

TIBCO® Fulfillment Subscriber Inventory Web Services Guide

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TIBCO Documentation and Support Services

Documentation for this and other TIBCO products is available on the TIBCO Documentation site. This site is updated more frequently than any documentation that might be included with the product. To ensure that you are accessing the latest available help topics, please visit:

<https://docs.tibco.com>

Product-Specific Documentation

The following documents for this product can be found on the TIBCO Documentation site:

- *TIBCO Fulfillment Subscriber Inventory Installation and Configuration Guide*
- *TIBCO Fulfillment Subscriber Inventory User's Guide*
- *TIBCO Fulfillment Subscriber Inventory Web Services Guide*
- *TIBCO Fulfillment Subscriber Inventory REST API Guide*
- *TIBCO Fulfillment Subscriber Inventory Release Notes*

How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, contact TIBCO Support:

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

<http://www.tibco.com/services/support>

- If you already have a valid maintenance or support contract, visit this site:

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Entry to this site requires a user name and password. If you do not have a user name, you can request one.

How to Join TIBCOmmunity

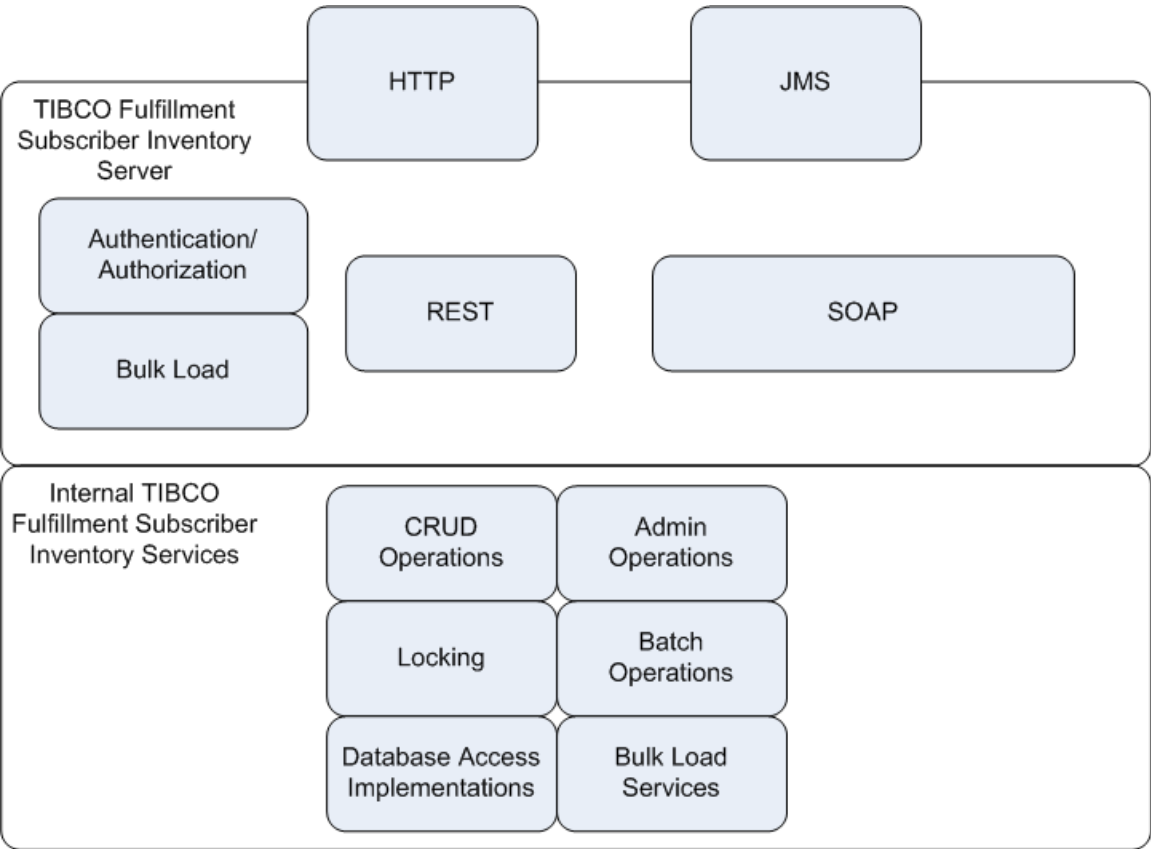
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<https://www.tibcommunity.com>

Architecture

Fulfillment Subscriber Inventory comprises of a server providing external interfaces and processing inventory entities and a UI client that access the server.

The following diagram represents Fulfillment Subscriber Inventory architecture:



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.



Supported encoding style in the web service request is UTF-8.

The web services endpoint URL has the following format:

`http://<hostname>:<port>/fsi-server/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 Fulfillment Subscriber 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 Fulfillment Subscriber Inventory supports calling SOAP over JMS synchronously using the standard SOAP Request/Reply activity.

Security Header

This SOAP header element has to be sent along with all operations (except Authenticate) in the request. The header contains a WS-Security JSON Web Token returned in the authenticate response.

TIBCO Fulfillment Subscriber Inventory Services

The TIBCO Fulfillment Subscriber Inventory services are the set of services which 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.



There is a difference between "item" and "party" when considering the actions of the TIBCO Fulfillment Subscriber 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 request 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 except the **authenticate** operation:

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 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 not used internally.
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 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 Fulfillment Subscriber Inventory to the client application on JMS topics.

The following are the three topics per tenant:

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

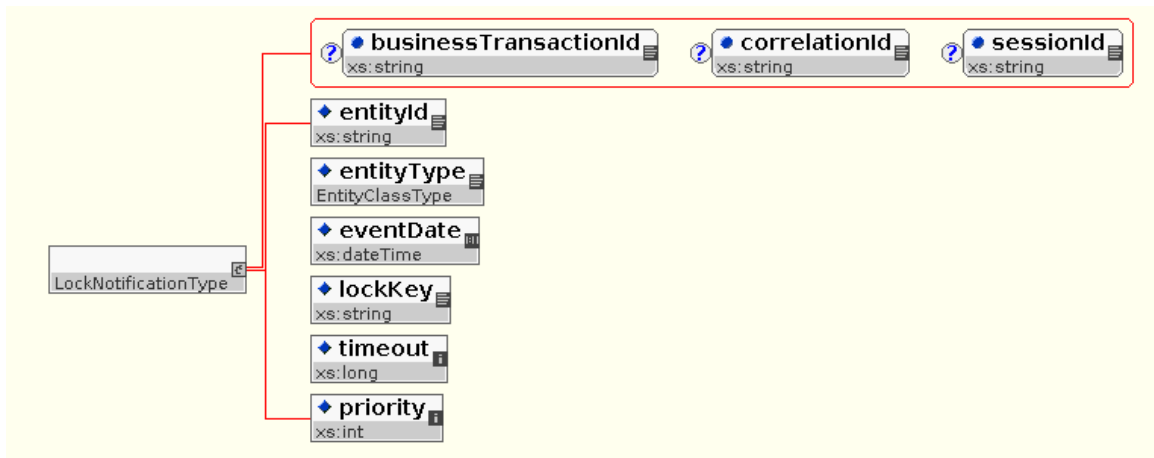
This topic is used for messages indicating that a lock was granted.

- `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 will get 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:

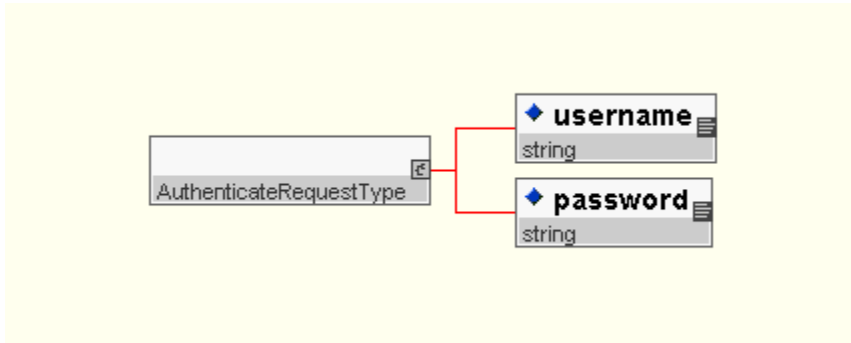
Element	Type	Cardinality	Description
entityid	String	Mandatory	This is the ID of the entity for which the notification has been emitted.
entityType	EntityClassType	Mandatory	This is the entity type of the entity the lock notification is referring to. This can either be "PARTY" or "ITEM" (quotes and capitalization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

Authenticate

The **authenticate** operation is used to fetch an authentication token from the application. The token has to be sent back as a header in all other operations.

Authenticate Request

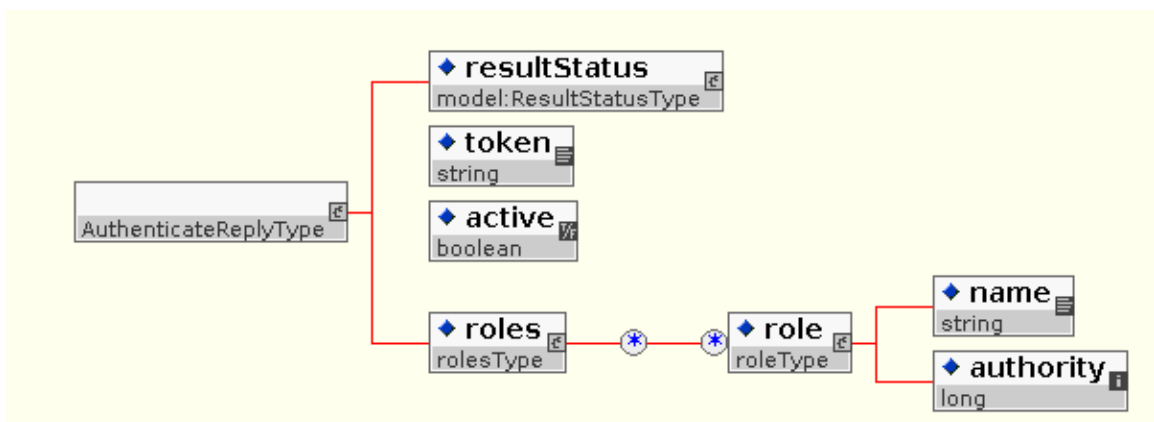
This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system. The authenticate request has the following payload:



Element	Type	Cardinality	Description
username	String	Mandatory	The user name has to be in the format of ABC@XYZ where ABC is the user id and XYZ is the tenant.
password	String	Mandatory	This is the password for the user.

Authenticate Response

This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation. The authenticate response has the following payload:



Element	Type	Cardinality	Description
token	String	Mandatory	The token is a string value which has to be returned as a header for all the other operations.
active	Boolean	Mandatory	This indicates if the user has been disabled.
roles	RolesType	Mandatory	This is the list of the roles attached to the user.

Start Batch

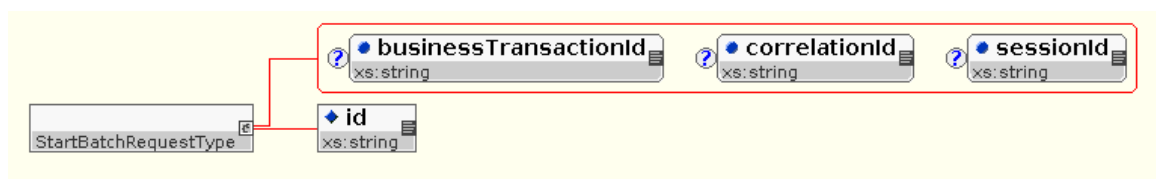
You can use the start batch operation to start batches.

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

- PERM_START_BATCH
- PERM_READ_BATCH

startBatch Request

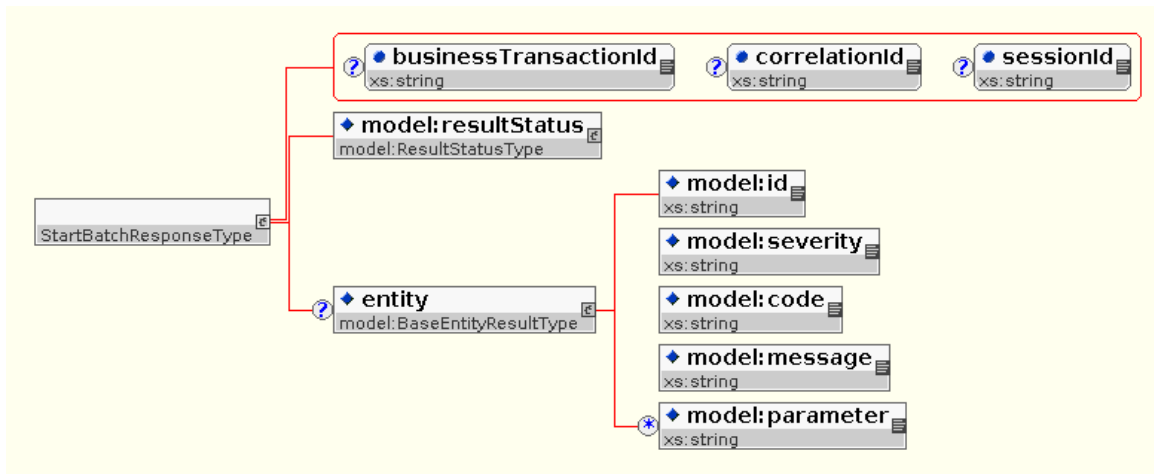
This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system. The startBatch request has the following payload:



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

startBatch Response

This message is sent by the TIBCO Fulfillment Subscriber 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	BaseEntityResultType	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

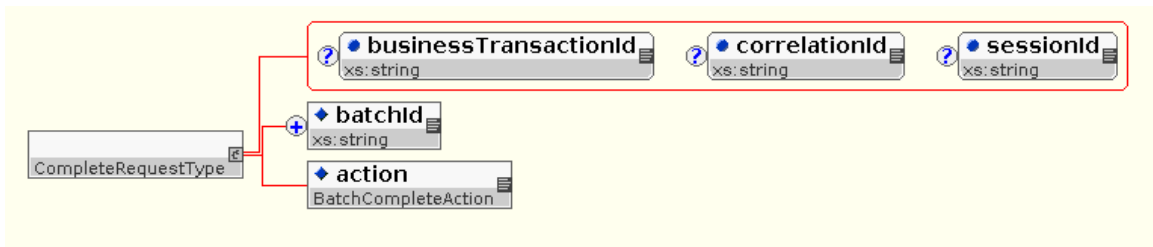
You can use the complete batch operation to complete or rollback batches.

