. Specifying the count restricts the number of returned records. Specifying the start and end records restricts the records to those items in the list.

Sorting is used to order the list of returned items. A multi-level sort can be specified from a list of predefined fields in either an ascending or descending order.

Pagination does not create a recordset on the server. To page through the data effectively, it is necessary to invoke the operation using the same filtering criteria and sort each time to get consistent results. Even then the results are not guaranteed as new records may be added to the system at the same time.

Users must have one of the following permissions for the respective action (query item or party) to call this operation:

- PERM_READ_ITEM
- PERM_READ_PARTY

The following table describes the performance implications of using this operation:

Activity	Impact	Description
Querying using case insensitive	Low	Case insensitive queries append the LOWER function to the SQL statement.
Querying with parent party filter	High	The parent party filter appends a sub-SELECT condition to the WHERE clause of the SQL statement.
Including parent party items	Low	Including parent party items are only relevant if querying using a parent party filter. Setting this flag has a low incremental impact over the high impact of filtering by the parent party. Using this may slightly reduce the size of the returned resultset.
Querying with characteristic filters	High	Characteristic filters append a sub-SELECT condition to the WHERE clause of the SQL statement.

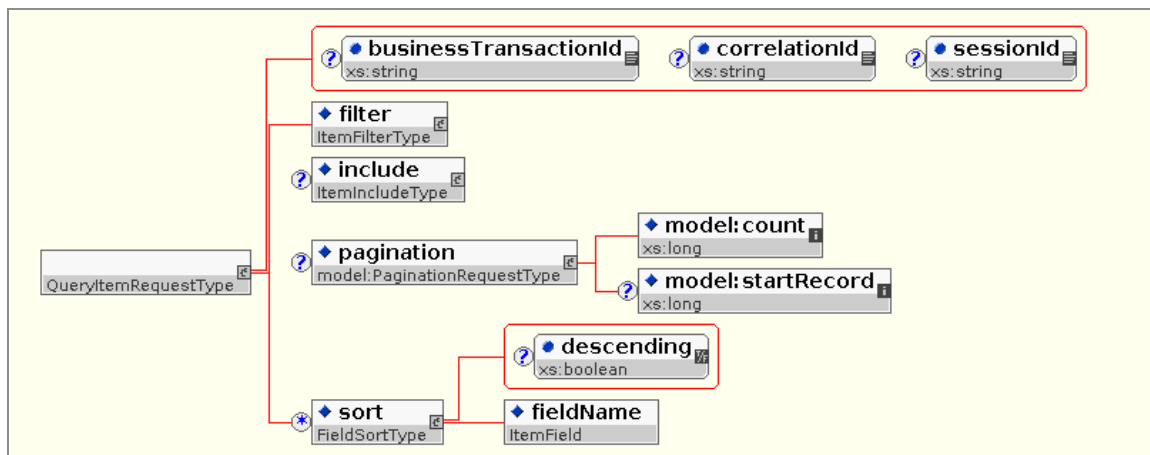
Activity	Impact	Description
Querying with order filter	High	Order filters append a sub-SELECT condition to the WHERE clause of the SQL statement.
Querying with relationship filters	High	Relationship filters append a sub-SELECT condition to the WHERE clause of the SQL statement.
Including party name	High	Including party name requires a query against the database.
Including parent party	High	Including parent party requires a query against the database.
Including parent party name	Low	Including parent party is only relevant if parent parties are included. Setting this flag has a low incremental impact over the high impact of including parent party because the names are retrieved at the same time during the same query.
Including characteristics	Low	Including characteristics increases the size of the response message.
Including characteristic names	Low	Including characteristics increases the size of the response message.
Including orders	Low	Including orders increases the size of the response message.
Including orderIds	Low	Including orders increases the size of the response message.
Including orderRefs	Low	Including orders increases the size of the response message.
Including relationships	Low	Including relationships increases the size of the response message.
Including	Low	Including relationships increases the size of the response

