Oracle® Hospitality OPERA Exchange Interface
Reservation and Profile XML Specifications

February 2022

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Contents

Preface

This document describes the Reservation and Profile XML schema layout and data elements used for the OPERA Exchange Interface.

Audience

This document is intended for those developing custom applications that interact with OPERA Exchange 2-way Interface for Reservations and Profiles functionality.

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Documentation

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

1   Introduction

This document describes the Reservation and Profile 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.

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 Exchange Interface will be referred to as OXI.

The specifications in this document are based on the XML schema version 4.0, compatible with OPERA version 4.0 onwards. All XML schema versions maintain backward compatibility.

OXI Parameters that Affect Reservation Messages

Parameter Name	Parameter Value	Description
ADDITIONAL_REFERENCE _EXCHANGE	LOV	Data from OPERA to external systems and external systems to OPERA.
		Comma(,) separated list of unique additional external reference types that are allowed to be included in the reservation and reservation result messages to the external systems, and accepted from the external systems.
		Additional reference types should not conflict with any of the existing or potential external systems.
		e.g. amongst many others, additional reference types like ORS, OXI-OPERA, OXI-V6, OXI-ORS, MYFIDELIO etc. cannot be used.
AUTO_POPULATE_MEMBE RSHIP_YN	Y/N	Data from external system to OPERA
		If 'Y' populate selected membership/s from the reservation message based on the membership configuration rules in OPERA. If 'N' then populate only the selected membership/s from the reservation message.

CRS_MARKET/SOURCE_CONTROL	Y/N	Data from external system to OPERA. This parameter defines the sequence in which OXI identifies the market and source codes to apply in the reservation. R = Use the codes defined in rate definition (rate details first and then rate header). B = Use the codes defined in block definition, E = Use the codes received from the external system (after conversion, if applicable), D = Use the codes defined in OXI defaults, Y = When used alone, same as ED and N = When used alone, same as BRD. Set the value of this parameter by listing only the desired characters among R, B and E in the preferred order and optionally D as the last character without any delimiters.
CRS_PRICE_CONTROL	LOV	Data from external system to OPERA Y - Select FD. N - Select ND. NN - OPERA rate will be applied without any discount. A warning in OXI will be displayed accordingly. ND - OPERA rate will be applied with discounts found in the message. A warning in OXI will be displayed accordingly. FF - External rate will always be applied and will be fixed if OPERA fixed rate is enabled. If OPERA fixed rate is disabled, discount will be applied. DD - External rate will be applied with rate difference and discount found in the message. Rate discount reasons will be applied from the message if external and OPERA rate match. FD - External rate will always be applied. Where external and OPERA rates do not match, rate will be fixed if fixed rate is enabled. If OPERA fixed rate is disabled, the rate difference will be applied as a discount and the rate will not be fixed. MARSHA - OPERA fixed rates must be enabled. Where external and OPERA rates do not match, the external rate will be applied and the rate will be fixed. Where external and OPERA rates match, OPERA rate will be applied and the rate will not be fixed.
CRS_RESERVATION_GENERATES_INVENTORY	Y/N	Data from external system to OPERA When a reservation message from an external system is received, OXI will generate inventory snapshots for the affected dates and room types.

EXT_SYSTEM_HANDLES_DAY_USE	Y/N	Data from OPERA To External System. When parameter value = Y, handling day use rooms has no difference. When parameter value = N, OXI will send a cancellation message to the external system when OPERA reservation has an external reference number and the number of nights equals 0.
FULL_OPERA_SHARES	LOV	Data both ways between external system and OPERA Following rules apply to both incoming and outgoing messages. Y: Any update on one individual reservation will be reflected in one reservation XML message. Any share related action (combine/break) will be reflected in appropriate share reservation message with only the key information about the reservations involved. NS: Any update, including share related on any of the reservations will be reflected in a reservation XML message containing information about all the relevant shares. External reference of all the share reservations in OPERA will be updated from the incoming result message. NU: Similar to NS, but external reference of only those reservations in OPERA mentioned in the result message will be updated from the incoming result message.
IGNORE_RES_FOR_UPDATE_OLDER_THAN	NUMERIC	Data from external system to OPERA Enter a numeric value that will be translated into number of days. The value entered here will determine how many days in the past OXI will consider existing reservations for update when matching on external reference number. If the external reference number sent in the message matches the external reference of an existing reservation, then that reservation will be considered for update if the departure date of the existing reservation is same or later than the number of days in the past entered in this parameter. If the departure date of the existing reservation is earlier than the number of days in the past entered in this parameter, then the existing reservation will be ignored and a new reservation will be created. If this parameter is left blank, then ALL existing reservations will be considered for update, except for HOLIDEX interface. For HOLIDEX interface, blank is treated as zero. Default setting is blank and this parameter should be left blank if the external system will always send a unique confirmation number.