Users must have the following permissions to call this operation:

- PERM_COMPLETE_BATCH

completeBatch Request

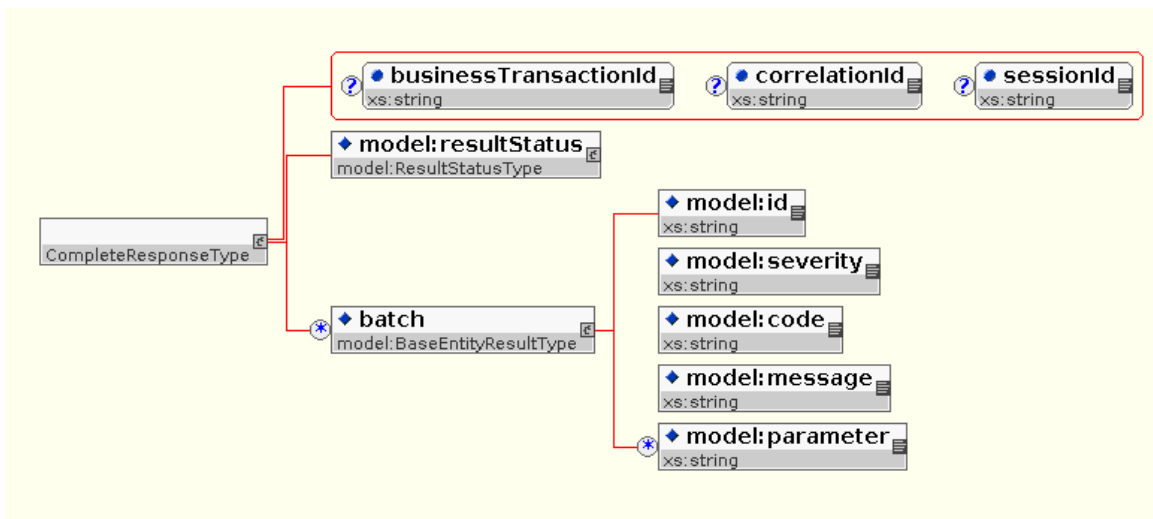
This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system. The completeBatch request has the following payload:



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 Fulfillment Subscriber 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 a 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 Fulfillment Subscriber Inventory. For items only, you can also use this operation to create orders, associated characteristics, and relationships, as well as linking to other items; this is item specific, and cannot be done for parties. Referential integrity is assured for item to item relationships.

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

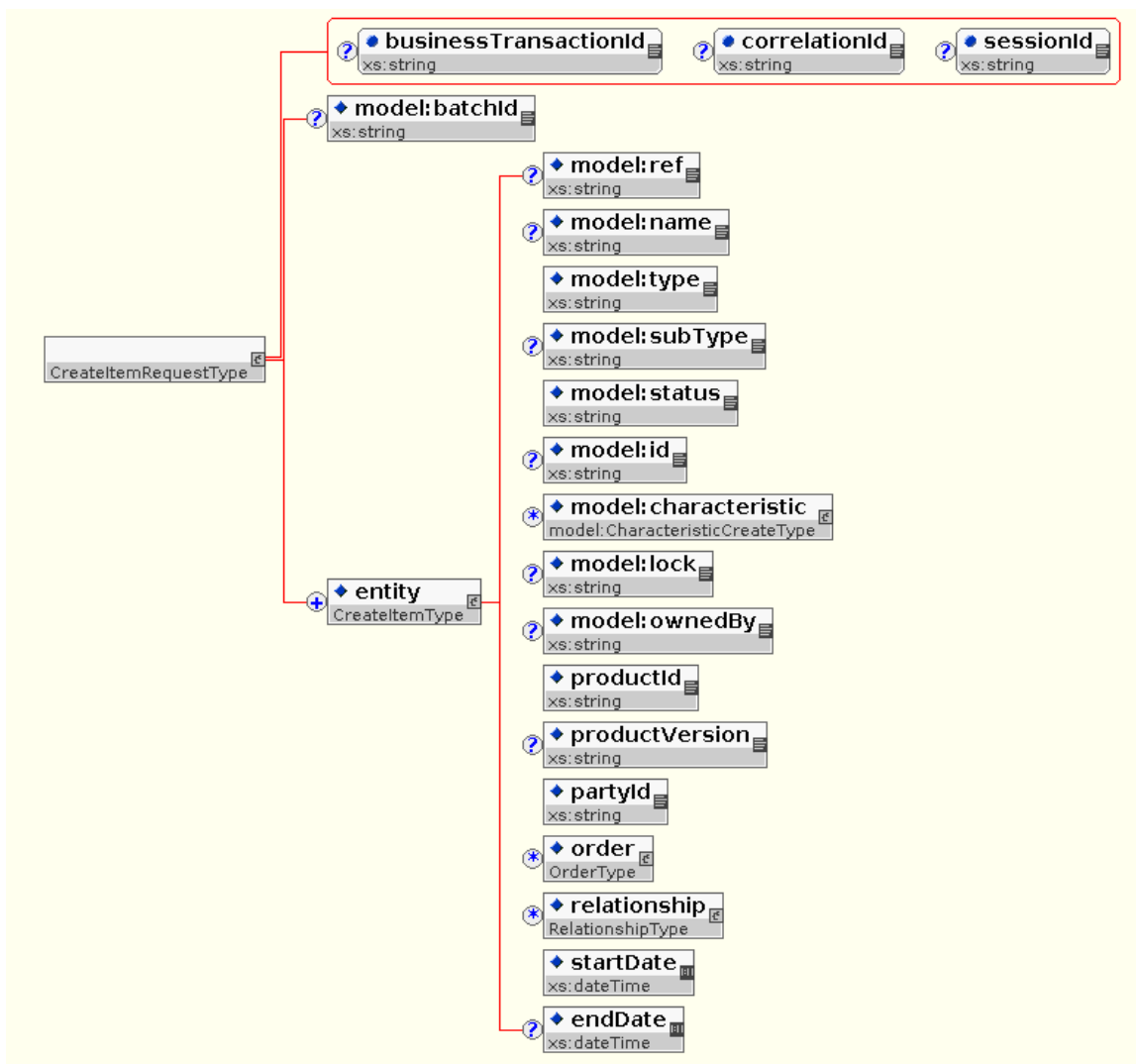
The following table describes performance implications of using this operation:

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 will take to complete. Creating multiple entities in a single call will 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 will result in longer processing time.

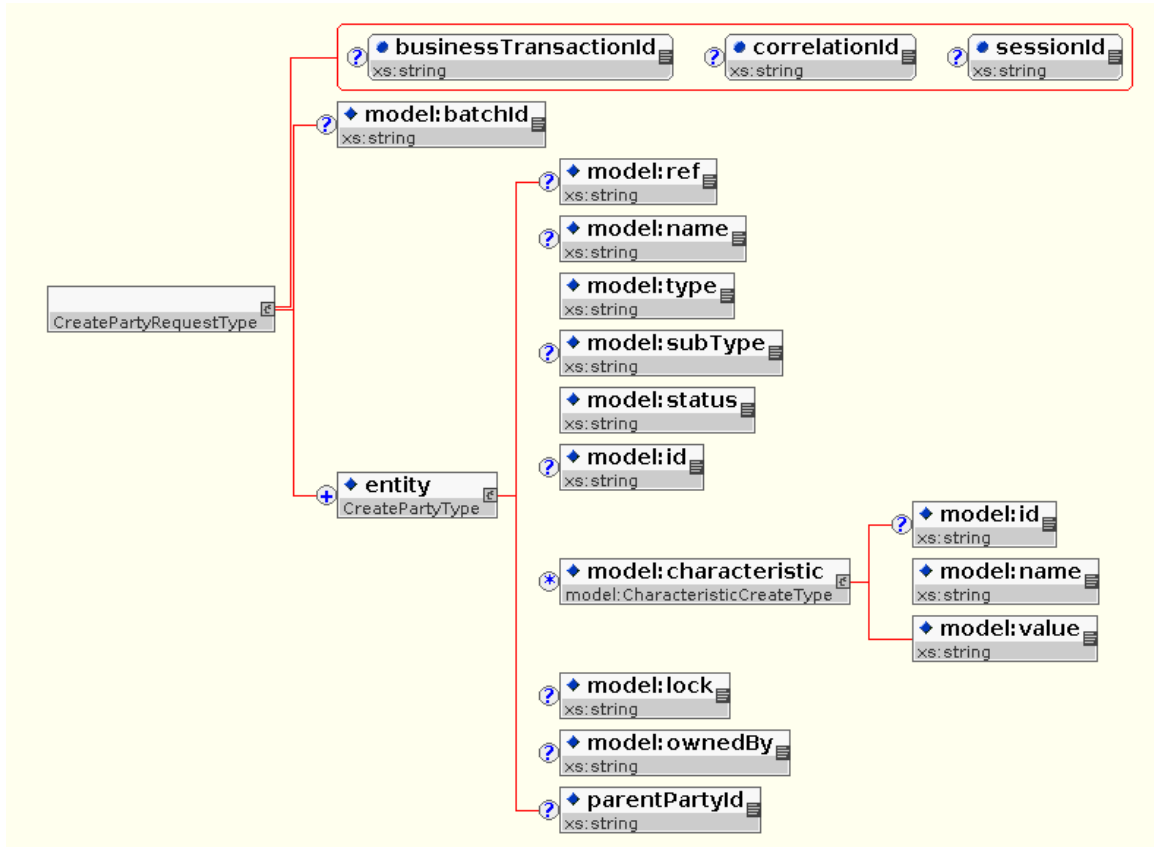
Create Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber 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.
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 the sub type of entity being created.
entity/status	String	Mandatory	This is the status of the entity being created.

Element	Type	Cardinality	Description
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.
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 is defaulted 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

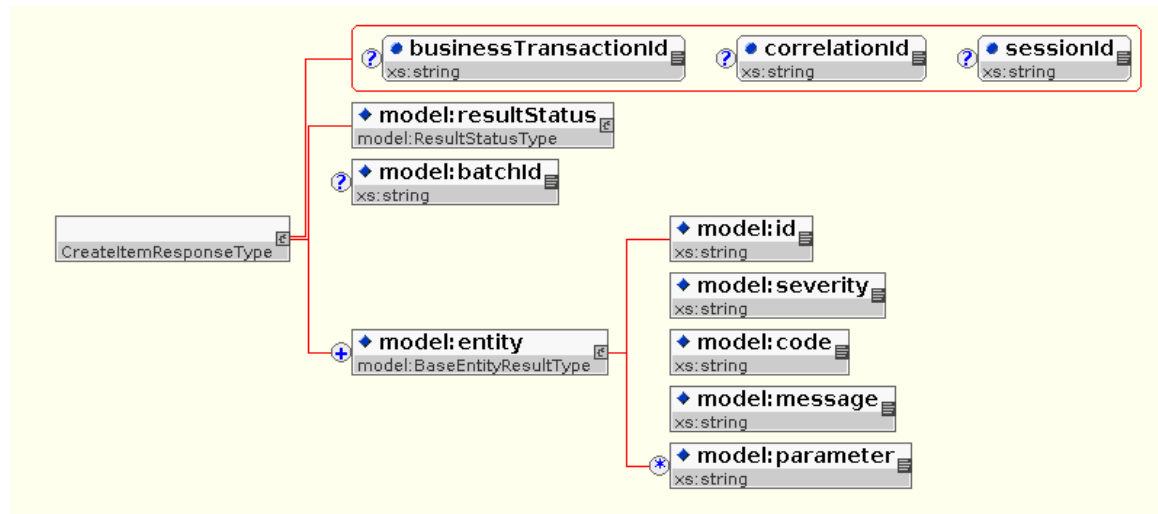
Element	Type	Cardinality	Description
entity/productid	String	Optional	This is the ID of the product represented by the item.

Element	Type	Cardinality	Description
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 the item 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 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.

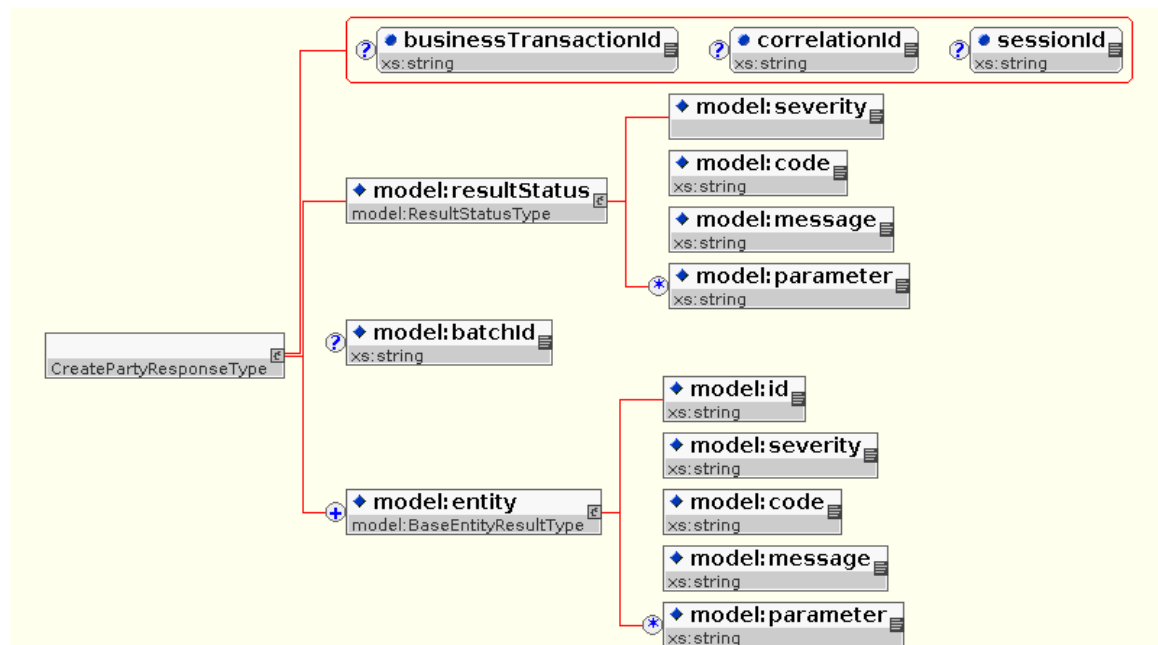
Create Response

This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation.

Create Item Response Payload



Create Party Response Payload



Create Response Body Details for Item and Party

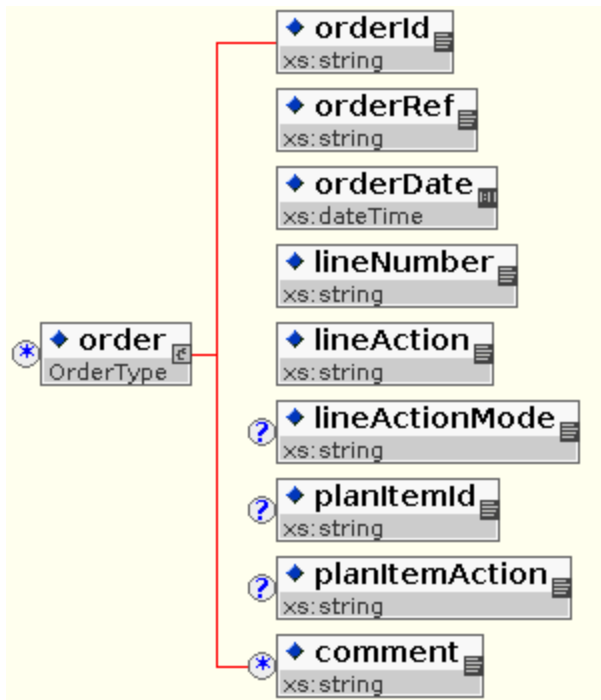
Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status.
batchId	String	Optional	This is the unique identifier for the batch that the request was included into. This will only be returned if it is included on the request.

Element	Type	Cardinality	Description
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 entityId was specified in the request or was created successfully, this is be populated.</p> <p>If entityId was omitted from the request and the entity was not successfully created, this is not returned.</p>
entity/parentPartyId	String	Optional	<p>This is the ID of the parent party of this party. May or may not be the ID of an existing party.</p>

Create Sub Elements

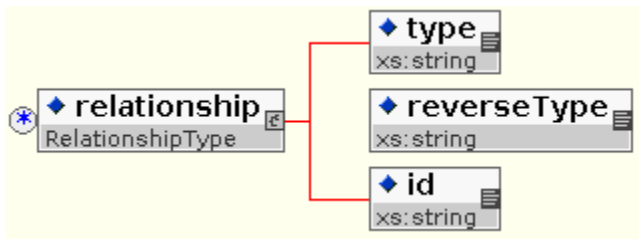
The following are the sub elements for the **create** operation.

