

**Oracle® Hospitality OPERA Exchange
Interface**
Block XML Specifications

October 2017

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Preface

This document describes the Block XML schema layout and data elements used for the OPERA Xchange Interface. It further explains the mapping of the XML data elements into the OPERA application and the generic business rules that are applied.

Audience

This document is intended for those developing custom applications that interact with Block XML functionality in OPERA through OXI.

Customer Support

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When contacting Customer Support, please provide the following:

- Product version and program/module name
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- Exact error message received and any associated log files
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at
<http://docs.oracle.com/en/industries/hospitality/>

1 Introduction

In the following document we will refer to the third party system as 'external system'. Third Party Systems can be central reservation systems, property management systems, or others. The OPERA applications will be referred to as 'OPERA'. Please note that OPERA can function as single property OPERA, multi property OPERA, or as central system OPERA. The respective differences between these OPERA flavors will be addressed where necessary. The OPERA Xchange Interface will be referred to as 'OXI'.

The specifications in this document are based on the XML schema version 2.0.

Functional Specifications Blocks Object

The block XML message has two elements that determine whether a block is inventory deductible and open for pickup: **InventoryBlockStatusType** determines whether the block shall be deductible and **MfBlockType** determines whether the block is open for pickup.

XML tag InventoryBlockStat usType	XML tag MfBlockType	Deductible in OPERA?	Open for pickup in OPERA?
INITIAL	FORCE	No	No
INITIAL	ELASTIC	No	Yes and set to elastic
INITIAL	NON-ELASTIC	No	Yes and set to non-elastic
ACTIVE	FORCE	Yes	No
ACTIVE	ELASTIC	Yes	Yes and set to elastic
ACTIVE	NON-ELASTIC	Yes	Yes and set to non-
DEACTIVATED	Any type	Does not change OPERA status, but the block is deactivated.	Block is deactivated
RELEASE	Any type	Remaining inventory is released but block is still active and the status is not changing.	Remains as is
CANCEL	Any type	Block is canceled.	Remains as is

2 OXI Parameters that Affect Block Messages

Parameter_Name	Parameter_Value	Description
CRS_BLOCK_GE NERATES_INVE NTORY	Y/N	-> Direction: Data from external system to OPERA. When a block message from CRS is received, OXI will generate inventory snapshots for the affected dates and room types.
EXTERNAL_LO CKED_YN	Y/N	-> Direction: Data from external system to OPERA. The system creating the block can remain the owner of it, which means the block can only be modified by the originating system. This parameter is used only to establish initial control during block creation. To relinquish or regain control on subsequent updates, external systems have to send "UNLOCK"/"LOCK" messages. The block shall remain in its existing external_locked state until any such "UNLOCK"/"LOCK" message is received. Set this parameter to 'Y' if the block created by the external system shall be locked in OPERA and cannot be modified by OPERA users. Set to 'N' if the block created by the external system shall be fully changeable in OPERA.