INHERIT_EXTERNAL_REFERENCE	Y/N	External System to OPERA only. When set to 'Y', OPERA will inherit the external system's confirmation number as its own, which will allow passing of the originating (Guest) confirmation number to PMS systems that do not have the capability of processing and storing multiple external references. When set to 'N', OPERA will store the external system's confirmation number, assign the OPERA confirmation number and pass it along to the receiving system. This parameter is subjected to the following restrictions: - The parameter can be set to 'Y' for only one external system across the entire OPERA system - For this one system, it can be selected for any number of resorts - For resorts, where the parameter is set to 'Y', the parameter SEND IFC CREATED ONLY must be set to 'Y' as well The restrictions serve to limit the possibility of colliding confirmation numbers between multiple external systems and OPERA. It is however the operator's responsibility to set the confirmation number sequences such that this never occurs.
ITEM_INVENTORY_EXT_SYS_OVER	Y/N	Data from external system to OPERA. This parameter determines whether to accept reservation inventory item updates from external system. Set to 'Y' and reservation inventory items will always be overwritten by external system. Set to 'N' and reservation inventory items sent by external system will be ignored.
ITINERARY_FUNCTIONALITY	Y/N	OXI will not support Itinerary Reservations

PACKAGE_CRS_OVER	LOV	Data from external system to OPERA:
		This parameter determines how the package elements received from the external system updates the packages in OPERA.
		  A = If received, replace OPERA values with the received values. If not received, remove the values from OPERA.
		  B = If received, replace OPERA values with the received values. If not received, do not remove the values from OPERA.
		  C = If received, merge the received values with OPERA values. If not received, remove the values from OPERA.
		  D = If received, merge the received values with OPERA values. If not received, do not remove the values from OPERA.
		  N = Ignore the package elements received. Do not touch the values in OPERA.

PROMOCODE_CRS_OVER	Y/N	Data from external system to OPERA This parameter determines whether Promotion elements sent by external system shall overwrite OPERA Promotion elements or not. Overwriting may be desired, as the property should decide what Promotions the guest has in this reservation. Set to 'Y' and reservation Promotions will always be overwritten by external system Promotions. Set to 'N' and Promotion elements sent by external system will be appended to existing ones in OPERA.
REMOVE_EXT_REF_ON_RE INSTATE	LOV	Data from OPERA to External System Select 'NO SHOW' if the reinstate no show message sent to the External System should not contain the External Reference Number of the current interface. Select this option when the External System cannot reinstate a no show reservation using the same reference number. Select 'CANCEL' if the reinstate cancel message sent to External System should not contain the External Reference Number of the current interface. Select this option when the External System cannot reinstate a cancelled reservation using the same reference number. If this parameter is NULL, then the External Reference Number of the current interface will always be sent to the External System for reinstate messages.
RESCOMMENTS_CRS_OVE R	Y/N	Data from external system to OPERA This parameter determines whether reservation comments sent by external system shall overwrite OPERA comments or if they shall be appended to existing ones. If set to 'Y' the OPERA reservation comments will always be overwritten by the external system comments. If set to 'N', only comments where the update user = external system ID in the OPERA database will be updated.
SHARER_REMOVAL_MOD E	LOV	External system to OPERA only. Applicable only when FULL OPERA SHARES=N. This parameter determines how OXI should handle share reservations those found in OPERA but not coming in the message. CANCEL: Cancels any sharer present in OPERA which does not appear in the incoming message. DELETE: Deletes any sharer present in OPERA which does not appear in the incoming message. NEITHER: Leaves sharer(s) those present in OPERA untouched, even if they don't appear in the message.

SHARE_RATE_CALC_MET HOD	LOV	Data from external system to OPERA 'INACTIVE' = When OXI Parameter OPERA FULL SHARES is set to Y behavior is INACTIVE, regardless of parameter value. When 'FULL OPERA SHARES' is set to 'N' OPERA determines the share amount as follows: SPLIT: Each sharer will carry an equal portion of the total rate amount. FULL: Each sharer will have the full rate amount. ENTIRE: First sharer will be determined as the primary and carry the entire rate amount, all other sharers will have a zero rate amount.
SPECIALS_CRS_OVER	Y/N	Data from external system to OPERA This parameter determines whether special requests sent by the external system will overwrite the ones in OPERA, or if they will be appended to existing ones. The functionality of this parameter is further determined by the 'mode' of your interface. If it works with delta changes set to 'yes' (interface configuration->edit interface), the external system can send reservation changes only and does not need to send the full reservation every time a small change to a reservation occurs. OXI will then only update the changed data and not touch the additional data that was found in the OPERA reservation. This also means that the external system needs to indicate intended deletions clearly with deletion indicators in the message. Sending simply blanks will not lead to data deletion if OXI works in 'delta mode'. The deletion indicators can be configured in interface configuration->edit interface. If your interface is set to delta changes 'no', OXI expects a full overlay of all profile data in every profile message, even if the external system only changes very little of the entire profile. Here is how the parameter works: If set to 'Y' and the interface is setup as 'Delta Changes = 'Y', ONLY the specials originally inserted by the external system will be overwritten. If set to 'Y' and the interface is setup as 'Delta Changes = 'N', all reservation specials in OPERA will be overwritten by the external system specials. If set to 'N', new specials will be appended to existing ones in OPERA, regardless whether the interface works in delta mode or not.