Create Order



Element	Type	Cardinality	Description
entity/order/orderId	String	Mandatory	ID of the order being 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.
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 Fulfillment Subscriber Inventory.

Delete

Delete performs a logical delete of one-to-many items in TIBCO Fulfillment Subscriber Inventory. The records are not physically deleted at this time. Instead a flag is set on the items, and they will 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

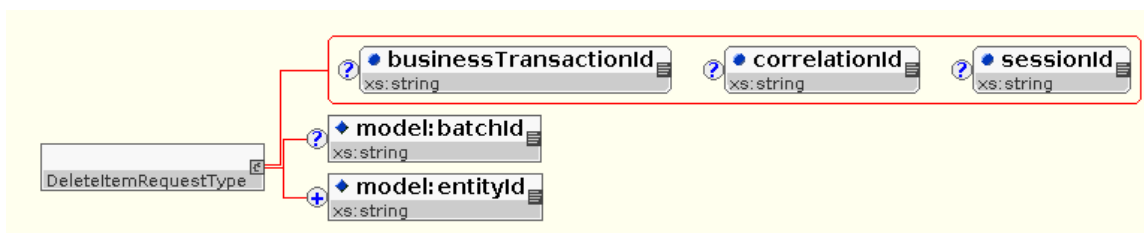
The following table describes performance implications of using this operation:

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.

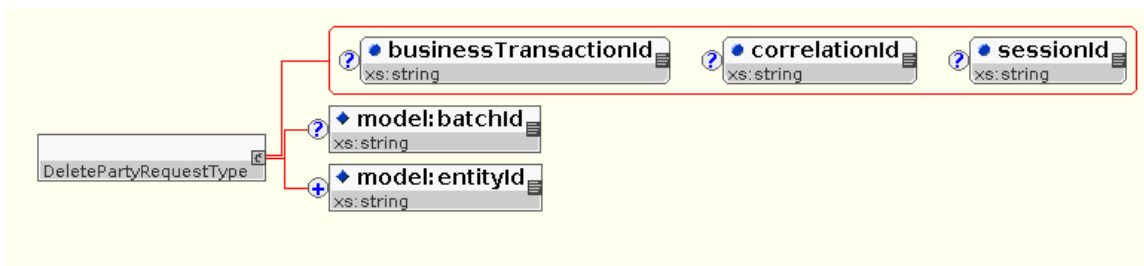
Delete Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system.

Delete Item Request Payload



Delete Party Request Payload

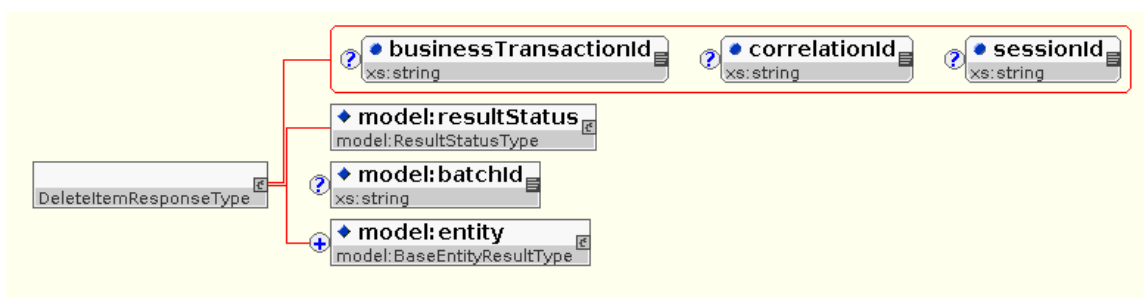


Element	Type	Cardinality	Description
batchId	String	Optional	This is the ID of the batch this deletion is happening in.
entityId	String	1...M	This is the unique identifier for the entity to delete.

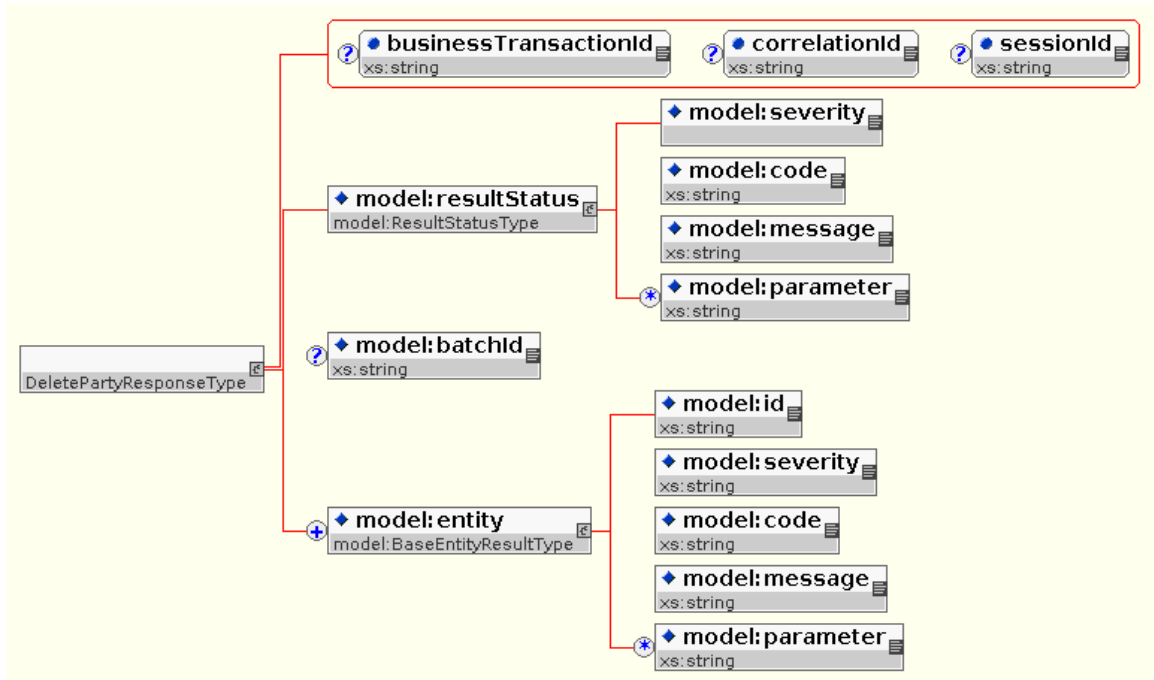
Delete Response

This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation.

Delete Item Response Payload



Delete 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.
entity	Type	Mandatory	<p>This is the entity type returning the individual result status.</p> <p>If none of the entities could be deleted 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	Optional	This is the unique identifier for the deleted entity.

Purge

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

The associated child or parent entities will not be 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

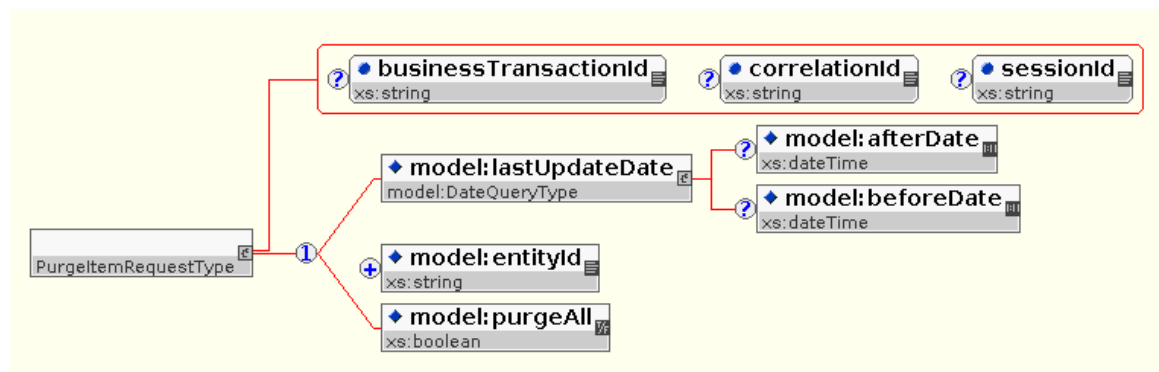
The following table describes performance implications of using this operation:

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 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.

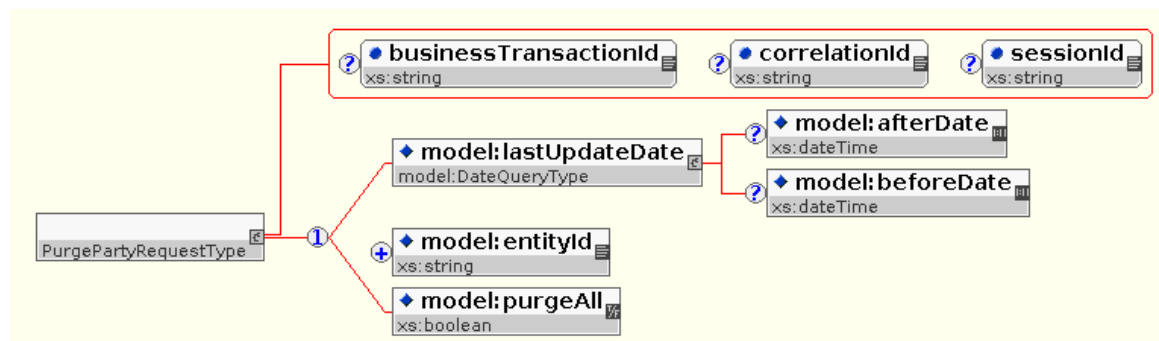
Purge Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system.

Purge Item Request Payload



Purge Party Request Payload

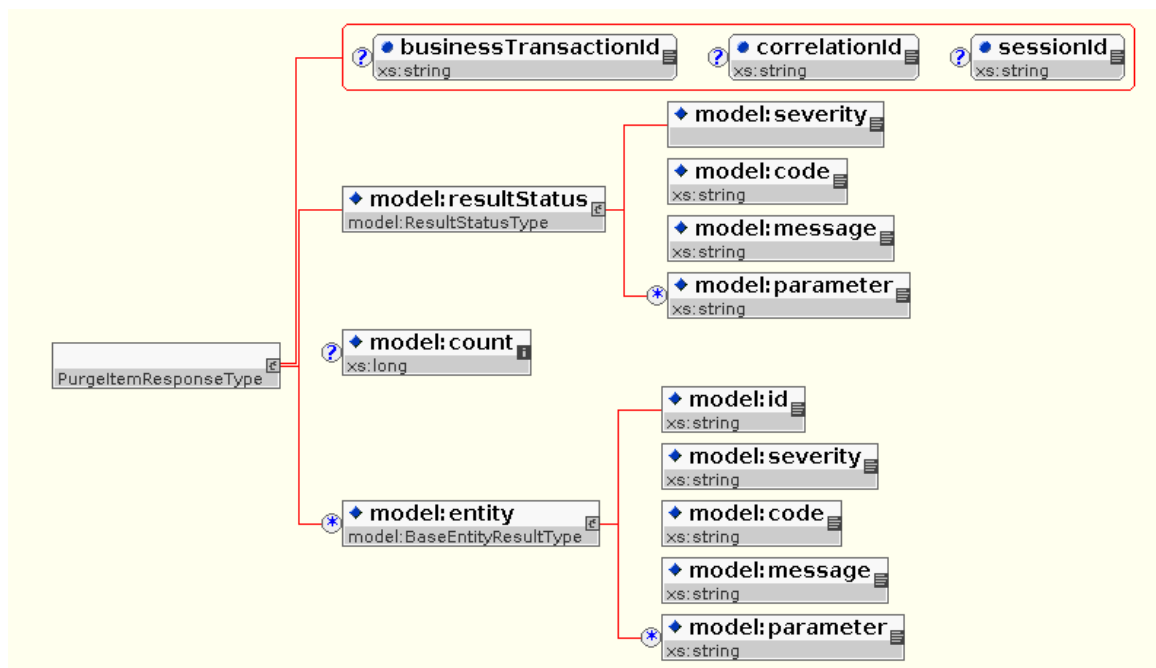


Element	Type	Cardinality	Description
lastUpdateDate	DateQueryType	Choice	This is a range of date for the purge.
lastUpdateDate/ afterDate	dateTime	Optional	The search is referring to elements modified after the specified date.
lastUpdateDate/ beforeDate	dateTime	Optional	The search is referring to elements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

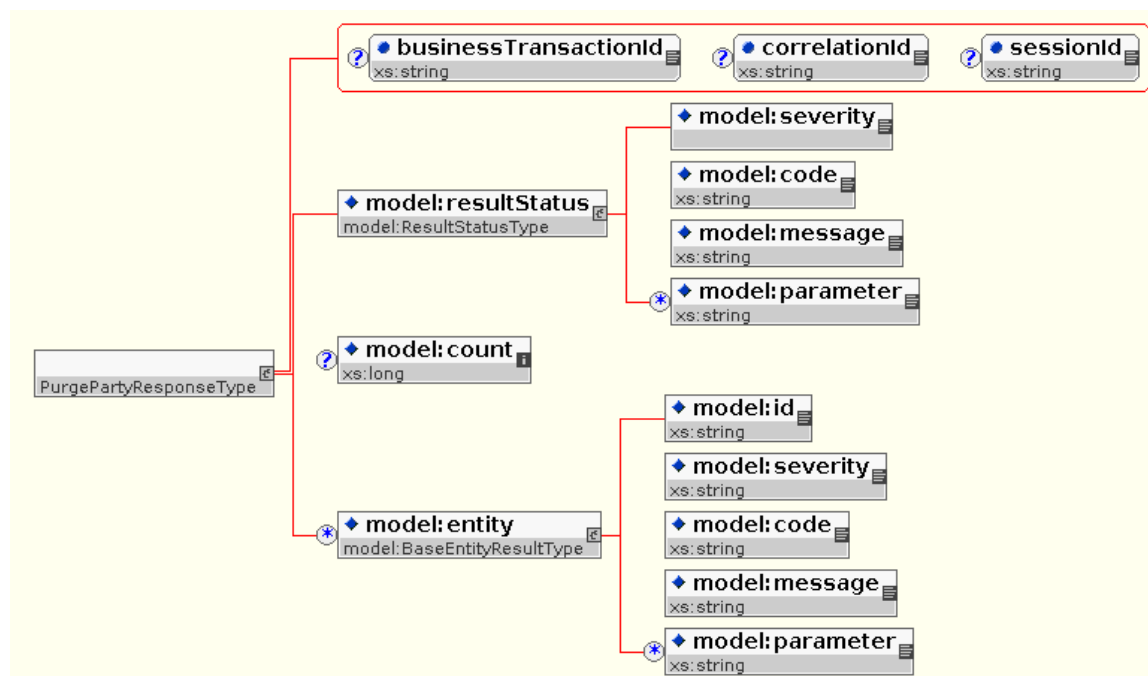
Purge Response

This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation.