HANDLE_BLOC K_SOLD	LOV	<p>-> Direction: Data from external system to OPERA (EXT_SYS->OPERA). Update block sold count from external system when sent to OPERA. This assumes that the external system has all block reservations but OPERA not. In this case we need a sold count update as part of the block messages.</p> <p>-> Direction: Data both ways between external system and OPERA (NONE). Block sold counts will not be transmitted between the systems. Use this if both systems transmit full reservations both ways, including block reservations. In this case an additional sold count update in the block message is not necessary.</p> <p>-> Direction: Data from OPERA to external system (OPERA->EXT_SYS). Send block sold counts from OPERA to external system. This assumes that OPERA has all block reservations but external system has not. In this case we need to send a sold count update as part of the block messages.</p> <p>-> Direction: Data both ways between external system and OPERA (TRANSMIT_BOTH_WAYS). Update block sold counts from external system when sent to OPERA, and also return sold counts to external system. Use this if block reservations are not transmitted between the systems at all. In this case the block messages must mutually update the sold counts.</p>
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HANDLE_MASTER_BLOCKS	Y/N	<p>-> Direction: Data both ways between external system and OPERA.</p> <p>OPERA has the ability to convert a single block into a master block, which is used when multiple sub blocks are linked to one block as master. A common scenario for this is a tour series, in which a former single block becomes a master block from which all tour series copies are made. The master block is visibly flagged as such in OPERA and has no inventory. A sub block is linked to a master block through the master block ID. If this parameter is set to 'Y', OXI will send master blocks in OPERA with the respective flags so that the external system can apply the same logic. Sub blocks are sent with the master block ID and need to be linked properly to the master block in the receiving system again, where the master could have a separate ID. If the external system is not capable of handling master and sub blocks, this parameter should be set to 'N'. In this case OXI sends a block cancel in case a block converts into a master, to make sure that the external system releases the inventory from that block accordingly. All sub blocks in OPERA will be sent as normal single blocks without master block ID to such an external system.</p>
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SPECIFIC_BLOC_K_EXCHANGE	Y/N	<p>-> Direction: Data between External System to OPERA and OPERA to External System.</p> <p>This parameter determines if conditions can be applied to determine which allotments and related reservations are exchanged with the external system. This parameter is an additional condition and does not enable the exchange of reservations and allotments. Its function is conditional to all other configuration items and parameters related to allotments and reservations.</p> <ul style="list-style-type: none"> - If this parameter is set to 'Y', it will enable a button 'OXI' on OPERA Block form. This button will allow selection of any external system where the parameter is set to 'Y'. When an external system has been selected on the allotment form, this block and all reservations related to that block will be sent to the external system. - If this parameter is set to 'N', all allotments and related reservations will be exchanged with the external system. <p>For external systems that derive their inventory from the exchange of block and reservation information (Examples: MyFidelio Pegasus), this parameter MUST be set to N.</p>
SPLIT_INV_DETAILS	Y/N	<p>-> Direction: Data from OPERA to external system.</p> <p>If 'Y', OXI will split the block inventory detail message into multiple chunks of size less than 32K.</p> <p>If 'N', OXI will send the entire inventory detail message to the external system.</p>
UPL_CATERING_BLOCKS	Y/N	<p>-> Direction: Data from OPERA to external system.</p> <p>Blocks can be flagged as 'Catering' in OPERA. Set this parameter to 'Y' if you wish to send catering only blocks to the external system. If set to 'N', catering only blocks will be suppressed from sending to the external system.</p>

UPL_DED_ONL Y	Y/N	<p>-> Direction: Data from OPERA to external system.</p> <p>If the external system does not distinguish between deductible and non-deductible blocks, you may want to suppress non-deductible blocks from sending, as these would affect the other system's inventory directly and cause inventory imbalances. In such a case you would set this parameter to 'Y' and OXI will only send deductible blocks. If the external system has a similar concept of handling deductible and non-deductible blocks, you can set this parameter to 'N' and OXI will send all blocks regardless of their status. In OPERA, the block status code determines whether a block is considered deductible. Please check the OPERA block status configuration for further information.</p>
UPL_OPEN_ON LY	Y/N	<p>-> Direction: Data from OPERA to external system.</p> <p>If the external system does not have a concept of 'open for pickup' blocks, you may want to suppress non-open blocks from sending, as these would still allow pickup in the other system and cause inventory imbalances when a reservation is sent to non-open block in OPERA. In such a case you would set this parameter to 'Y' and OXI will only send open for pickup blocks. If the external system has a similar concept of open for pickup blocks, you can set this parameter to 'N' and OXI will send all blocks regardless of their status. An open for pickup block is defined by its status. Please check the OPERA block status configuration for further information.</p>

WAIT_FOR_BLO CK_EXT_REF	Y/N	<p>-> Direction: Data from OPERA to external system.</p> <p>If a block is created in OPERA, OXI can send the block header first and expect a result message with the external system's confirmation number. Only once this confirmation is received would OXI send the block details, as it is now safe to assume that the block details would be accepted by the external system as well. This external confirmation can even be displayed on the block header, ensuring OPERA users that they can pick up reservations from a block without problems, as the external system knows the block as well. Set the parameter to 'Y' if block transmissions shall be handled like this. Set the parameter to 'N' if the external system does not return a response, or if it can safely handle block header and details at the same time.</p>
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Blocks from External System to OPERA

Block header information is always considered a full overlay to the existing information in OPERA.