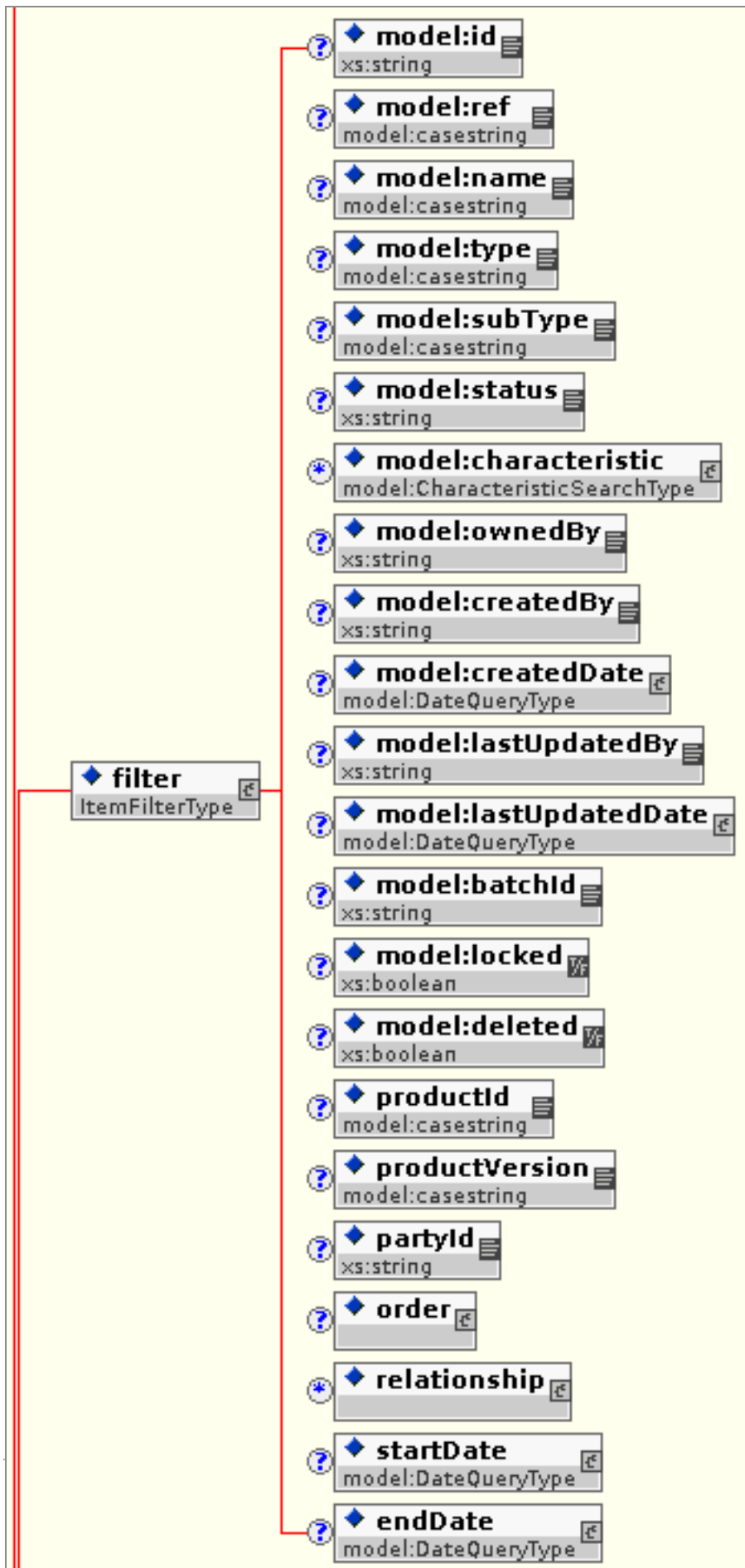
Activity	Impact	Description
relationship types		message.
Including reverse relationships	High	Including reverse relationships requires a query against the backing store database.
Returning deleted items	Low	Returning deleted items increases the number of records in the response message.
Using pagination	Low	Pagination queries surround the SQL is another SELECT statement based on the row number.
Sorting by multiple fields	Low	Each sort field is added to the SQL as part of the ORDER BY clause.