STAY_UPLOAD_PROFILE_T YPES	MULTI SELECT	Data from OPERA to external systems. If null all the stay records will be sent to external system. If value(s) are selected; then the stay records will be sent where only those profiles exist on Stay records. (i.e., If selection is only TRAVEL_AGENT, then only Stay Records that have an attached Travel Agent profile will be sent. All other Stay records without this profile will not be sent).
TRACE_DEPT_NON_REVIE WED	LOV	Data from external system to OPERA When a non-reviewed reservation message received from the external system is processed, a trace will be logged against this trace department.
TRACE_DEPT_RESULT_FAI LED	CAT	Data from external system to OPERA When the external system can't process a reservation message received from OPERA, if it sends a result message back to OPERA indicating the error, a trace with the error message will be logged against this trace department.
TRACE_DEPT_SEND_FAILE D	CAT	Data from OPERA to external system When the reservation message can't be delivered (possibly due to communication errors) to the external system, a trace will be logged against this trace department. Applicable only if OXI processor is configured to deliver the messages.
TRACE_ROOM_ASSIGNME NT	LOV	External System to OPERA only. 'NO ROOM' - OPERA will trace if Room could not be assigned. 'ALWAYS' - OPERA will trace Room assignment process. 'NEVER' - OPERA will not trace Room assignment.
UPDATE_ACCOMPANY_G UEST	Y/N	Data from external system to OPERA This parameter determines how the accompany guest received from the external system updates the accompany guest in OPERA. A = If received, replace OPERA values with the received values. If not received, remove the values from OPERA. B = If received, replace OPERA values with the received values. If not received, do not remove the values from OPERA. C = If received, merge the received values with OPERA values. If not received, remove the values from OPERA. D = If received, merge the received values with OPERA values. If not received, do not remove the values from OPERA. N = Ignore the accompany guest received. Do not touch the values in OPERA.

UPDATE_FEATURES	LOV	Data from external system to OPERA. This parameter determines how the features received from the external system updates the features in OPERA. A = If received, replace OPERA values with the received values. If not received, remove the values from OPERA. B = If received, replace OPERA values with the received values. If not received, do not remove the values from OPERA. C = If received, merge the received values with OPERA values. If not received, remove the values from OPERA. D = If received, merge the received values with OPERA values. If not received, do not remove the values from OPERA. N = Ignore the features received. Do not touch the values in OPERA.
UPDATE_INHOUSE_RES	Y/N	Data from external system to OPERA With this parameter OXI allows you to update reservations that are flagged as 'checked in' in OPERA. If set to 'Y', OXI will accept changes to checked in reservations in OPERA except for arrival date and room type changes. If set to 'N', OXI will reject any changes to a checked in reservation in OPERA.
UPDATE_PAYMENT_TYPES _PER_WINDOW	LOV	Data from external system to OPERA This parameter determines how the payment types per window received from the external system updates the information in OPERA. A = If received, replace OPERA values with the received values. If not received, remove the values from OPERA. B = If received, replace OPERA values with the received values. If not received, do not remove the values from OPERA. C = If received, merge the received values with OPERA values. If not received, remove the values from OPERA. D = If received, merge the received values with OPERA values. If not received, do not remove the values from OPERA. N = Ignore the payment types per window received. Do not touch the values in OPERA.