Block details can be delivered in the same message as the block header or as separate messages that contain information on the detail changes only. When receiving a block message from the external system, OXI determines which status to apply to the block in OPERA based on the combination of InventoryBlockStatusType and MfBlockType. This combination determines whether the block is deductible from the inventory and open for pickup, as shown in the table in the section earlier. OXI will then try to find a status for the OPERA block that matches the incoming block conditions and the 'status flow' that OPERA has configured.

Sample: A block can have the following status flow: initial->option->definite->cancel. This means it is not possible to jump from cancel to definite or from definite to initial, as the flow does not allow this. If for any reason the external system sends a block condition equivalent to status 'initial' even though the OPERA block is already in status 'definite', OXI will use the OXI block status default. This means that the block may end up with different conditions in OPERA and external system, however we cannot change a block status against its natural flow.

OXI offers defaults and conversion tables for the block data from the external system.

Options and Restrictions for Blocks from External System to OPERA

- All blocks are considered open for pickup and deductible from inventory when they are received in OPERA.
- Blocks can be sent with or without inventory. In case no inventory is sent, the block is created as elastic block, which automatically adds inventory once a reservation is picked-up.
- If the OXI group parameter EXTERNAL_LOCKED is set to 'Y', blocks created in the external system cannot be changed in OPERA, as the block will be created as 'external system locked'. Only a few fields can still be modified by the OPERA user at that time:
 - Info
 - Grids will be view only
 - Profiles can be updated and changed
 - Summary
 - Traces
 - Create Tour Series
 - Changes can be viewed only
 - Open for pickup-> the block status can still be changed when the block is locked
 - Priorities
 - Cutoff
- If a block is elastic in OPERA, reservations can be accepted with arrival and/or departure date outside the block dates. OXI will simply expand the block dates to cover the reservation. Sell Limits will also be considered in the allowance of days beyond the block core dates, and how the inventory will be released back to the house.
- OPERA expects a group profile to be linked to the block, as this is necessary for pickup. If the external system does not send a group profile along with the block, OXI will create the same from the group name and link this group profile to the block in OPERA. This Group Profile will be part of the block and exchanged as such within the messaging to and from the external system.
- If a block is released or cut-off, the external system has to send a release message to OPERA. These rooms are given back to the house inventory.
- Every reservation that is picked up at the external system for a block will be sent to OPERA and adjust the house and block availability accordingly.

Pickup of Reservations from a Block

- If a reservation is sent for a block and the block code is not found in OPERA, the reservation will be taken from the OPERA house inventory. Users will be prompted in the form if they would like to Borrow from house availability. Depending on OXI parameters, the reservation will be assigned default information as set-up in the OXI Interface Defaults. A warning will be issued to notify OPERA users.
- If a block is sold out in OPERA, the reservation will still be picked up from the block as it can be overbooked in OPERA. A warning will be issued to notify OPERA users.

- If a reservation falls outside of the OPERA block dates but the block is 'Elastic', the dates for the block will be expanded and the reservation will be accepted. A warning will be issued to notify OPERA users.
- If a reservation falls outside of the OPERA block dates and the block is 'Non-Elastic', the reservation is taken from the OPERA house inventory and a warning will be issued to notify OPERA users.

Blocks from OPERA to External System

Block header information is always considered a full overlay to the existing information in the external system.

Block details can be delivered in the same message as the block header or as separate messages that contain information on the detail changes only.

The action type for an XML block message can be New/Change/Delete.