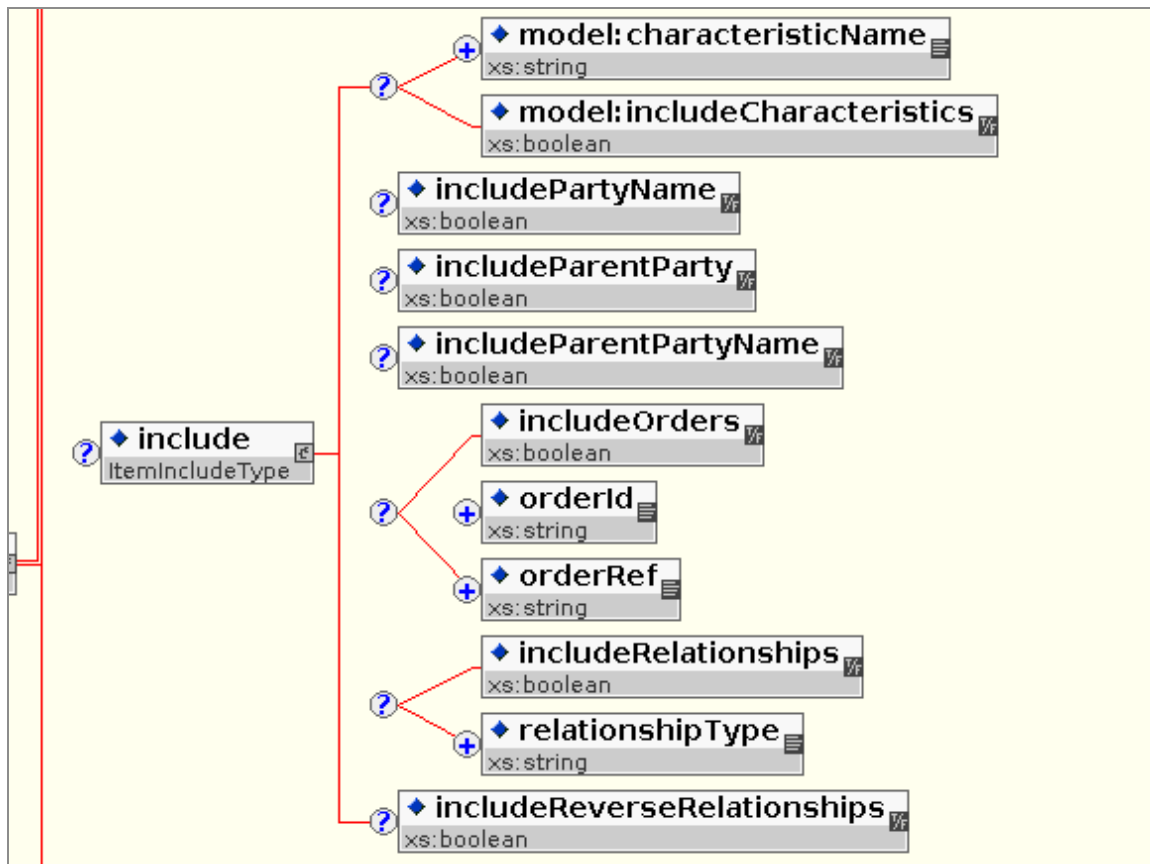
Query Request

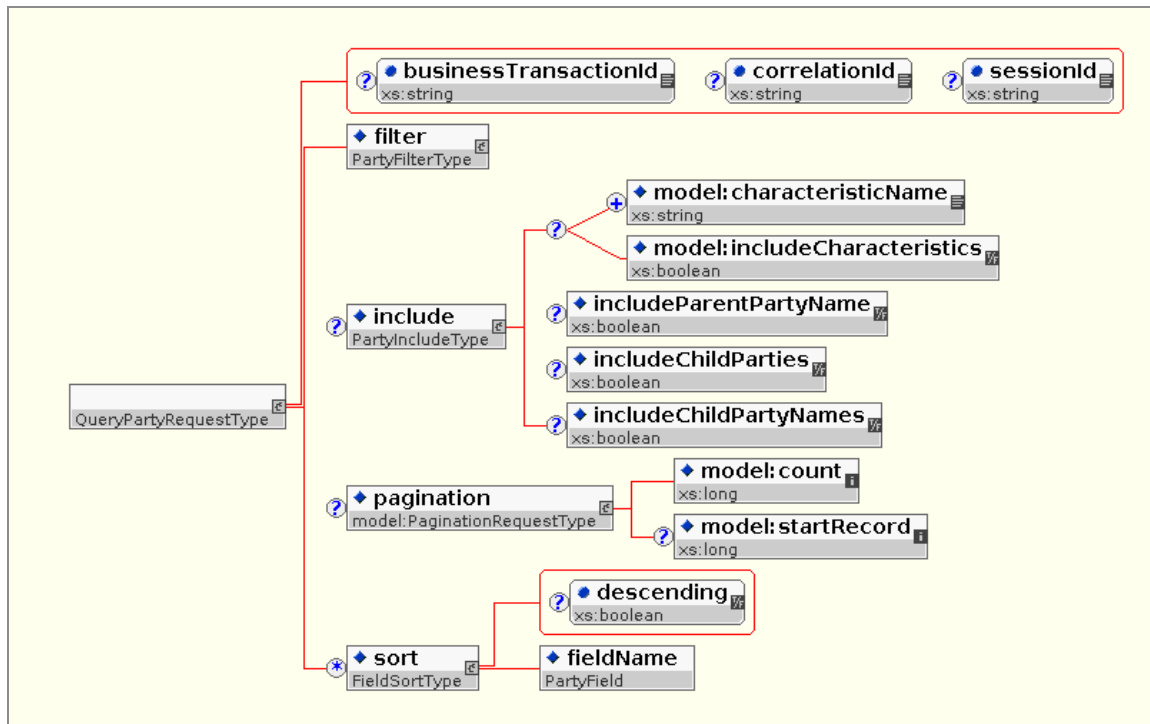
This message is sent by the client application to the TIBCO Product and Service Inventory system.

Query **Item** Request Payload







Query **Party** Request Payload

Query Request Body Details for Item and Party

Element	Type	Cardinality	Description
filter	ItemFilterType or PartyFilterType	Mandatory	This applies filters to the entity set to narrow the results. All filtering elements are ANDed together to construct the query.
include	ItemIncludeType or PartyIncludeType	Optional	This represents the fields to return for each matching entity.
include/characteristicName	String	Optional	This is the characteristic name

Element	Type	Cardinality	Description
			to include in the query.
include/includeCharacteristics	Boolean	Optional	This indicates if characteristics must be returned.
include/includeParentParty	Boolean	Optional	This indicates if the parent party must be returned.
pagination	PaginationRequestType	Optional	This is the pagination request.
pagination/count	long	Optional	This is how many records must be returned.
pagination/startRecord	long	Optional	This defines the index of the record to return first.
sort	FieldSortType	Optional	<p>This is for sorting common fields. FieldName accepts a string with the name of the field to sort by.</p> <p>The following are the common fields:</p> <ul style="list-style-type: none"> • id • ref • name • type

Element	Type	Cardinality	Description
			<ul style="list-style-type: none"> • subtype • status • owneBy • createBy • lastUpdatedBy <p>Party fields: common + parentPartyId</p> <p>Item fields: common + productId, productVersion.</p>
sort/descending	Boolean	Optional	This indicates if the sort of common field is ascending or descending.
sort/fieldName	ItemField	Optional	This is the field name to query for.
filter/id	String	Optional	This is the ID filter for the query.
filter/ref	CaseString	Optional	This is the reference filter for the query.
filter/name	CaseString	Optional	This is the entity name filter for the query.
filter/type	CaseString	Optional	This is the entity type filter for the query.