Purge Item Response Payload



Purge Party Response Payload



Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result for 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 Fulfillment Subscriber 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

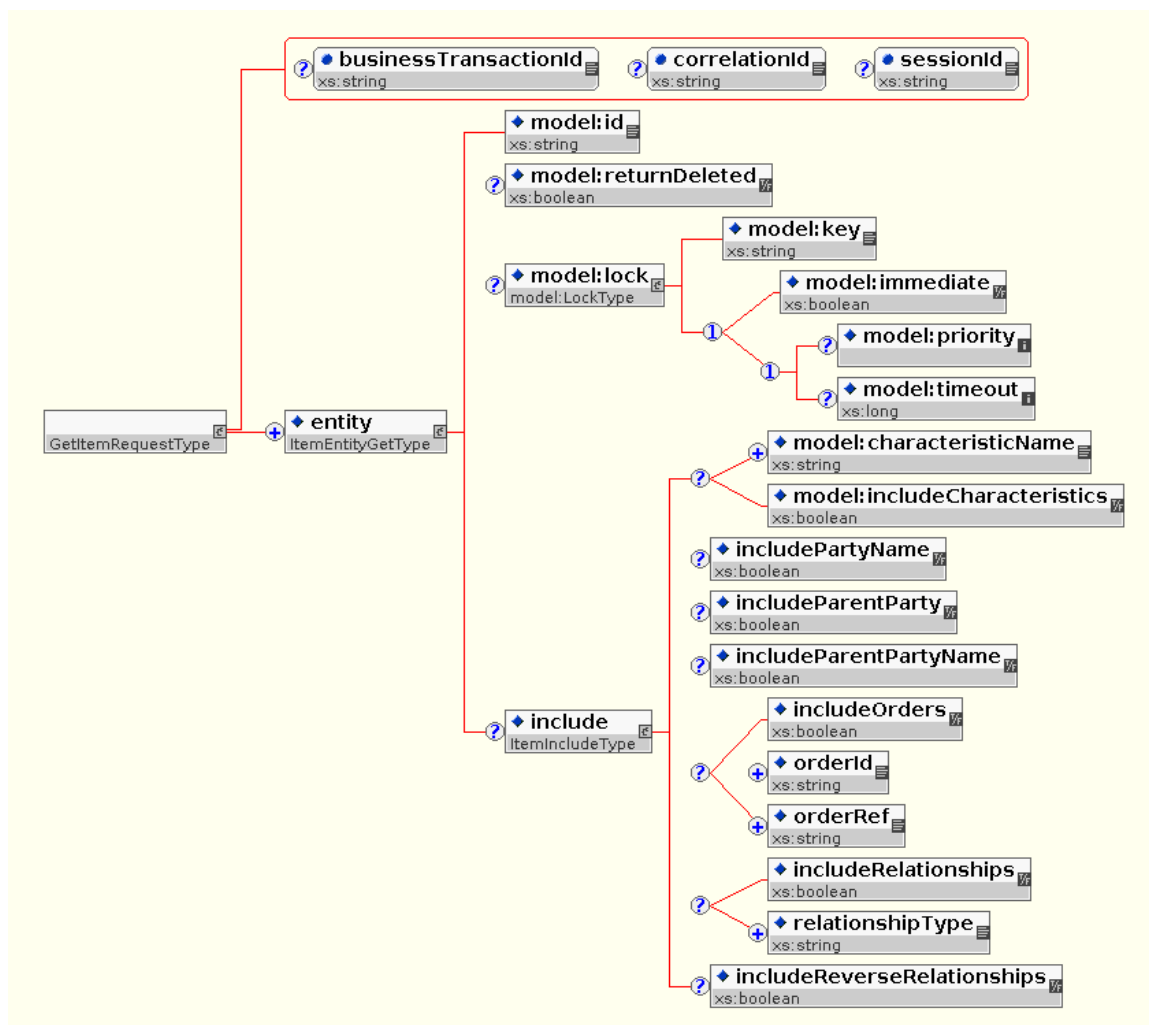
The following table describes performance implications of using this operation:

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 will take 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 names requires a query against the database.
Including parent party	High	Including parent parties 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 deleted entities	Low	Returning deleted entities increases the number of records in 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.

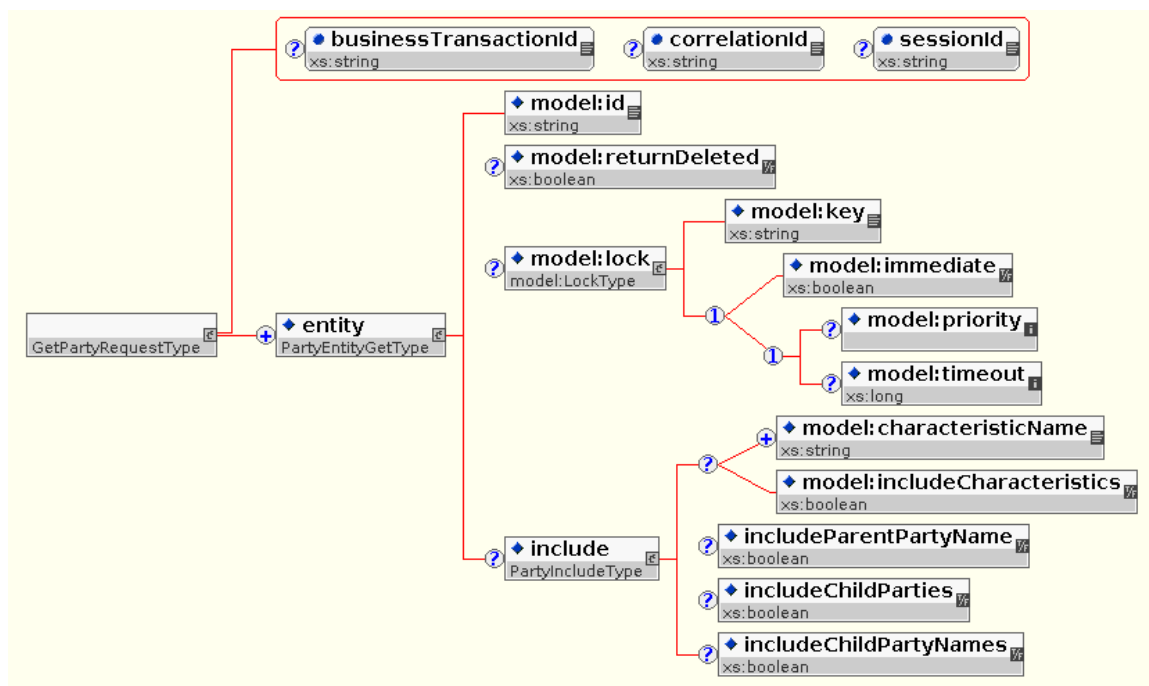
Get Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber 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 PartyEntityType	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	<p>If this element is true and an item has been logically deleted, it will be returned.</p> <p>If this element is false or omitted and an item has been logically deleted, it will not be returned.</p> <p>If an item has been physically deleted using the Purge operation, it will never be returned.</p>
entity/lock	LockType	Optional	This is the lock request type. If this is omitted, no lock attempt will occur.
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 PartyIncludeType	Optional	This is the include type and the definition of what to include on the response.

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

Get Request Body Details for Item Only

Element	Type	Cardinality	Description
include/ includePartyName	Boolean	Optional	This indicates if the party name should be returned.
include/ includeParentParty	Boolean	Optional	This indicates if the parent party should be returned.
include/includeOrders	Boolean	Optional	This indicates if all or no orders should 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 characteristics should be returned.
relationshipType	String	Choice	This indicates the array of relationship types to return.
includeReverseRelationships	Boolean	Optional	This indicates if the reverse relationships should be returned.

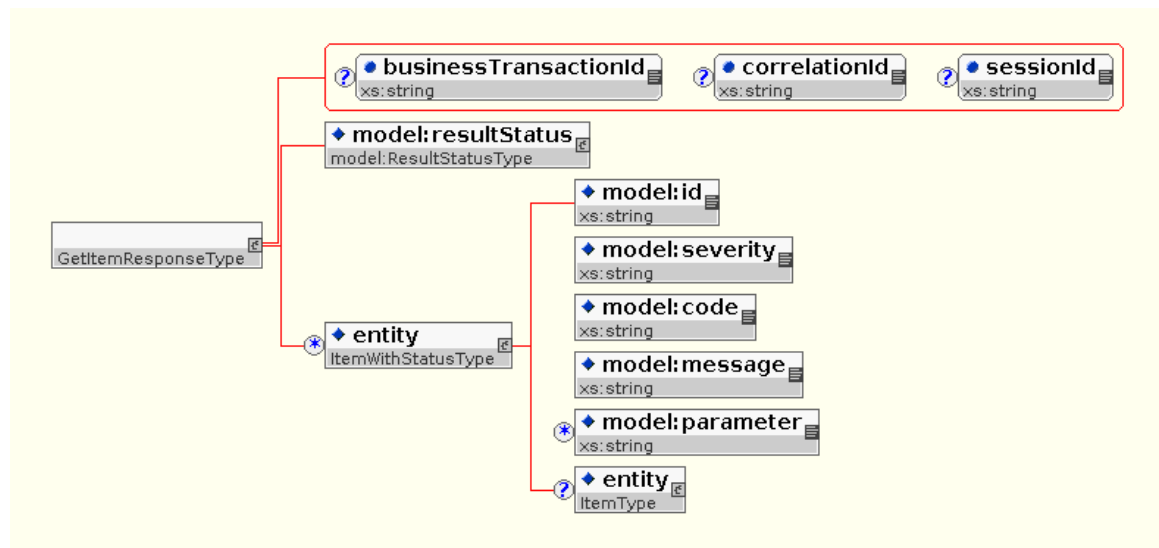
Get Request Body Details for Party Only

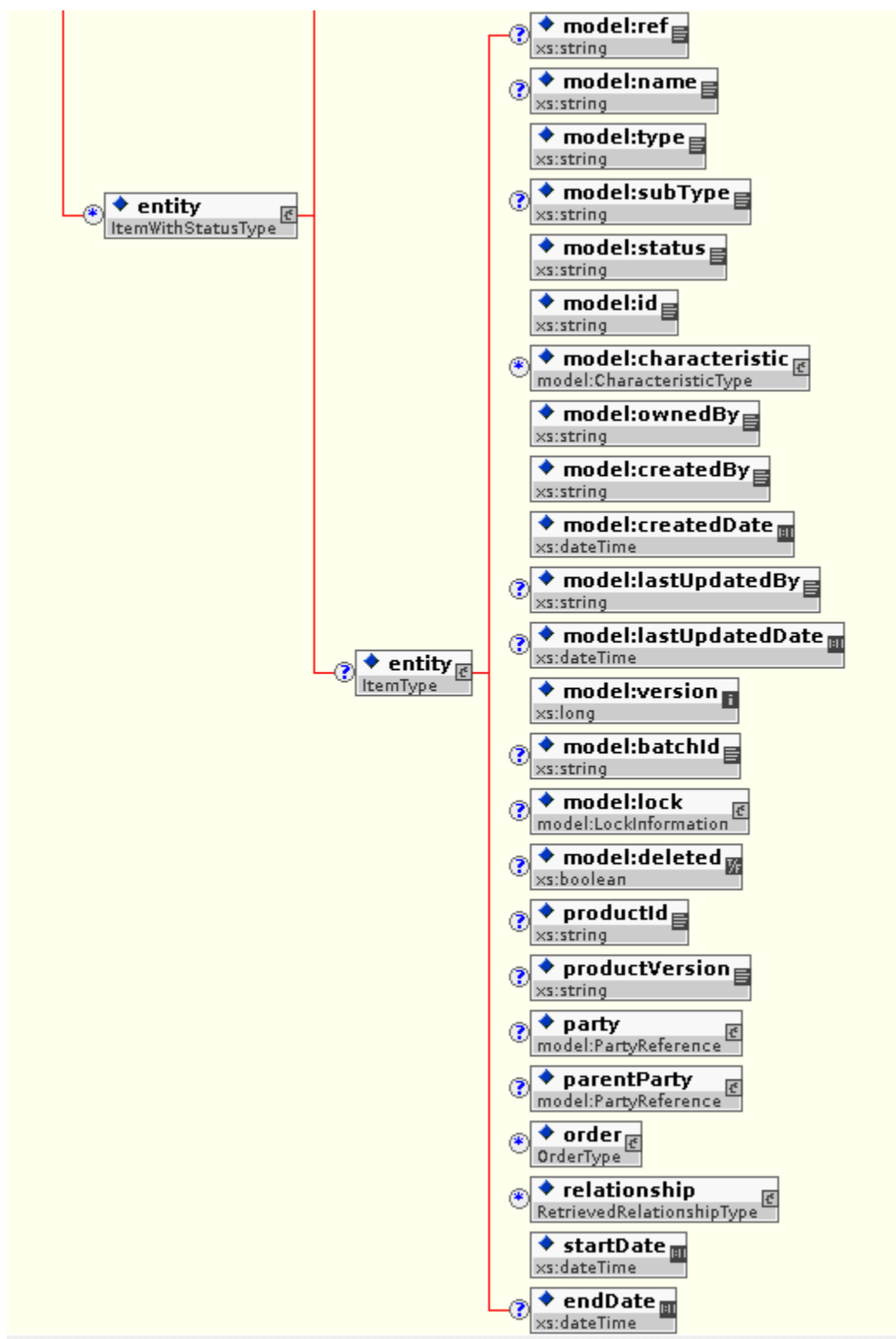
Element	Type	Cardinality	Description
includeChildParties	Boolean	Choice	This indicates if child parties should be returned.
includeChildPartyNames	Boolean	Choice	This indicates if the child party names should be returned.

Get Response

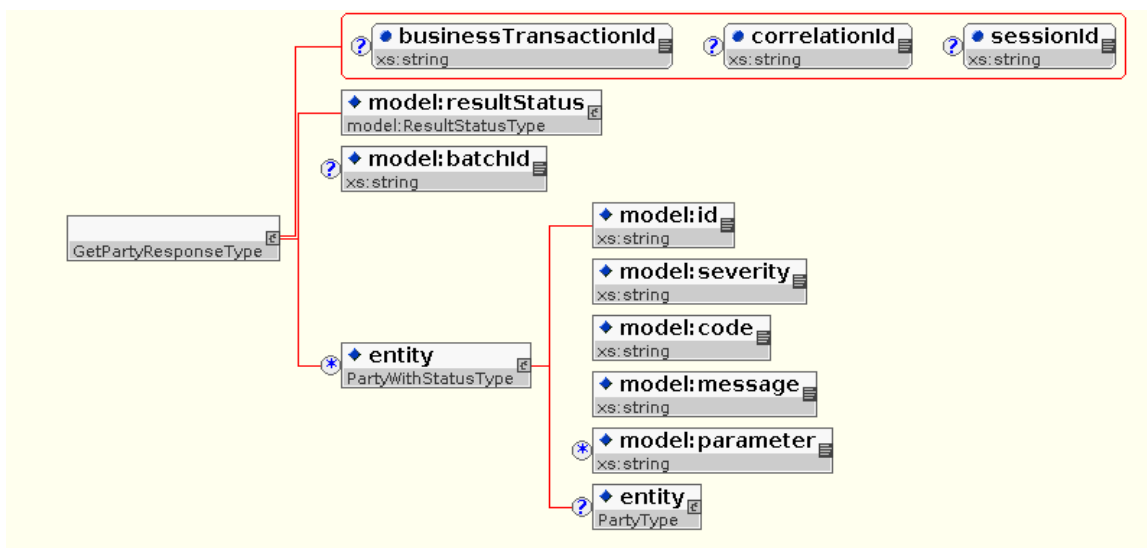
This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation.