If the OXI block parameter WAIT_FOR_BLOCK_EXT_REF is set to 'Y', a new block created in OPERA will only send the block header message to the external system. The external system will return a successful result message with the external system block ID that will be stored in the block header table in OPERA. Once the external system block ID is updated, it indicates that the block exists in both systems and therefore at this stage, OPERA will send all the details associated with the newly created block in OPERA and the external system will receive a block detail XML message. If the parameter WAIT_FOR_BLOCK_EXT_REF is set to 'N', OXI will send the block header and details from OPERA at the same time without waiting for the external system block ID first. Currently there is no OPERA block ID that is being sent to the external system as part of the block result message. Instead we upload the external system block ID and the OPERA block code along with the result message.

OXI offers defaults and conversion tables for the block data transmission to the external system.

Options and Restrictions for Blocks from OPERA to the External System

OXI will send blocks from OPERA based on the OXI parameters that determine if only deductible/open for pickup, or all blocks shall be sent. Please see the rules as follows:

- Block is non-deductible: The XML message shows an inventoryBlockStatusType of 'INITIAL'.
- Block is deductible: The XML message shows an inventoryBlockStatusType of 'ACTIVE'.
- Unless the block is open for pickup in OPERA, no reservations can be booked against it.

- OPERA will be able to perform a manual cutoff on blocks created by an external system – this is one of the options excluded from the ‘external system locked’ flag.
- OPERA can pick up reservations from blocks that were created by external systems.
- If OPERA deletes the block, OXI will send this as a cancel to the external system.
- OPERA “Borrow” technique: In OPERA, room types that are not part of the original block can be selected during reservation pick-up:
 - The selected room type will become part of the block and will be sent to the external system.
 - The increased and decreased room types will be sent prior to the reservation in a block detail message and will update the original block information in the external system.
- OPERA has the functionality to create blocks without specifying a rate code. In this case the OPERA user has the option to specify rate amounts specific for the block, or to not insert any rate details at all.
- OXI will send block detail records with the rate amount for each room type allotted. The current number of rate amounts supported per day/room are 4 (from 1 to 4 people).
- OPERA allows making reservations using a different rate code than the originally created one in the block.
- If a block is canceled in OPERA, a cancel message will be sent to the external system.
- Every reservation that is picked up from a block in OPERA will be sent to the external system and adjust the house and block availability accordingly.
- Cut off: an automatic or manual release of the remaining allotted rooms in the block. These rooms are given back to the OPERA house inventory. A message to release the block/room types in the external system will be sent.
- Changes to the block created by OPERA:
 - Changes in an OPERA block are always initiated in OPERA. The external system cannot make any changes to an OPERA created block, as it will be locked by OPERA.
- Rate Code changes - There are 3 different scenarios for rate code changes in OPERA:
 - A new rate code is added to a block that did not have a previous rate code.
 - An existing rate code is changed to a different rate code.
 - An existing rate code is set to null.
- For all 3 cases above the same rules apply:
 - Previous reservations are not changed.
 - New reservations will have the new rate code.
 - Available inventory is released for the old rate code and new inventory is taken for the new rate code.
- Block date changes:
 - Increasing the number of days:
 - Allowed at any time, even if reservations exist against the block.
 - A header record is sent from OXI that indicates the change.

- If detail information was added for the new dates, detail records indicating a new or change action will follow. This record can be processed independent of the block header record sent previously, i.e. header and details don't have to be in the same message.
- Decreasing the number of days:
 - Allowed only if no reservations exist against the block.
- Changes in the Master Group Profile - OPERA allows changing the group profile for a block. The following rules apply:
 - Existing reservations are not changed. The previous group profile will remain on those reservations.
 - New reservations will have the new group profile.

Business Events Needed in OPERA for Sending Blocks to the External System

Module	Business Event (Action type)	Business Type
BLOCK	NEW BLOCK HEADER	Create a new block header in OPERA
	UPDATE BLOCK HEADER	Change an existing block header in OPERA
	DELETE BLOCK HEADER	Delete a block header in OPERA
	UPDATE BLOCK PICKUPS	Changes to the block pickup count in OPERA
	UPDATE BLOCK GRID	Create/Change block details in OPERA
	UPDATE BLOCK RATES	Create/Change rates assigned to a block in OPERA
	UPDATE GRID SUMMARY	Will give an effective snapshot of the grid details
	NEW LEAD HEADER	Create new lead header in OPERA
	NEW LEAD GRID	Create lead grid data in OPERA
	NEW LEAD NOTES	Create lead notes
	UPDATE LEAD HEADER	Change an existing lead header in OPERA
	UPDATE LEAD GRID	Change an existing lead grid data in OPERA
	UPDATE LEAD NOTES	Change an existing lead notes in OPERA
	DELETE LEAD HEADER	Delete an existing lead in OPERA
	DELETE LEAD GRID	Delete an existing lead grid in OPERA
	DELETE LEAD NOTES	Delete an existing lead note in OPERA