Element	Type	Cardinality	Description
filter/subType	CaseString	Optional	This is the entity subtype filter for the query.
filter/status	String	Optional	This is the status filter for the query.
filter/characteristic	CharacteristicSearchType	Optional	This is the entity characteristic filter for the query. See the "Characteristic" section in Query Sub Elements for more details on the sub elements of this element.
filter/characteristic/name	String	Optional	This is the characteristic name filter for the query.
filter/ownedBy	String	Optional	This is the owner filter for the query.
filter/createdBy	String	Optional	This is the creator filter for the query.
filter/createdDate	DateQueryType	Optional	This is the creation date filter for the query. See the "DateQueryType Filter" section in Query Sub Elements for more details on the sub elements of this element.

Element	Type	Cardinality	Description
filter/lastUpdatedBy	String	Optional	This is the last user to make an update filter for the query.
filter/lastUpdatedDate	DateQueryType	Optional	This is the last updated date filter for the query. See the "DateQueryType Filter" section in Query Sub Elements for more details on the sub elements of this element.
filter/batchId	String	Optional	This is the batch ID filter for the query.
filter/locked	Boolean	Optional	This indicates if locked entities are returned.
filter/deleted	Boolean	Optional	<p>If this element is true and an item has been logically deleted, it is returned.</p> <p>If this element is false or omitted and an item has been logically deleted, it is not returned.</p> <p>If an item has been physically deleted using the Purge operation, it is not returned.</p>

Query Request Body Details for Item Only

Element	Type	Cardinality	Description
filter/productId	CaseString	Optional	This is the product ID filter for the query.
filter/productVersion	CaseString	Optional	This is the product version filter for the query.
filter/partyId	String	Optional	This is the party ID filter for the query.
filter/order	OrderType	Optional	This is the order filter for the query. See the "Order" section in Query Sub Elements for more details on the sub elements of this element.
filter/relationship	RelationshipType	Optional	This is the relationship filter for the query. See the "Relationship" section in Query Sub Elements for more details on the sub elements of this element.
filter/startDate	DateQueryType	Optional	This is the start date filter for the query. See the

Element	Type	Cardinality	Description
			"DateQueryType" section in Query Sub Elements for more details on the sub elements of this element.
filter/endDate	DateQueryType	Optional	This is the end date filter for the query. See the "DateQueryType" section in Query Sub Elements for more details on the sub elements of this element.
filter/order/orderId	String	Optional	This is the order ID filter for the query.
filter/order/orderRef	String	Optional	This is the order reference filter for the query.
filter/relationship/type	String	Optional	This is the relationship type filter for the query.
filter/relationshipId	String	Optional	This is the relationship ID filter for the query.
filter/startDate/afterDate	dateTime	Optional	This is the date after the start

Element	Type	Cardinality	Description
			date filter for the query.
filter/startDate/beforeDate	dateTime	Optional	This is the date before the start date filter for the query.
filter/endDate/afterDate	dateTime	Optional	This is the date after the end date filter for the query.
filter/endDate/beforeDate	dateTime	Optional	This is the date before the end date filter for the query.
include/includePartyName	Boolean	Optional	This indicates if the party name is returned.
include/includeParentPartyName	Boolean	Optional	This indicates if the parent party name is returned.
include/includeOrders	Boolean	Optional	This indicates if orders associated with the items are returned.
include/orderId	String	Optional	This is the order ID to include in the query.
include/orderRef	String	Optional	This is the order reference to

Element	Type	Cardinality	Description
			include in the query.
include/includeRelationships	Boolean	Optional	This indicates if relationships must be returned.
include/relationshipType	String	Optional	This is the relationship type to include in the query.
include/includeReverseRelationships	Boolean	Optional	This indicates if reverse relationships must be returned.