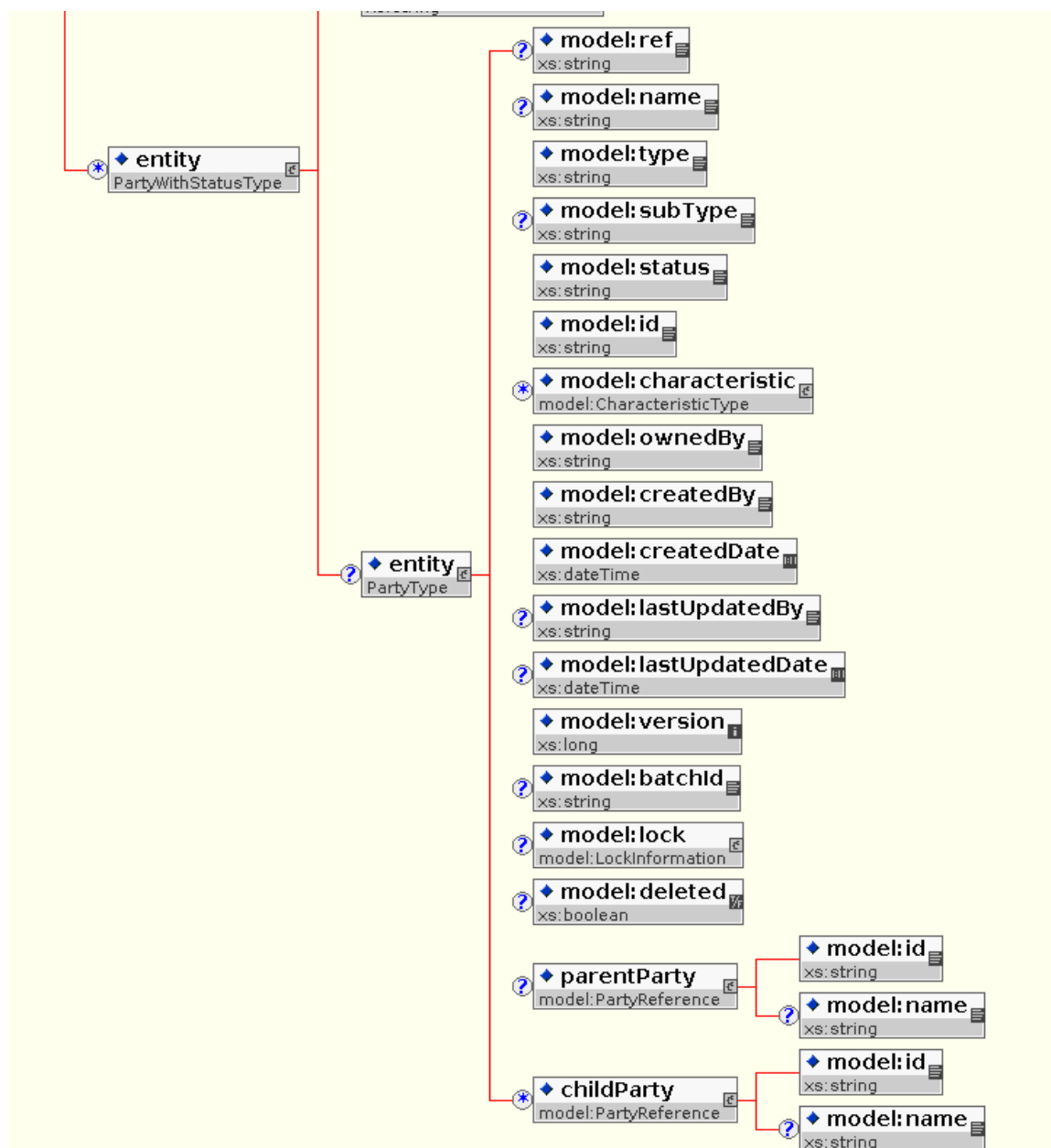
Get Item Response Payload





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 status.

Element	Type	Cardinality	Description
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	This is the entity type of the retrieved entity. If the entity was not found, this will be omitted.
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 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.

Element	Type	Cardinality	Description
entity/entity/ownedBy	String	Optional	This defines who owns the retrieved entity.
entity/entity/createdBy	String	Optional	This defines who 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.
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.

Element	Type	Cardinality	Description
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 retrieved item. See the "Get Order" section in Get Sub Elements for more details on the sub elements of this element.
entity/entity/relationship	RetrievedRelationship Type	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 default (meaning forward relationship). This is used to differentiate forward and reverse relationships when relationships are fetched. Reverse relationship/id will contain the originator item.

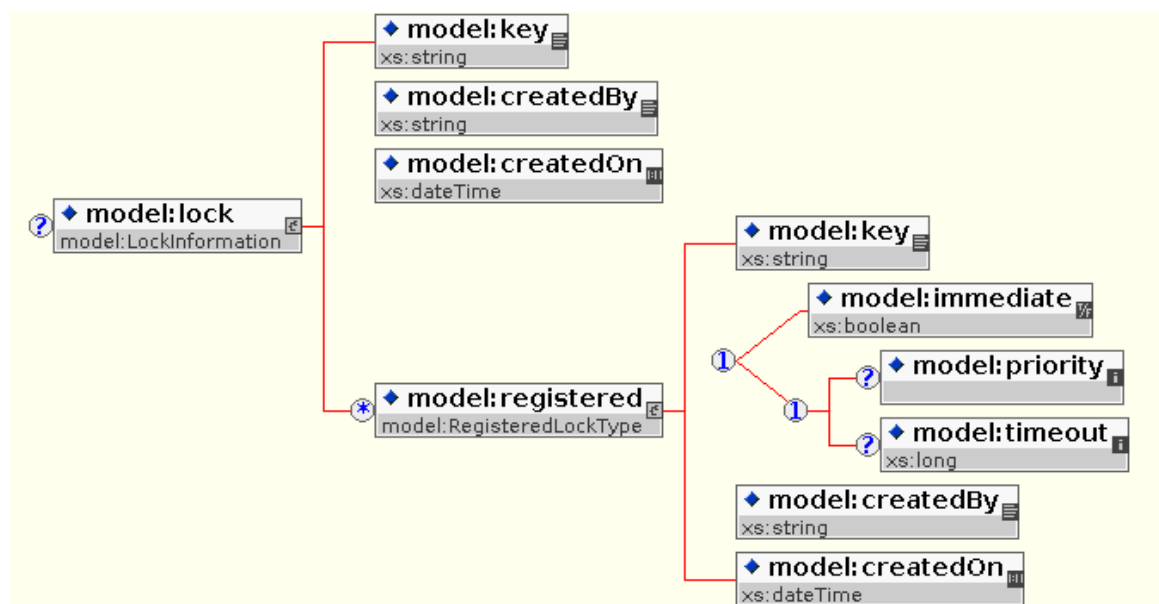
Get Response Body Details for Party Only

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.
childParty/name	String	Optional	This is the child party name associated with the retrieved party.

Get Sub Elements

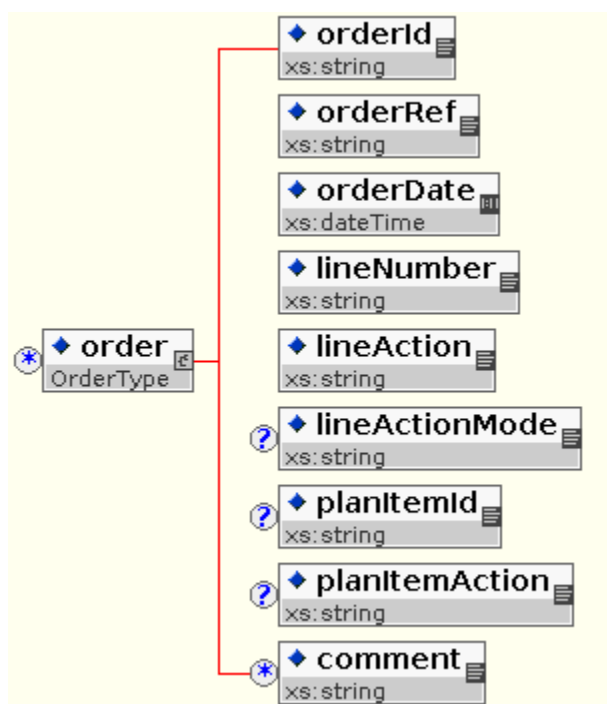
The following are the sub elements for the **get** operation.

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 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 notable addition of createdOn / createdBy (user id) indications.
entity/entity/lock/registered/key	String	Mandatory	This is the key of the registered lock type.
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/createdOn	dateTime	Optional	This indicates the date the registered lock type was created.

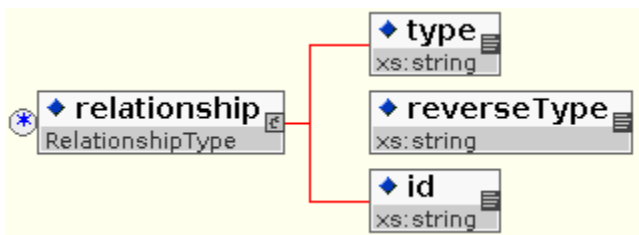
Get Order



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 with the retrieved item.
order/lineActionMode	String	Optional	This is the action mode of the order associated with the retrieved item.

Element	Type	Cardinality	Description
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 of 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 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

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 on 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 will determine whether or not other elements of the update will be applied correctly:

1. Lock the entity using the specified key.

If the entity could not be locked, then the remainder of the update will not occur. An exception will be returned.

2. Validate if all specified unlock keys exist.

If any of the unlock keys do not exist, then the remainder of the update will not occur. An exception will be returned.

3. Apply all other field updates with the exception of 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

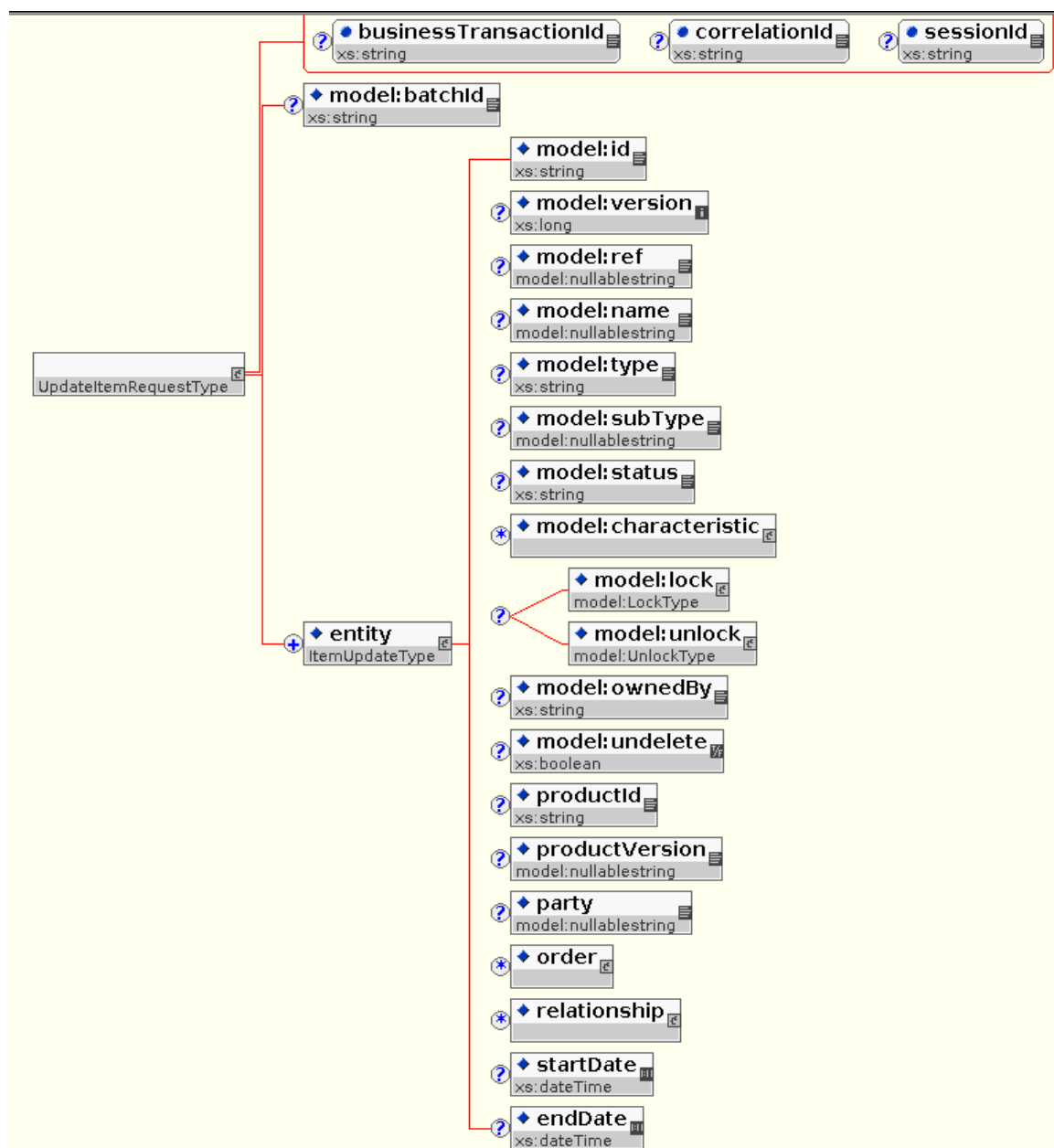
The following table describes performance implications of using this operation:

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

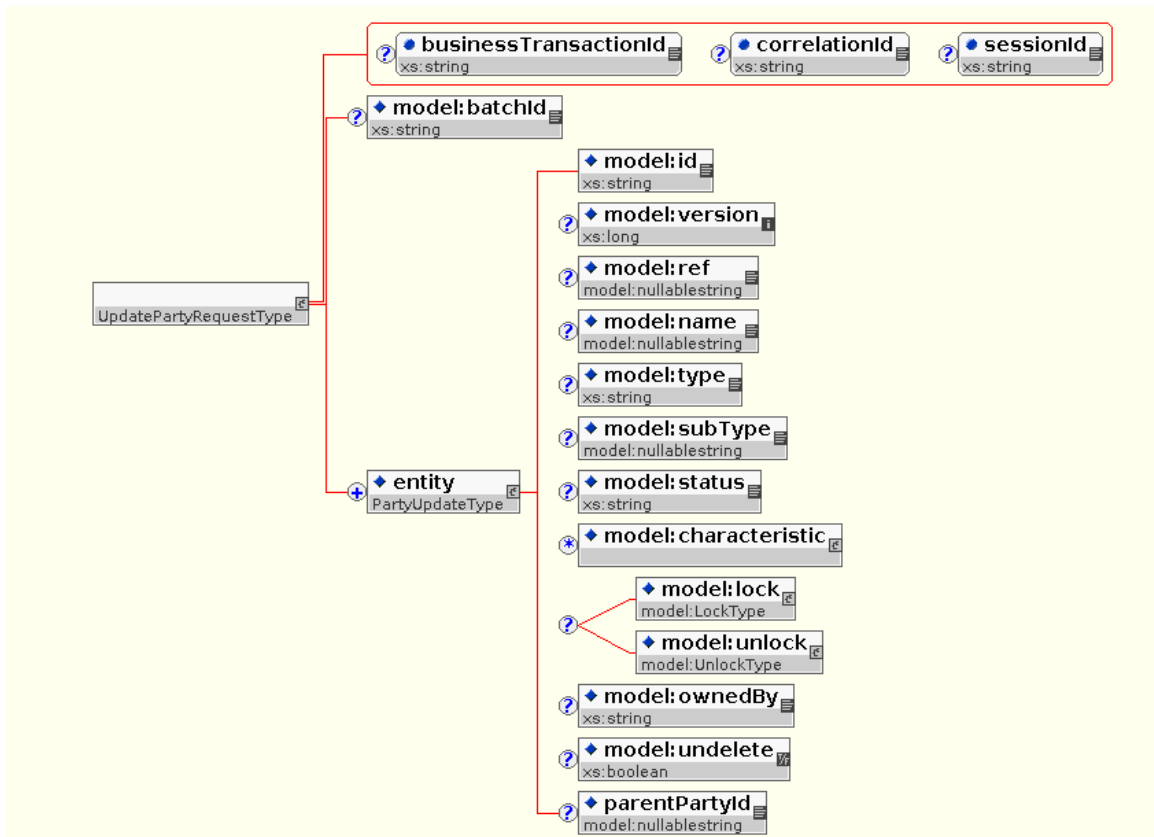
Update Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber 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 update will fail.
entity/ref	Nullable String	Optional	This is the reference of the entity being updated.