3 Mapping Table Data Elements

Legend for mapping table:

- External System Column - Indicates the possible external system value in *italics*. This column is blank if no value is required and it describes schema layout only.
- XML Main Group - The main group in the HITIS/XML schema containing all data elements that belong to this group.
- XML Message Label - The label or tag that is given to the data element in this XML schema. These labels are derived from HITIS and are standard for all Micros-Fidelio XML schema labels.
- Mandatory in XML Message? - Indicates whether this data element is mandatory for OPERA.
- Business Rules - Description of data element, conversion table name if applicable, all business rules, and functionality description.

Blocks - Mapping Table between External System and XML Message

The original schemas contain more data elements than are described in the following mapping table. Whatever is not described is not used by OXI and can be ignored in the schema. All additions from XML schema version 1+ to schema version 5.0 are shown in blue color.

External System Column	XML Message Main Group	XML Message Label	Mandatory in XML Message?	Business Rules
Block Status Type		inventoryBlockStatus Type	Yes for all messages	Block Status Type. Rules: XML Message: OPERA INITIAL - Initial – block is nondeductible from inventory. ACTIVE - Block is deductible from inventory. DEACTIVATED - Block is deactivated.

Elastic or not		mfBlockType	Yes for all messages	Type of Block. Rules: OPERA considers elastic in dates only. This means that room types can always be overbooked regardless if the block is elastic or not. XML Message: OPERA ELASTIC - elastic=Y and open for pickup. NONELASTIC - elastic=blank and open for pickup. FORCE - the block is deductible but not open for pickup.
Block Message Type		mfBlockMessageType	Yes for all message	Block Message Type. Valid values are HEADER; HEADERWITHDETAIL; DETAIL.
	Inventory Block Notification	inventoryBlockCodeType		Type of inventory block code. Can be BLOCKCODE; GROUPBLOCKCODE, NA.
	Inventory Block Notification	inventoryBlockNotificationType		Type of modification for block. Can be NA; NEW; DELTAMODIFICATION; FULLOVERLAYMODIFICATION. Rules: OXI will look at this and the interface setup for 'Delta YN' to determine whether the block shall be treated as full overlay or delta modification message.
	Inventory Blocks	inventoryBlock		Number of inventory blocks in notification. Default to 1.
Property ID	Hotel Reference	hotelCode	Yes for all messages	Property ID. Rules: Required field for OPERA.
Group Name		inventoryBlockName	Yes for all messages	Block full name in header. Rules: Required field for OPERA.

Group Code		inventoryBlock GroupingCode	Yes for all messages	Block Code. Rules: OPERA offers a parameter for the handling of the block code: It can either be unique within the property, or unique within one particular inventory week, which means that block code can be repeated in OPERA in another week.
Start Date	Block Time Span	startTime	Yes for all messages	Start Date of Block. Rules: Required field for OPERA.
End Date	Block Time Span	numberOfTimeUnit s	Yes for all message s	StartTime plus NumberOfTimeUnits = end date of the block. Rules: Required field for OPERA.