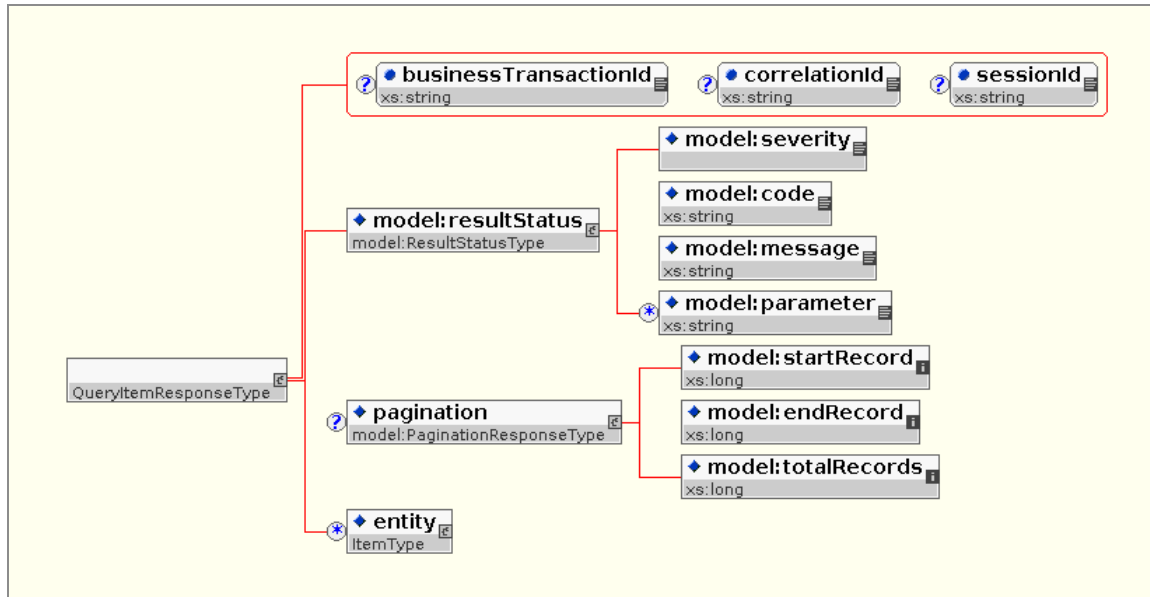
Query Request Body Details for Party Only

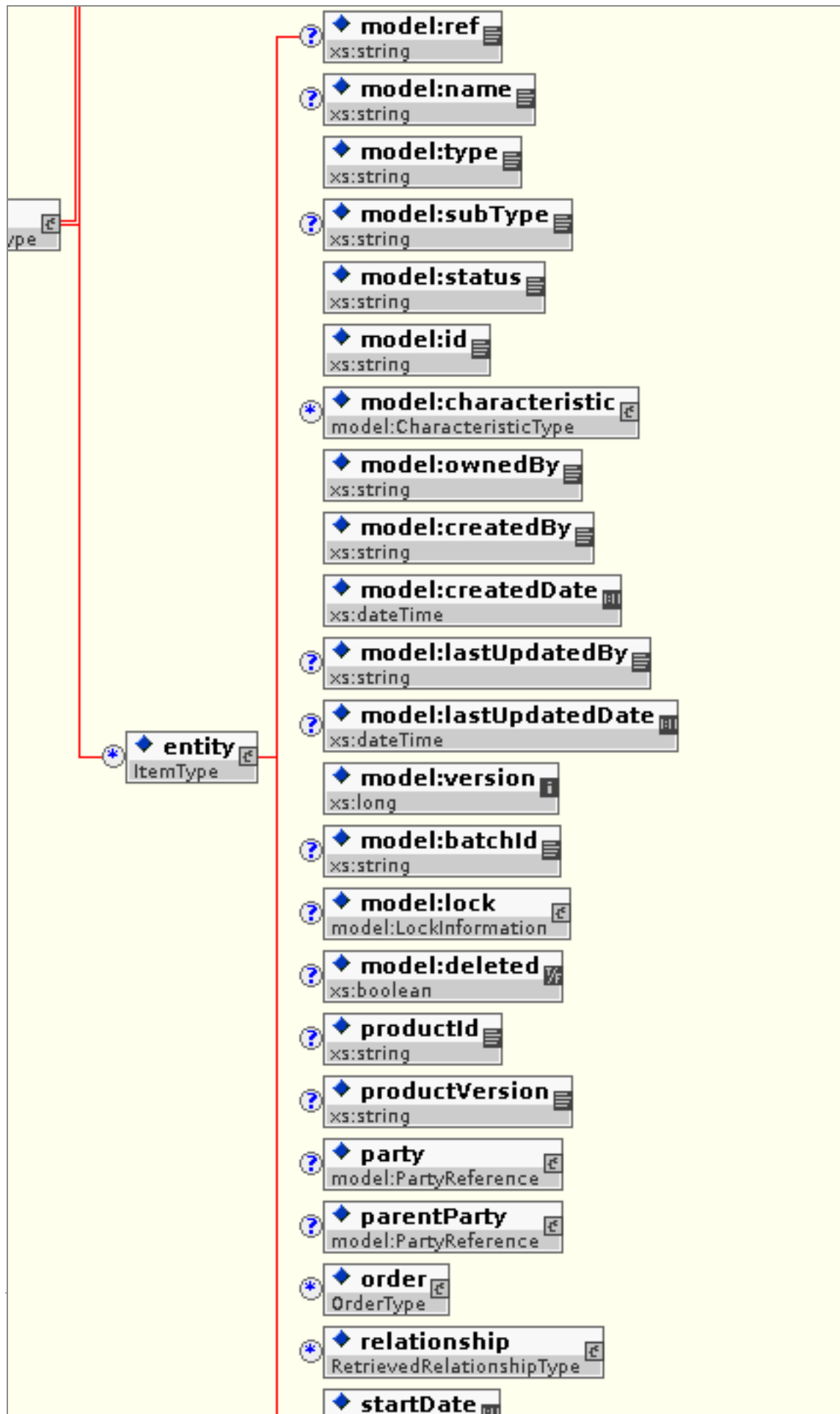
Element	Type	Cardinality	Description
include/includeChildParties	Boolean	Optional	This indicates if child parties must be returned.
include/includeChildPartyNames	Boolean	Optional	This indicates if child party names must be returned.
filter/characteristic/value	CaseString	Optional	This is the characteristic value filter for the query.
filter/parentPartyId	String	Optional	This is the parent party ID filter for the query.