Element	Type	Cardinality	Description
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 the sub type of the updated entity.
entity/status	String	Optional	This 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 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 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.

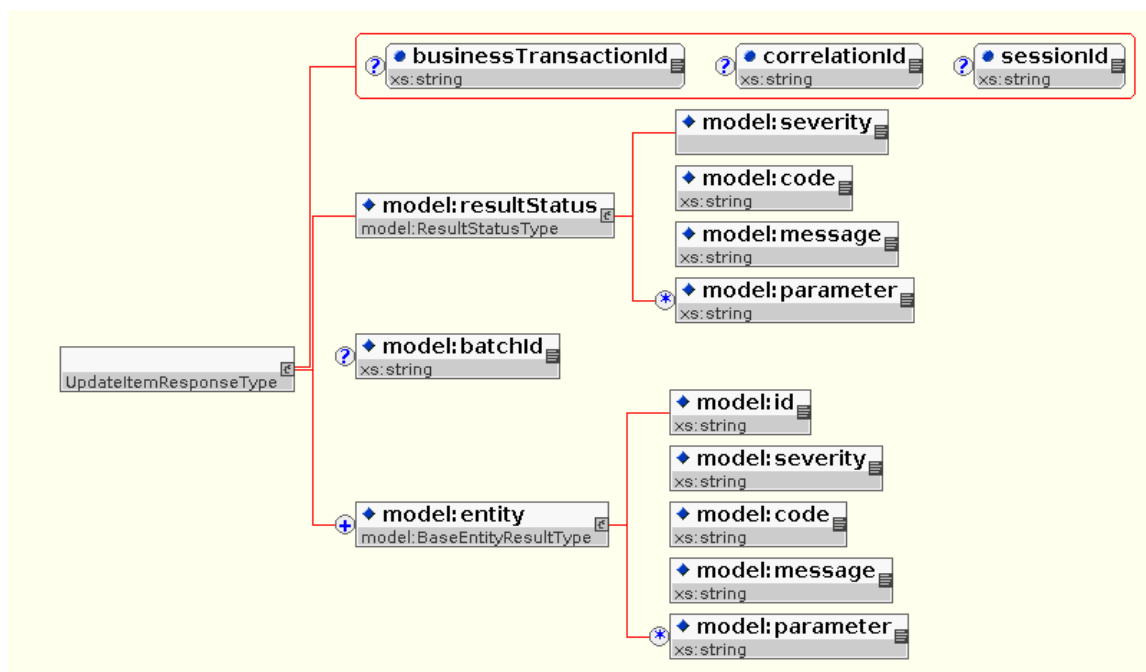
Update Request Body Details for Party Only

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

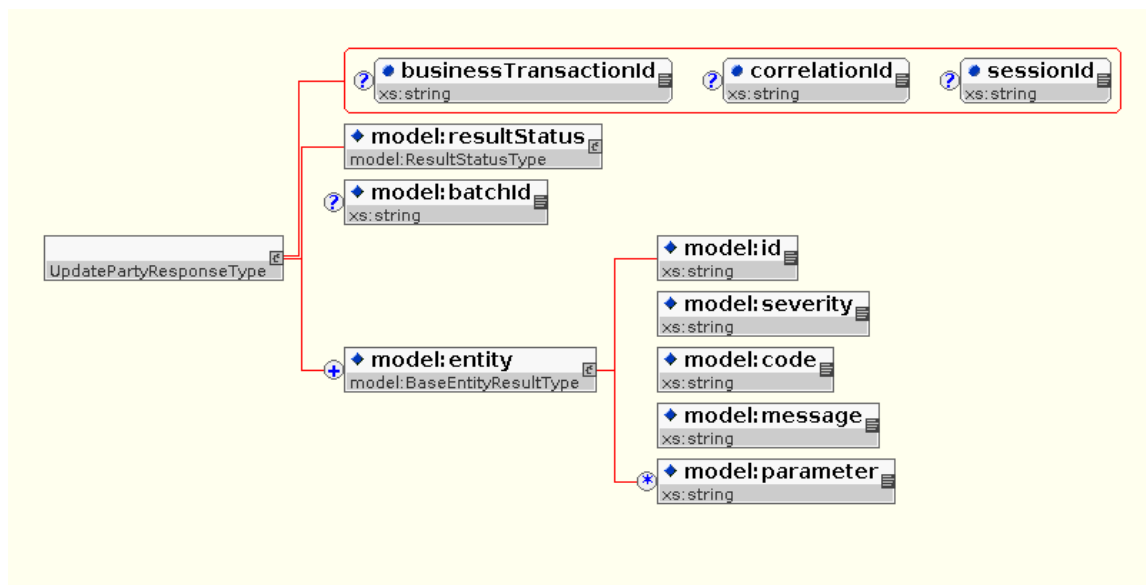
Update Response

This message is sent by the TIBCO Fulfillment Subscriber 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

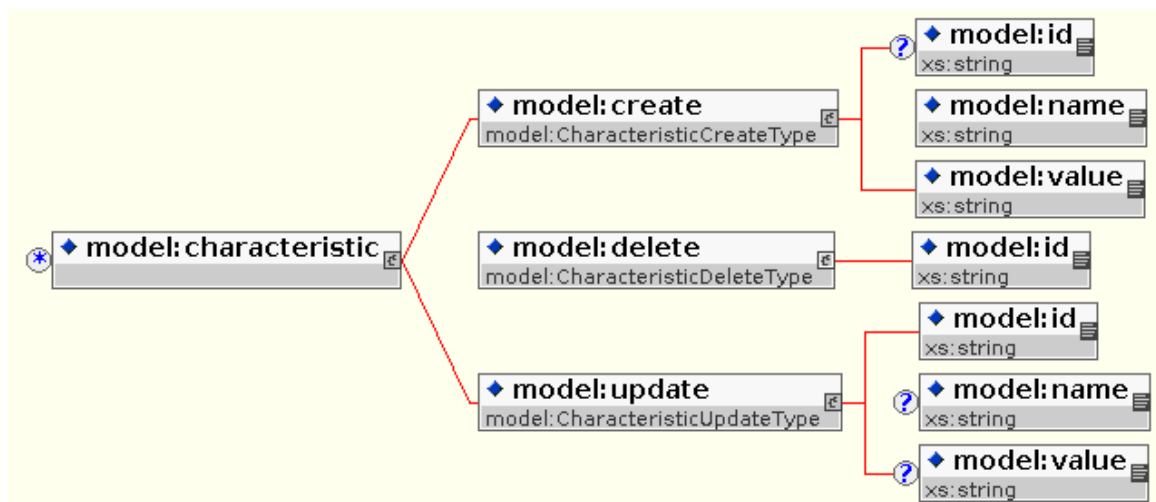
Element	Type	Cardinality	Description
resultStatus	ResultStatusType	Mandatory	This is the result status type and the operation invocation status of the query.
batchId	String	Optional	This is the ID of the batch this update belongs to.

Element	Type	Cardinality	Description
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 will be empty.</p> <p>If any of the entities could be updated, then there will be one entity for each requested update entity. The returned entity order is the same as the original requested item entity.</p>
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.

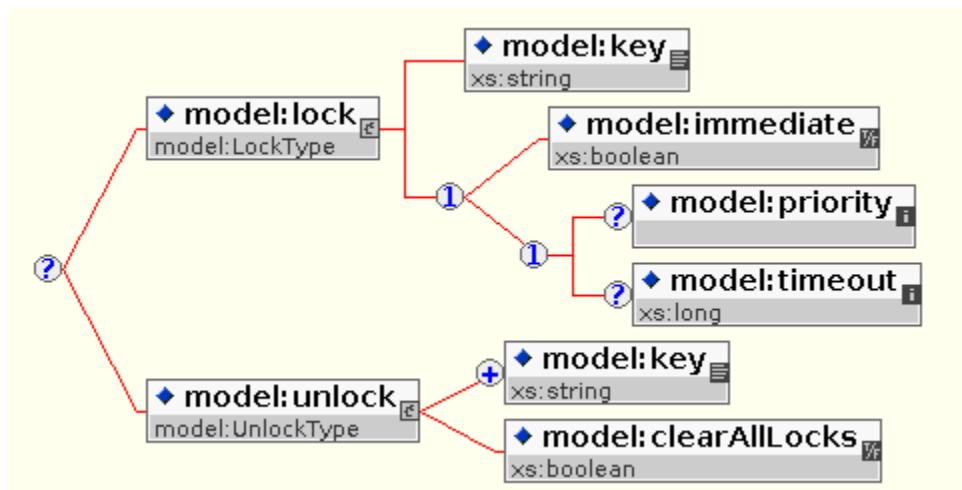
Update Characteristic



Element	Type	Cardinality	Description
entity/characteristic/create	CharacteristicCreateType	Optional	These are the characteristics to create.

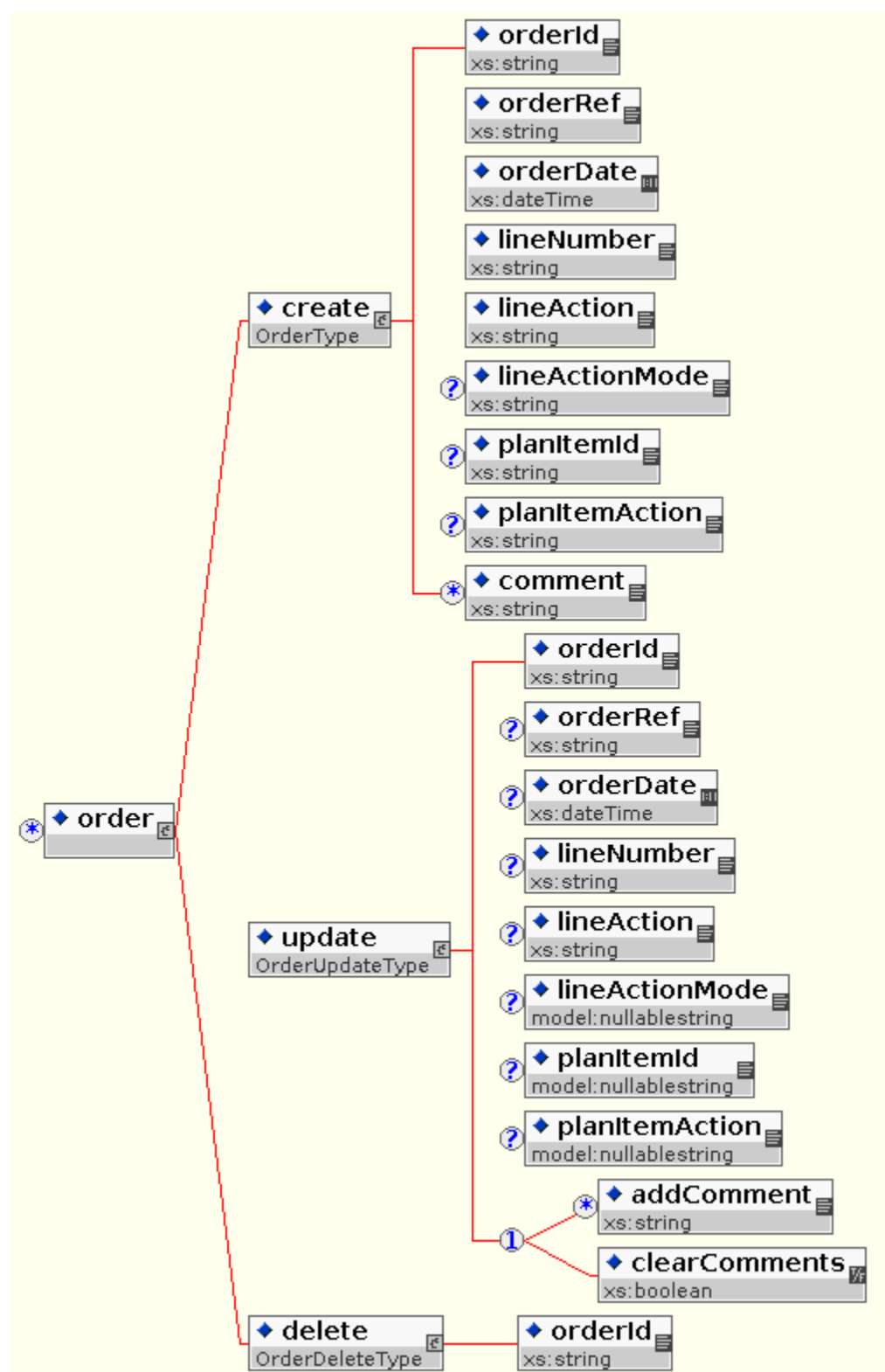
Element	Type	Cardinality	Description
entity/characteristic/create/id	String	Optional	This is the identifier of the characteristic to create.
entity/characteristic/create/name	String	Mandatory	This is the name of the characteristic to create.
entity/characteristic/create/value	String	Mandatory	This is the value of the characteristic to create.
entity/characteristic/delete	CharacteristicDeleteType	Optional	This is the container of the characteristic ID to delete on the item.
entity/characteristic/delete/id	String	Mandatory	Only the ID is required for 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.
entity/characteristic/update/value	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 present in the request, the lock will be delayed. If immediate=true, the lock will be immediate.
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.

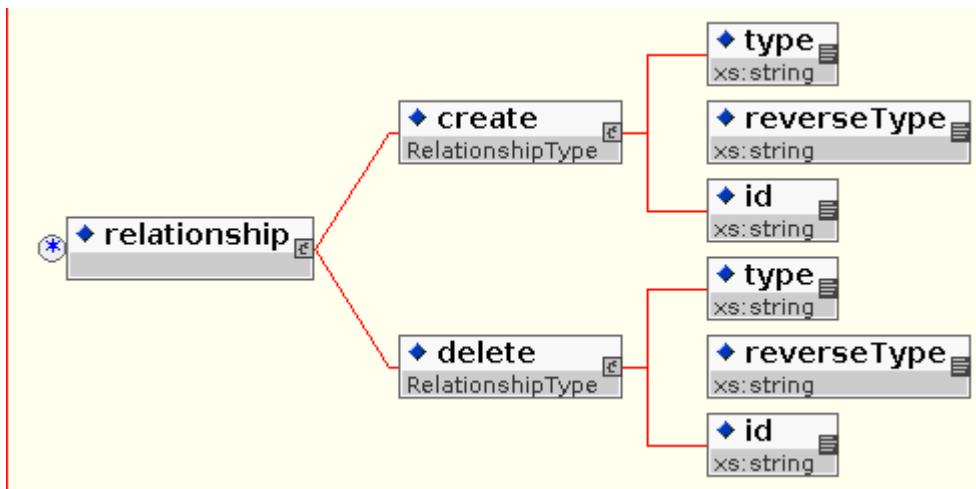
Update Order



Element	Type	Cardinality	Description
entity/order/create	OrderType	Optional	The order to create in the item.
entity/order/create/orderId	String	Mandatory	This is the ID of the order to create.
entity/order/create/orderRef	String	Mandatory	This is the external reference for the order to create.
entity/order/create/orderDate	dateTime	Mandatory	This is the date for the order to create.
entity/order/create/lineNumber	String	Mandatory	This the line referencing the order to create.
entity/order/create/lineAction	String	Mandatory	This is the action of the line referencing the order to create.
entity/order/create/lineActionMode	String	Optional	This is the action mode to create.
entity/order/create/planItemId	String	Optional	This is the planItemId referencing the order to create.
entity/order/create/planItemAction	String	Optional	This is the action for the plan item for the order to create.
entity/order/create/comment	String	Optional (0..N)	This is the list of comments associated with the order to create.
entity/order/update	OrderUpdateType	Optional	This represents a type to update an order. A choice allows clearing all comments or adding new ones. Update can nullify fields or update only specific fields. The omitted fields are not changed.
entity/order/update/orderId	String	Mandatory	This is the ID of the order to update.