Rate Code		ratePlanCodes		Rate code used in block. Rules: 1. OXI conversion table for rate codes will be used. 2. External system sends block with rate code and rate amounts as 0. ->OXI will ignore rate amounts and use rate code only. Retrieve rate code details in OPERA and insert in block. 3. External system sends block with rate code and rate amounts greater than 0. ->OXI will ignore rate amounts and use rate code only. Retrieve rate code details in OPERA and insert in block. 4. External system sends block without rate code and only rate amounts greater than 0. ->OXI will use the rate amounts sent. 5. OPERA can send a block with rate code and rate amounts populated. ->OXI will build an XML message with both, rate code and rate amounts populated. The rate amounts are corresponding to the rate code details. The external system has to verify if the rate amounts comply with the rate code on their side. 6. OPERA can send a block without rate code but only rate amounts. The XML message will show rate amounts only. 7. OPERA does not support multiple rate codes per block.
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Group Profile	Associated Profiles	Profile XML profileID (all profile details for group profile)		Master (Group) Profile linked to block. Rules: OPERA requires a group profile to be linked to the block in order to pick up reservations. The block can be built without group profile, but it is needed as of the moment pick-up takes place.
Company Profile	Associated Profiles	Profile XML profileID		Company profile linked to the block.
Travel Agent Profile	Associated Profiles	Profile XML profileID		Travel Agent profile linked to the block.
Wholesaler Profile	Associated Profiles	Profile XML profileID		Source/Wholesaler profile linked to the block.
			Yes for messages with block detail	<p>Rules:</p> <p>XML Message: OPERA: NEW – New. CHANGE – Change. DELETE - Cancel or delete. SYNC - Used in case a block is synchronized. NA.</p> <p>1. Action type DELETE has to turn block into an OPERA block status that is flagged to 'return inventory' in the status setup table.</p> <p>2. OPERA can delete or cancel a block. OXI will send a cancel message in both cases.</p> <p>3. OPERA can reactivate a block, which will be sent as new block.</p>

Room Type	Inventory Block	inventoryCode	Yes for messages with block detail	Room Type in Block. Rules: 1. This is a required field for OPERA. 2. OXI conversion table for room types will be used. 3. During a room type borrow in OPERA, the selected room type will become part of the block and will be uploaded. The new room type must be sent up before the reservation and will be sent as update of the original block information.
Number of Rooms	Inventory Block	numberToBlock	Yes for messages with block detail	Number of rooms for this block per day per roomtype.
Inventor y Date	Inventory Block	mfInventoryDate	Yes for messages with block detail	Date for which room type is allotted in block detail.
	Inventory Block	mfNumberSold		Number of rooms sold in block. Rules: Will be used according to OXI block parameter HANDLE_SOLD_COUNTS .
Rate Amount	Inventory Block	mfRate1 mfRate2 mfRate3 mfRate4		Rate amount per number of occupying persons in block detail.
Add-on Rate Amount	Inventory Block	mfRateAddOn		Rate amount for extra bed in the room.
Child Rate Amount	Inventory Block	mfRateChild		Rate amount for child in the room.

Projected Single, Double, Triple, Quadruple Occupancy	Inventory Block	mfProjectedOcc1 mfProjectedOcc2 mfProjectedOcc3 mfProjectedOcc4		Projected occupancy per room for single, double, triple, or quadruple occupancy.
Cutoff Date in Block Detail	Inventory Block	mfCutoffDate		The cutoff date on the block detail, which can differ from the cutoff date on the block header. If not sent by external system, the block header cutoff date will be used for all block details in OPERA.
Cutoff Days in Block Detail	Inventory Block	mfCutoffDays		The cutoff days on the block detail, which can be different from the cutoff days on the block header. If not sent by external system, the block header cutoff days will be used for all details in OPERA.