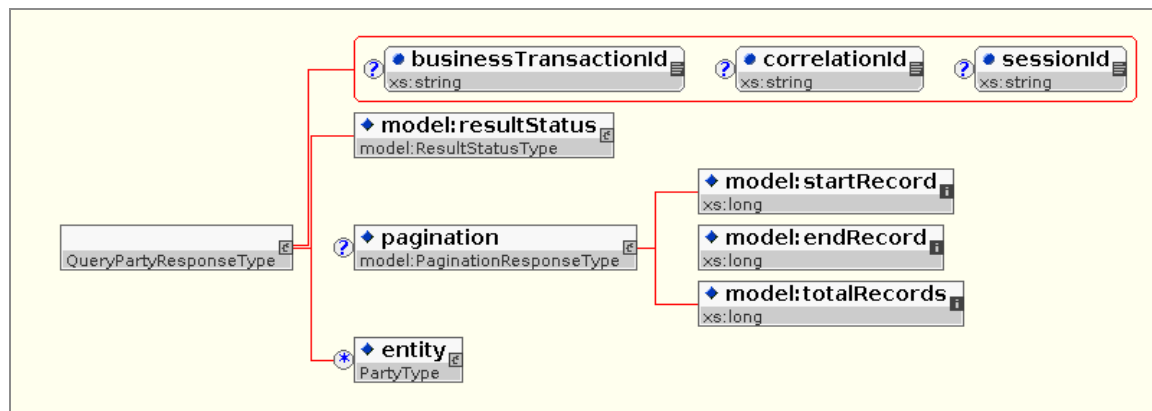
Query Response

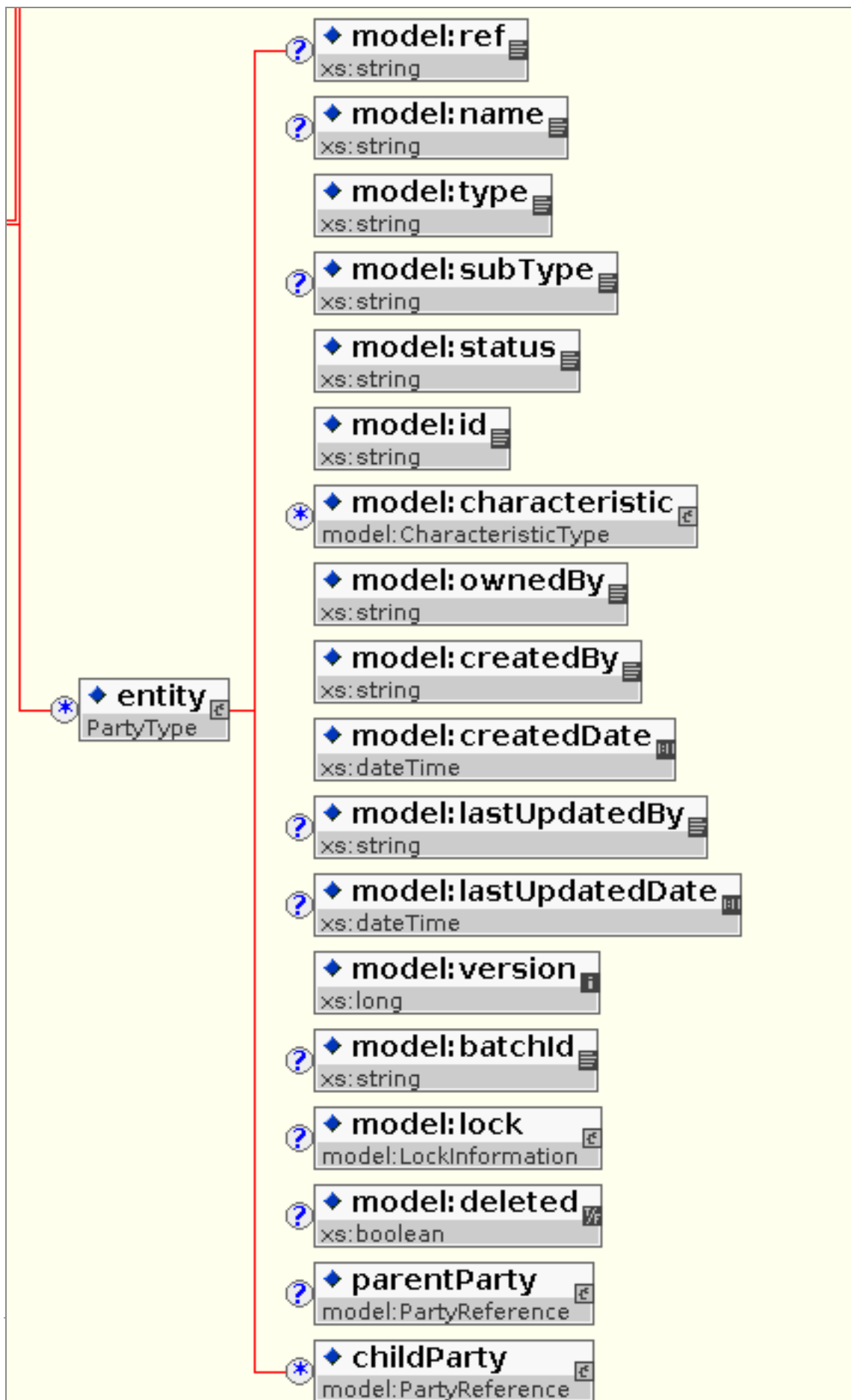
This message is sent by the TIBCO Product and Service Inventory system to the requesting application to return the results of the operation invocation.