Element	Type	Cardinality	Description
entity/order/update/ orderRef	String	Mandatory	This is the external reference for the updated order.
entity/order/update/ orderDate	dateTime	Mandatory	This is the date for the updated order.
entity/order/update/ lineNumber	String	Mandatory	This the line referencing the updated order.
entity/order/update/ lineAction	String	Mandatory	This is the action of the line referencing the updated order.
entity/order/update/ lineActionMode	String	Optional	This is the action mode for updated order.
entity/order/update/ planItemId	String	Optional	This is the planItemId for the update order.
entity/order/update/ planItemAction	String	Optional	This is the action for the plan item for the updated order.
entity/order/update/ comment	String	Optional (0..N)	This is the list of comments associated with the updated order.
entity/order/delete	OrderDeleteType	Optional	To delete an order, only the order id is needed.
entity/order/delete/id	String	Mandatory	This is the ID of the order to delete.

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 the relationship to create.
entity/relationship/create/reverseType	String	Mandatory	This is the reverse type of the relationship to create.
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 the 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 should 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 should 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 record 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 pre-defined fields in either an ascending or descending order.

Pagination does not create a recordset on the server. In order 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 in 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 performance implications of using this operation:

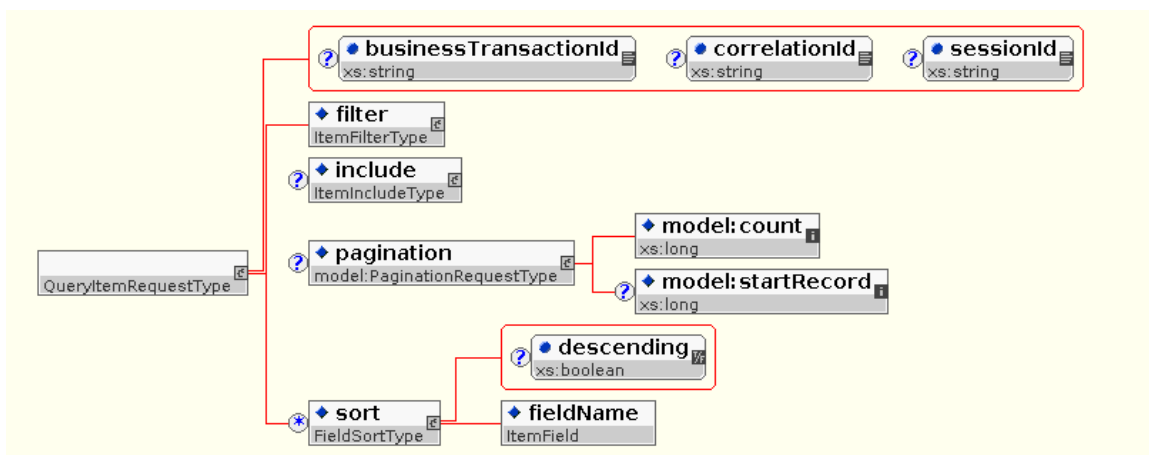
Activity	Impact	Description
Querying using case insensitive	Low	Case insensitive queries append LOWER function to the SQL statement.
Querying with parent party filter	High	The parent party filter appends a sub-SELECT condition to the WHERE clause of the SQL statement.
Including parent party items	Low	Including parent party items is only relevant if querying using a parent party filter. Setting this flag has a low incremental impact over the high impact of filtering by 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.
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 names requires a query against the database.

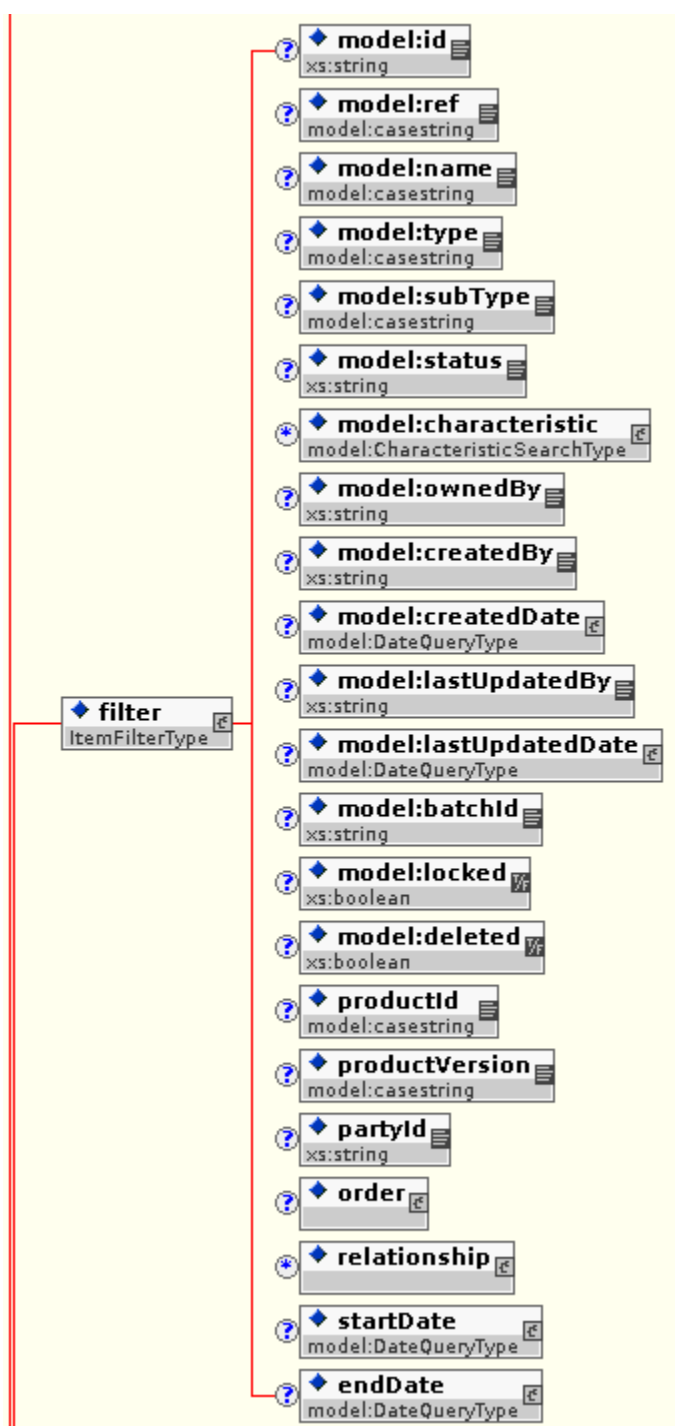
Activity	Impact	Description
Including parent party	High	Including parent parties requires a query against the database.
Including parent party name	Low	Including parent party is only relevant if parent parties are included. Setting this flag has a low incremental impact over the high impact of including 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 relationship types	Low	Including relationships increases the size of the response 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 will another SELECT statement based on row number.
Sorting by multiple fields	Low	Each sort field is added to the SQL as part of the ORDER BY clause.

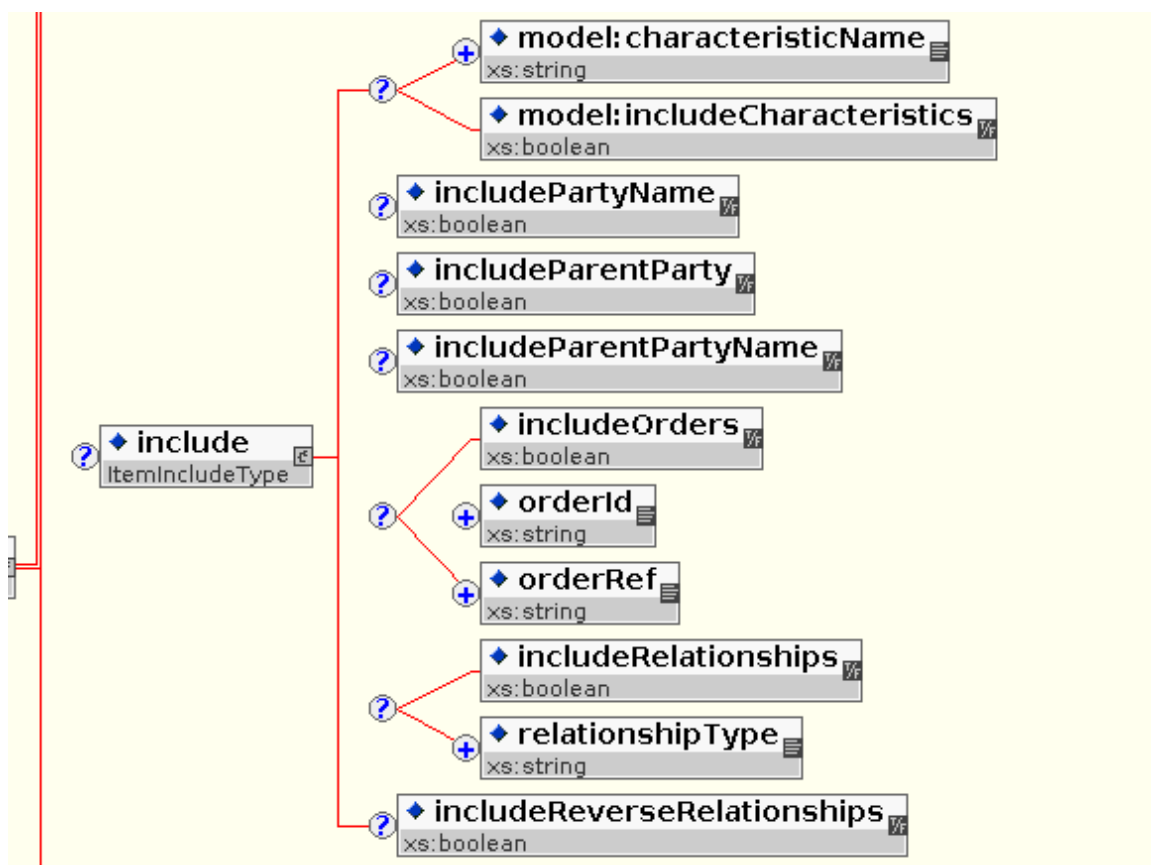
Query Request

This message is sent by the client application to the TIBCO Fulfillment Subscriber Inventory system.

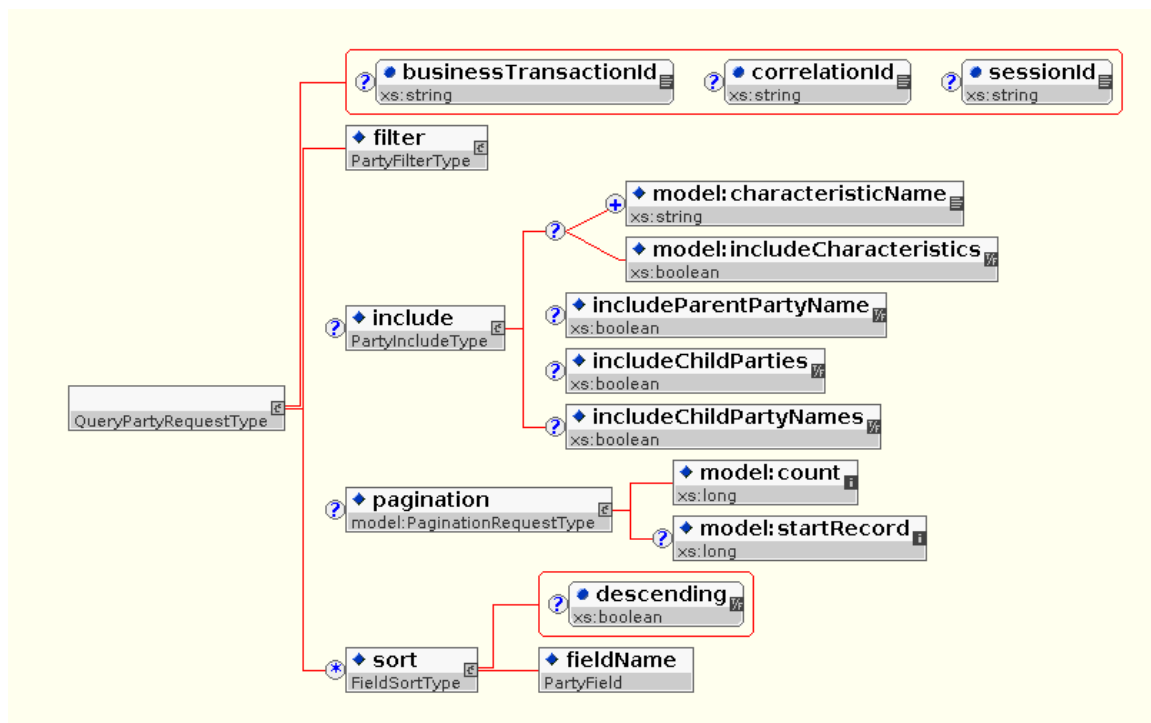
Query Item Request Payload







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 to include in the query.
include/ includeCharacteristics	Boolean	Optional	This indicates if characteristics should be returned.
include/ includeParentParty	Boolean	Optional	This indicates if the parent party should be returned.
pagination	PaginationRequestType	Optional	This is the pagination request.
pagination/count	long	Optional	This is how many records should be returned.
pagination/startRecord	long	Optional	This defines the index of the record to return first.

Element	Type	Cardinality	Description
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 • subtype • status • ownedBy • createdBy • 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 fields 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.
filter/subType	CaseString	Optional	This is the entity sub type filter for the query.

Element	Type	Cardinality	Description
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.
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.

Element	Type	Cardinality	Description
filter/deleted	Boolean	Optional	<p>If this element is true and an item has been logically deleted, it will be returned.</p> <p>If this element is false or omitted and an item has been logically deleted, it will not be returned.</p> <p>If an item has been physically deleted using the Purge operation, it will not be 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.

Element	Type	Cardinality	Description
filter/startDate	DateQueryType	Optional	This is the start date filter for the query. See the "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 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.

Element	Type	Cardinality	Description
include/ includeParentPartyName	Boolean	Optional	This indicates if the parent party name is returned.
include/includeOrders	Boolean	Optional	This indicates if orders associated with the item 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 include in the query.
include/ includeRelationships	Boolean	Optional	This indicates if relationships should 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 should be returned.