Master Block Flag	Inventory Block Notification	mfMasterBlock		Master block flag in OPERA This flag indicates whether the block is a 'master' in OPERA, which means it does not carry inventory and has linked 'sub blocks' that have the inventory data. A master block is often used as an umbrella for block tour series in OPERA. This functionality is mainly offered for blocks between OPERA and OPERA and depends on the OXI parameter HANDLE_MASTER_BLOCKS. In case this is set to 'Y', OXI will send master blocks in OPERA with the respective flags in the XML message so that the external system can apply the same logic. Sub blocks are sent with the master block ID and need to be linked properly to the master block in the receiving system again, where the master could have a separate ID. If the external system is not capable of handling master and sub blocks, this parameter should be set to 'N'. In this case OXI sends a block cancel in case a block converts into a master, to make sure that the external system releases the inventory from that block accordingly. All sub blocks in OPERA will be sent as normal single blocks without master block ID to such an external system.
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Master Block Code	Inventory Block Notification	mfMasterBlockCode		Master block code name in OPERA. If the XML message contains a sub block that belongs to a master block in OPERA, the master block code will be sent for this. This functionality requires the parameter HANDLE_MASTER_BLOCKS set to 'Y'.
Market Code	Inventory Block Notification	mfMarketCode		Market code in block header. Rules: 1. OXI conversion table for market codes will be used. 2. The OXI default market code will be used if no conversion is possible or no market code is sent. 3. Required field for OPERA.
Source Code	Inventory Block Notification	mfSourceCode		Source code in Block header. Rules: 1. OXI conversion table for source codes will be used. 2. The OXI default source code will be used if no conversion is possible or no source code is sent. 3. Required field for OPERA.
Channel Code	Inventory Block Notification	mfChannelCode		Channel code in Block header. Rules: 1. OXI conversion table for channel codes will be used. 2. The OXI default channel code will be used if no conversion is possible or no channel code is sent.
Cutoff Date in Block Header	Inventory Block Notification	mfCutoffDate		Cutoff date in block header.

Cutoff Days in Block Header	Inventory Block Notification	mfCutoffDays		Cutoff days in block header.
Block Booking ID	Inventory Block Notification	mfBookingID		Block booking ID. This ID can be used to store a third party block ID number. This value will be populated from and to OPERA without any validation.
Block Reservation Type	Inventory Block Notification	mfGuaranteeType		Reservation type in block header. Rules: 1. OXI conversion table for reservation types will be used. 2. The OXI default reservation type will be used if no conversion is possible or no reservation is sent. 3. Required field for OPERA.
Block Currency Code	Inventory Block Notification	mfCurrencyCode		Block currency code. This is the currency code on the block header, indicating in which currency the rate amounts are displayed in case the block does not use a rate code. Rules: OXI conversion table for currency codes will be used.
Block flagged as catering only	Inventory Block Notification	mfCateringFlag		Block catering only flag. Sent from OPERA to external system in case the block is flagged as 'catering only' in OPERA. This will only apply if catering blocks are not suppressed based on the OXI block parameter UPL_CATERING_BLOCKS .

Product or Packages	Inventory Block Notification	mfPackage		Products in block header. Rules: OXI conversion table for products is used.
Block Note Type	Inventory Block Notification	AllotmentNote noteType		Block notes in OPERA. The block note type will be defaulted to 'OXI' when sent from or to OPERA.
Block Note Date	Inventory Block Notification	AllotmentNote noteDate		Block notes in OPERA. The date of the block note.
Block Note Text	Inventory Block Notification	AllotmentNote note		Block notes in OPERA. The block notes text.
Block Note Title	Inventory Block Notification	AllotmentNote noteTitle		Block notes in OPERA. The block note title.
Day of Week for Inventory	Available days of week Arrival Days of week Required days of week	Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday		Days of week for Block availability.

Requirements to Build the XML Messages

Information on the XML Schemas used by OXI

- We are using Oracle xmlparser to parse the xml message
- The current OXI XML schemas are created before the W3C Specifications released, so they are not W3C compliant
- The current OXI XML schemas are derived from HITIS specifications
- The current OXI XML schemas are created using Microsoft SDK 3.0
- The current OXI XML schemas are called as XDR Schemas [XDR : The XML-Data Reduced (XDR) schema defines the individual elements, attributes, and relations used in the XML structure]

The XML Message Header Label

A label needs to be added in the XML message header so OXI can identify who the sender was. We have introduced this label as a standard for all messages:

```
INT |Resort |Msgtype |MsgId <?Label FTCRS|SANNO|BLOCK|5323 17?>
```

INT - The interface name. This can be the external system name.

Resort - The external system property code, which will be converted into the OPERA property code.

MsgType - Message Type identifies what kind of message is received.

MsgID - Message ID from the external system. This should be a unique message ID.