Query **Item** Response Payload





Query **Party** Response Payload



Query Response Body Details for Item and Party

Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status of the query.
pagination	PaginationResponseType	Optional	This is the pagination information response.
pagination/startRecord	long	Optional	This defines the first record of the paginated response.
pagination/endRecord	long	Optional	This defines the last record of the paginated response.
pagination/totalRecords	long	Optional	This is the total number of matching records.
entity	ItemType or PartyType	Mandatory (0..N)	This is the matching entities returned by the query.
entity/ref	String	Optional	This is the reference of the retrieved entity.
entity/name	String	Optional	This is the name

Element	Type	Cardinality	Description
			of the retrieved entity.
entity/type	String	Optional	This is the type of the retrieved entity.
entity/subType	String	Optional	This is the subtype of the retrieved.
entity/status	String	Optional	This is the status of the retrieved entity.
entity/id	String	Optional	This is the unique identifier for the retrieved entity.
entity/characteristic	CharacteristicType	Optional	This is the characteristics of the retrieved entity, such as ID, name, and value.
entity/ownedBy	String	Optional	This defines who owns the retrieved entity.
entity/createdBy	String	Optional	This defines who created the retrieved entity.
entity/createdDate	dateTime	Optional	This defines the date the

Element	Type	Cardinality	Description
			retrieved entity was created.
entity/lastUpdatedBy	String	Optional	This defines who last updated the retrieved entity.
entity/lastUpdatedDate	String	Optional	This defines the date when the retrieved entity was updated.
entity/version	long	Optional	This defines the version of the retrieved entity.
entity/batchId	String	Optional	This is the associated batch ID of the retrieved entity.
entity/lock	LockInformation	Optional	This is the lock information associated with the retrieved entity. See the "Lock Information" section in Get Sub Elements for more details on the sub elements of this element.
entity/deleted	Boolean	Optional	This indicates if the retrieved entity is logically

Element	Type	Cardinality	Description
			deleted.
entity/parentParty	PartyReference	Optional	This defines the parent party of the retrieved entity.

Query Response Body Details for Item Only

Element	Type	Cardinality	Description
entity/productId	String	Optional	This is the ID of the product represented by the retrieved item.
entity/productVersion	String	Optional	This is the product version number associated with the retrieved item.
entity/party	PartyReference	Optional	This is the party associated with the retrieved item.
entity/order	OrderType	Optional	This is the order associated with the retrieved item.
entity/relationship	RetrievedRelationshipType	Optional	This is the relationship type associated with

Element	Type	Cardinality	Description
			the retrieved item.
entity/startDate	dateTime	Optional	This is the start date of the retrieved item.
entity/endDate	dateTime	Optional	This is the end of the retrieved item.

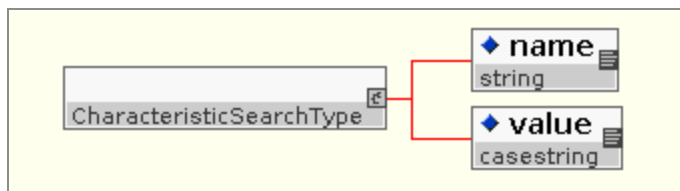
Query Response Body Details for Party Only

Element	Type	Cardinality	Description
entity/childParty	PartyReference	Optional	This is the child party reference of the retrieved party.

Query Sub Elements

The following are the sub elements for the query operation.

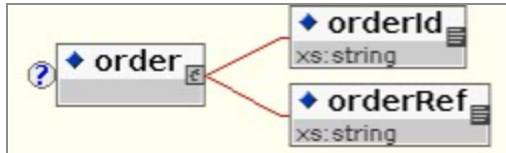
Characteristic Filter



Element	Type	Cardinality	Description
filter/characteristic/name	String	Optional	This is the characteristic name to retrieve in the query.