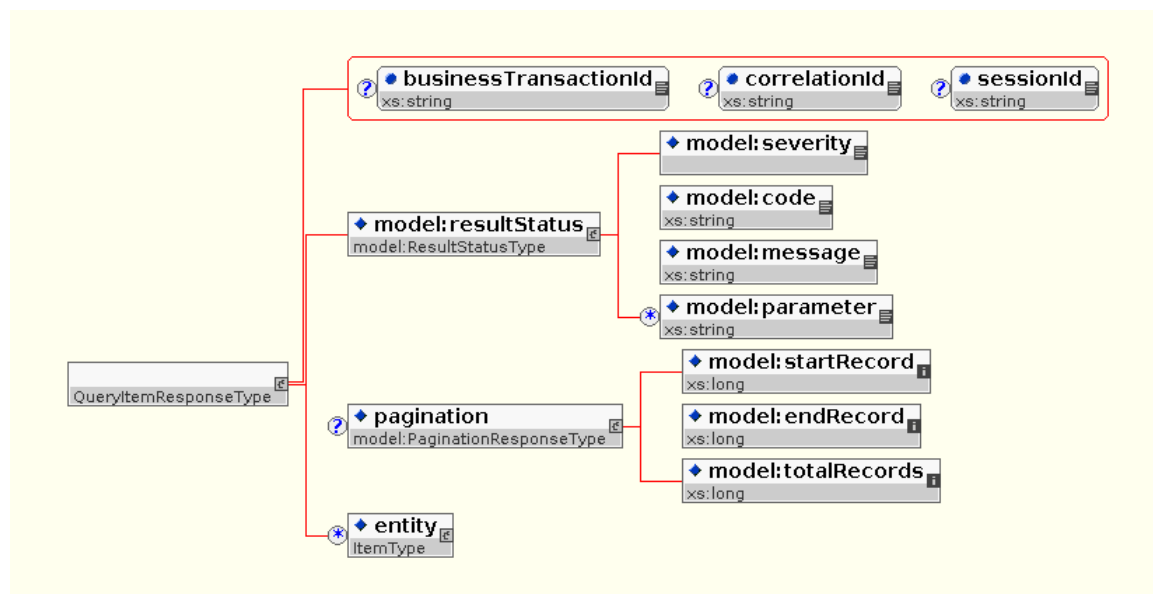
Query Request Body Details for Party Only

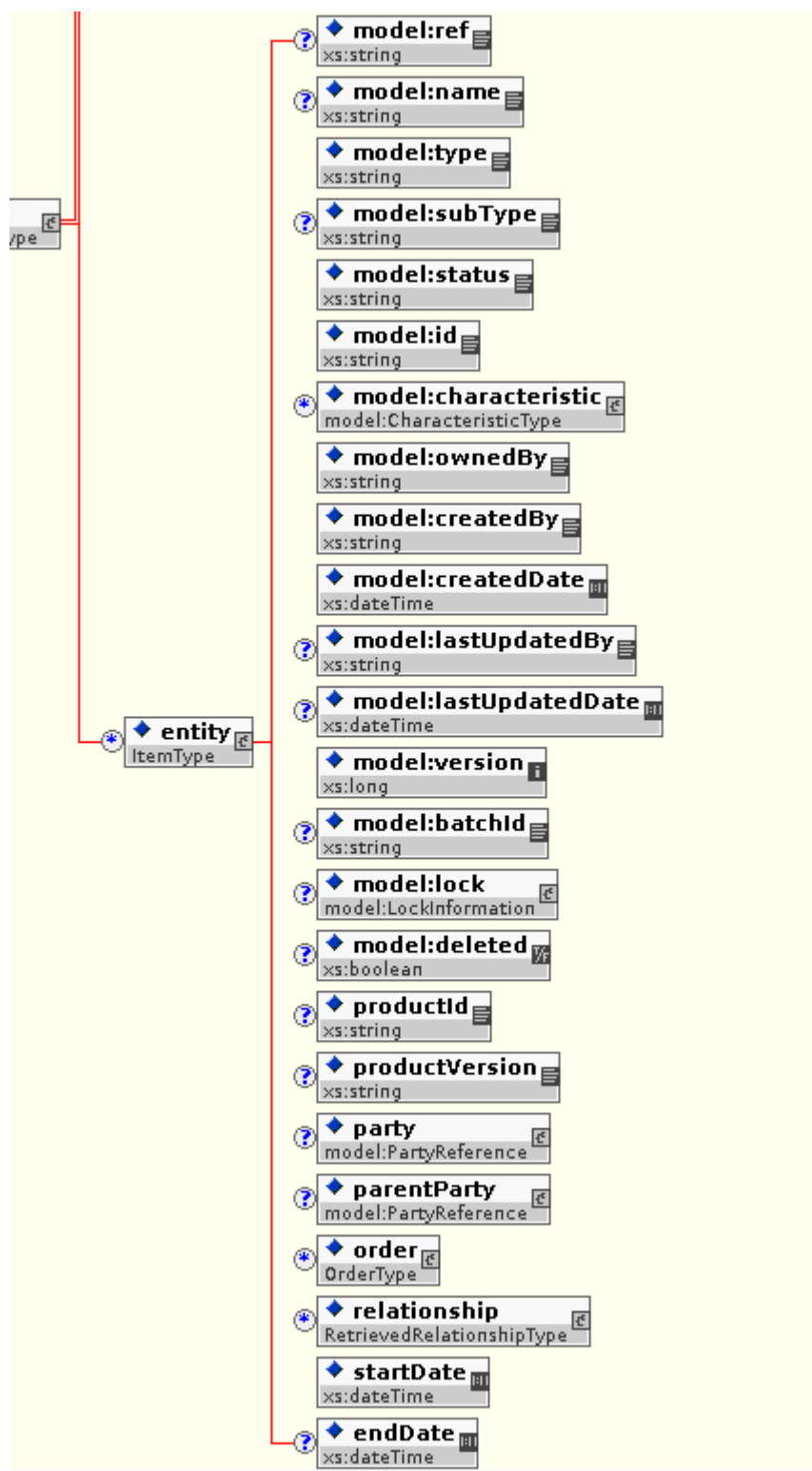
Element	Type	Cardinality	Description
include/ includeChildParties	Boolean	Optional	This indicates if child parties should be returned.
include/ includeChildPartyNames	Boolean	Optional	This indicates if child party names should be returned.
filter/characteristic/ value	CaseString	Optional	This is the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

Query Response

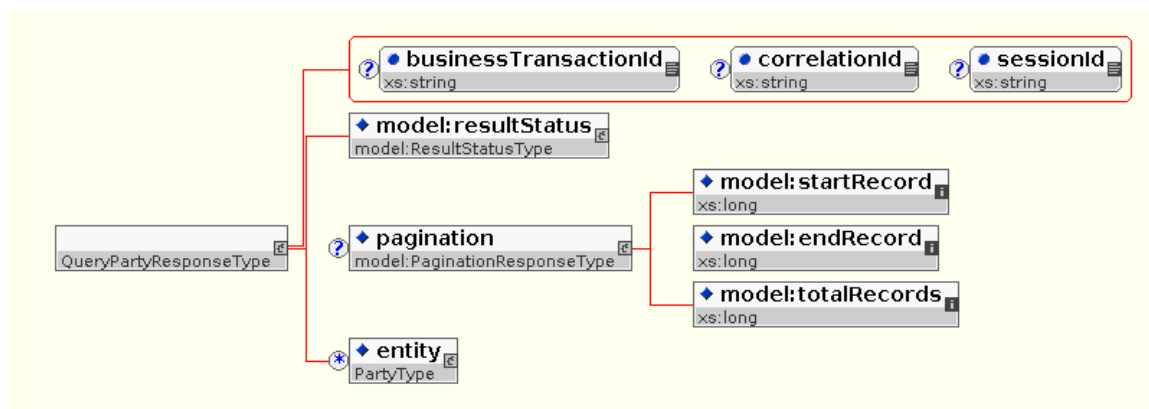
This message is sent by the TIBCO Fulfillment Subscriber Inventory system to the requesting application to return the results of the operation invocation.

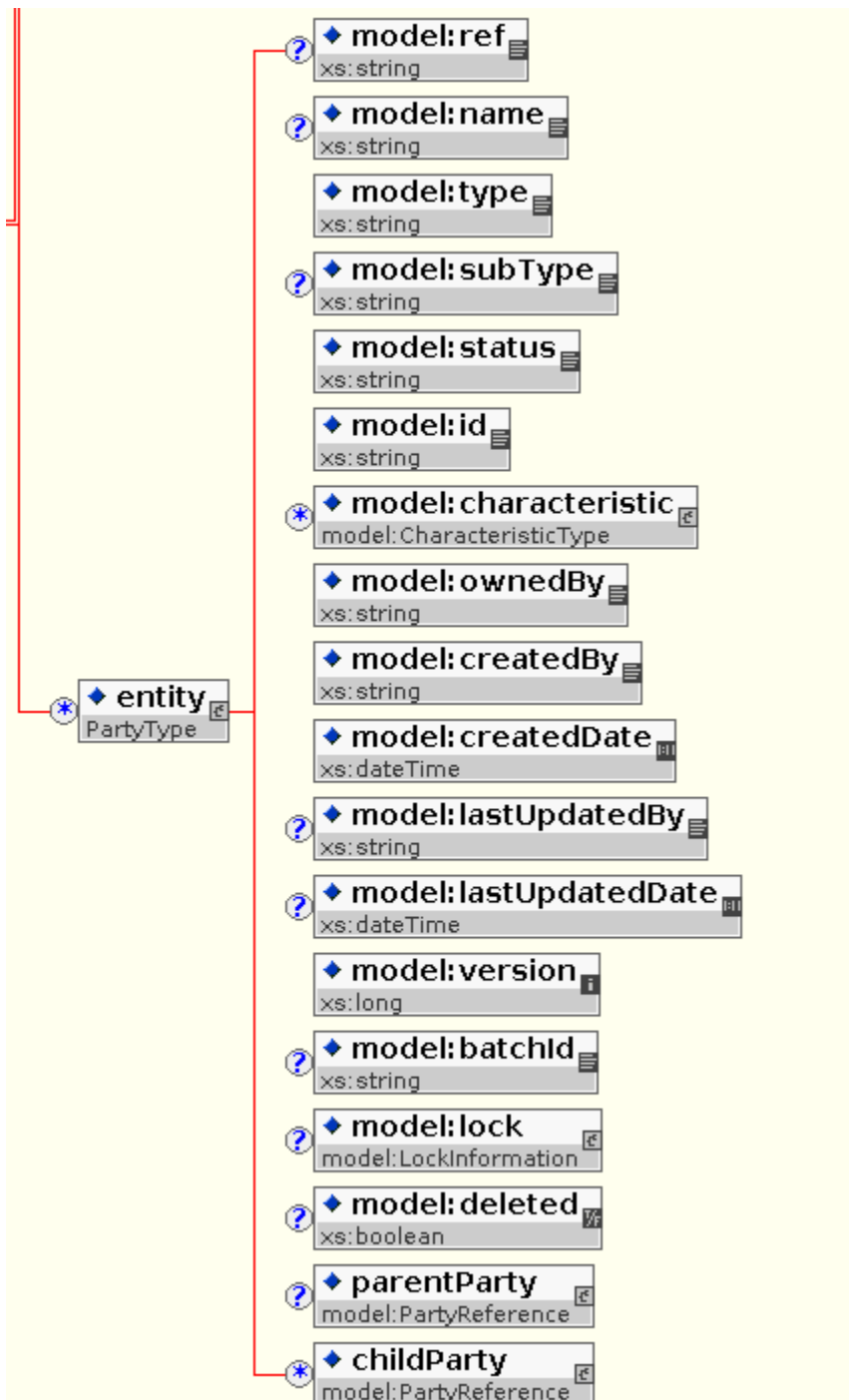
Query Item Response Payload





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.

Element	Type	Cardinality	Description
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 of the retrieved entity.
entity/type	String	Optional	This is the type of the retrieved entity.
entity/subType	String	Optional	This the sub type 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.

Element	Type	Cardinality	Description
entity/createdDate	dateTime	Optional	This defines the date the retrieved entity was created.
entity/lastUpdatedBy	String	Optional	This defines who last updated the retrieved entity.
entity/ lastUpdatedDate	String	Optional	This defines date 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 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.

Element	Type	Cardinality	Description
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	RetrievedRelationship Type	Optional	This is the relationship type associated with 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.

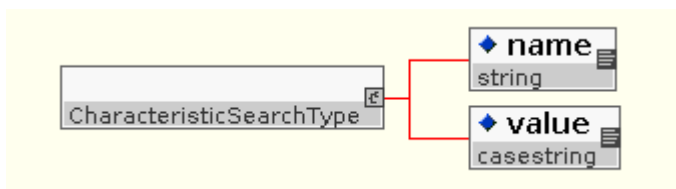
Query Response Body Details for Party Only

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

Query Sub Elements

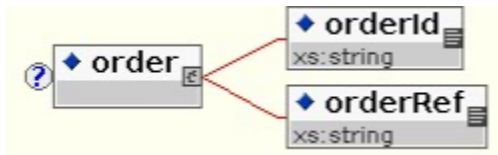
The following are the sub elements for the **query** operation.

Characteristic Filter



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

Order Filter



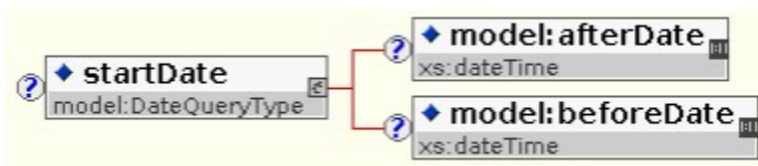
Element	Type	Cardinality	Description
filter/order/orderId	String	Mandatory	This is to retrieve the order associated with the specified ID.
filter/order/orderRef	String	Mandatory	This is to retrieve the order associated with the specified external reference.

Relationship Filter



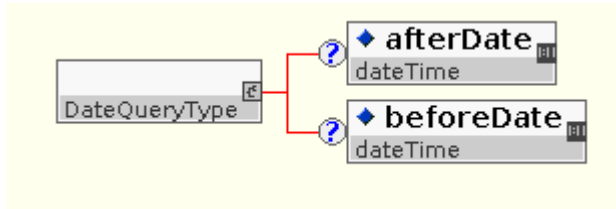
Element	Type	Cardinality	Description
filter/relationship/type	String	Mandatory	This defines a filter on the forward type of a relationship.
filter/relationship/id	String	Mandatory	This defines a filter on the item ID of a related item.

DateQueryType Filter

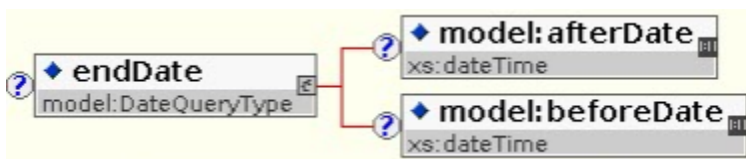


Element	Type	Cardinality	Description
filter/startDate/ afterDate	dateTime	Mandatory	This is to retrieve elements after the specified date.

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



Element	Type	Cardinality	Description
filter/createdDate/ afterDate	dateTime	Optional	This will set the search to refer to elements after the specified created date.
filter/characteristic/ beforeDate	dateTime	Optional	This will set 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 place holders 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 following key: '%1s'.
0117	Entity is not locked for lock key '%1s'. Cannot unlock.
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'.

Access Related Response Codes and Messages

Code	Message
20001	Could not find user with given credentials or tenant
20002	User does not have authority to perform this action
20003	Token is invalid. Reason : '%1s'

Administration Related Response Codes and Messages

Code	Message
30001	User already exists '%1s'

Code	Message
30002	User does not exist '%1s'
30003	Cannot delete current user '%1s'
30003	Cannot delete super admin user '%1s'
30004	Cannot remove permission from current user '%1s'
30005	Cannot remove permission '%1s'
30011	User role already exists '%1s'
30012	User role does not exist '%1s'
30013	Cannot update super admin role '%1s'
30014	Cannot grant permission '%1s'
30015	Cannot delete user role as users are using it '%1s'
30021	Tenant already exists '%1s'
30022	Tenant already exists '%1s'
30023	Tenant still contains items or parties: '%1s'
30024	Tenant cannot be deleted (supports superadmin user): '%1s'