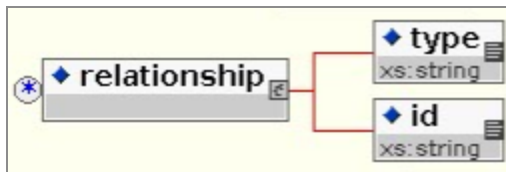
Element	Type	Cardinality	Description
filter/characteristic/value	casestring	Optional	This is the characteristic value to retrieve in the query.

Order Filter



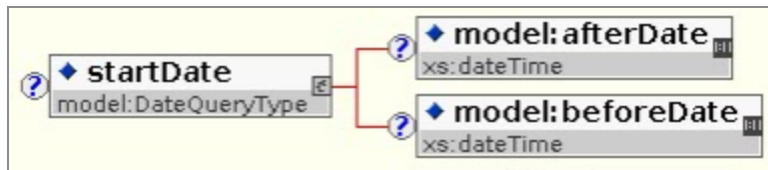
Element	Type	Cardinality	Description
filter/order/orderId	String	Mandatory	This is to retrieve the order associated with the specified ID.
filter/order/orderRef	String	Mandatory	This is to retrieve the order associated with the specified external reference.

Relationship Filter

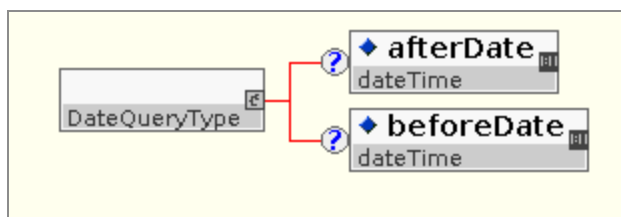


Element	Type	Cardinality	Description
filter/relationship/type	String	Mandatory	This defines a filter on the forward type of a relationship.
filter/relationship/id	String	Mandatory	This defines a filter on the item ID of a related item.

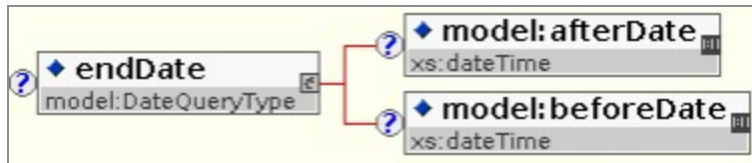
DateQueryType Filter



Element	Type	Cardinality	Description
filter/startDate/afterDate	dateTime	Mandatory	This is to retrieve elements after the specified date.
filter/startDate/beforeDate	dateTime	Mandatory	This is to retrieve elements before the specified date.



Element	Type	Cardinality	Description
filter/createdDate/afterDate	dateTime	Optional	This sets the search to refer to elements after the specified created date.
filter/characteristic/beforeDate	dateTime	Optional	This sets the search to refer to elements before the specified created date.



Element	Type	Cardinality	Description
filter/endDate/afterDate	dateTime	Mandatory	This is to retrieve elements after the specified date.
filter/endDate/beforeDate	dateTime	Mandatory	This is to retrieve elements before the specified date.

Response Codes and Messages

This section lists the response codes and message details.

The following error messages use placeholders for the parameters. For example, "%1s" is used for the first parameter, "%2s" for the second parameter, and so on.

General Response Codes and Messages

Code	Message
0000	Success.
0100	One or more object-level operations were unsuccessful.
10001	Invalid Argument. '%1s'.
10002	An unexpected error has occurred: '%1s'.

Entity Related Response Codes and Messages

Code	Message
0110	Entity already exist: '%1s'
0111	Entity not found for id: '%1s'.
0112	Entity has already been logically deleted for given id: '%1s'.
0113	Entity is not logically deleted: '%1s'.
0114	Entity is already involved in batch: '%1s'.
0115	Mandatory entity field missing: '%1s'.
0116	The entity is already locked using the following key: '%1s'.
0117	Entity is not locked for lock key '%1s'. Cannot unlock.

Code	Message
0118	Entity is already locked. Callback lock registered for key '%1s'.
0137	Version mismatch. Should be: '%1s'.

Characteristic Related Response Codes and Messages

Code	Message
0130	Duplicate characteristic id: '%1s'.
0131	Mandatory characteristics field missing: '%1s'
0132	Characteristic not found: '%1s'.
0133	Characteristic already exists: '%1s'

Relationship Related Response Codes and Messages

Code	Message
0140	Mandatory relationship field missing: '%1s'.
0141	Target item is missing: '%1s'.
0142	Relationship not found: '%1s'.
0143	Relationship already exists: '%1s'.

Order Related Response Codes and Messages

Code	Message
0150	Order not found: '%1s'.
0151	Order already exists: '%1s'.
0152	Order field not found: '%1s'.

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Product-Specific Documentation

The following documentation for this product is available on the [TIBCO® Product and Service Inventory](#) documentation page:

- *TIBCO® Product and Service Inventory Release Notes*
- *TIBCO® Product and Service Inventory Installation and Configuration*
- *TIBCO® Product and Service Inventory User Guide*
- *TIBCO® Product and Service Inventory REST Services Guide*
- *TIBCO® Product and Service Inventory Web Services Guide*

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