UPDATE_SHARE_RES	Y/N	Data from external system to OPERA This parameter allows external systems to update a share reservation in OPERA. If set to Y, OXI will accept changes to shared reservations in OPERA based on a strict set of rules: 1) Based on the OXI parameter UPDATE_INHOUSE_RES, the external system can send changes to checked-in sharers except for changes to the arrival date and room type. 2) In case the external system sends a change to the departure date, OXI will check if the room # assigned to the guest is still available for the extended stay. If not, the change will be rejected with an explicit error message. The currently assigned room number will not be removed. OXI will log all warnings in its status tables, visible to the user 3) If the OXI Parameter FULL_OPERA_SHARES is set to N, changed reservation data will be updated equally for all sharers. If for example an update to market code, booker, comment, etc. are sent in the reservation change message, OXI will update the same data equally in all share reservations. 4) If the OXI Parameter FULL_OPERA_SHARES is set to N, all changes to the reservation will be applied to all sharers alike except for the data mentioned in the following bullet points. This means that formerly inserted changes to the share reservations in OPERA are overwritten. 4a) Rate changes: OXI will apply the rate amount change to the primary sharer, which is identified by the lowest OPERA confirmation #. 4b) If changes to the membership details are sent by the external system, this will only be applied to the primary sharer reservation and profile. For data from OPERA to an external system, OXI will only send changes to non-inventory fields if these changes have occurred on the primary sharer, the reservation with the lowest OPERA confirmation #. If this parameter is set to N, OXI will reject any changes to shared reservations in OPERA.
UPL_DED_RES_ONLY	Y/N	Data from OPERA to external system If set to 'Y', only deductible and non-waitlisted reservations will be sent to the external system. In a reservation this is determined by the reservation type and status, and means that only reservations with deductible reservation types and non-waitlisted status would be sent. This is desirable if the external system does not have a concept of tentative and definite reservations and would regard all bookings equally deductible regardless of their status. Set to 'N' if all reservations should be sent to the external system irrespective of the reservation type and status.

Full Reservation from External System to OPERA

Each reservation message sent to OPERA will receive a response back after successful insertion into OPERA. The response will contain the OPERA confirmation number.

Two modes of reservation handling are accepted:

1. Full overlay mode where each message to OPERA has to send all reservation information and has to be a total overlay of the existing reservation contents in OPERA.

2. Delta modification mode where the external system can send only the data elements stored in their system, even if OPERA has more details stored for the reservation. Minimum requirements still have to be fulfilled and a sample of a minimum-content reservation message can be found in appendix 2. For successful delta modification processing, the external system has to indicate clearly when a data element shall be deleted. The following deletion indicators can be applied for data elements in the main profile table and will be accepted by OXI:
   - For the deletion of character values: ~; ^; *
   - For the deletion of numeric values: -99999
   - For the deletion of date values: 12/12/1800

   It should also be noted that a keep indicator of "~~"Is also processed for inbound reservations as well.

Please also note that various data elements of the reservation can now carry an inactive date, which will lead to the deletion of this data element in OPERA.

Explanation of the Reservation Object and the Reference Place Holders in the XML Message

The XML/HITIS reservation message contents have to contain the following: The RoomStay object will always be one (1). Everything contained in the RoomStay will always apply to the entire reservation, regardless how many sharing or accompanying guests the message contains. The number of rooms is sent in the MfImage object in data element NumRooms. The ResGuest object is repeated for each guest profile in a reservation, regardless whether the guest is the main reservation holder, a sharer, or an accompanying guest. In case of a sharer, an MfSharedGuestRPH is added to the RoomStay object. This means that the number of ResGuest objects is equal to the number of different guest names for this reservation, including the sharers. The first ResGuestRPH in a reservation from OPERA can always be considered as the main guest. This would usually be ResGuestRPH0.

Sample 1: a family makes a reservation for 2 adults and 2 children. The reservation is made with one name only. In this case, only one ResGuestRPH is required, as only one ProfileRPH exists.

Sample 2: Two colleagues are sharing a room and the reservation carries both of their names. In this case we will expect two ResGuestRPHs as we will have two guest profiles and each sharer can also have different stay dates, which will be reflected in the individual ResGuestRPHs.

Each ResGuest object contains a link to one or more Profile Reference Placeholders (Profile RPH). The link is made through the ResGuestRPH number. In case the number of rooms (NumRooms) =1, the details of the ResGuestRPH can be used for the main guest, and the details of the mfShareRPH can be used to create sharers. In this case a direct distribution is possible, as it is only one room. In case the number of rooms is greater than 1, a distribution cannot be done as it is unclear which guests and sharers will use which reservation. In this case we will create the reservation with the first ResGuestRPH details, and all other guest details will be inserted as profiles in OPERA. This includes the sharers. The OPERA user will have to distribute the guests to the correct reservations manually. A link between all profiles and the main reservation will be given. Reservations will be downloaded in XML format including attached profile details and on insertion; OXI will return a message with the OPERA confirmation number.

The total length of the reservation is sent in the StayDateRange object, which contains the earliest arrival date and latest departure date. The single guests and their individual stay lengths within the reservation are sent in the ResGuest object.

In OPERA, every reservation has as many records as number of nights, plus one additional record for the departure date in the RESERVATION_DAILY_ELEMENTS table. In case of sharers, additional records for each sharer will be added.

Reference placeholders
A list of elements linked to a reservation are referred as RPHs – Reference Placeholders. One ResGuest can have multiple ProfileRPHs depending on the number of profiles linked to this reservation. For example, guest, company, etc. The number within the profileRPH is the identifier to which reservation it is linked.

Sample1: one reservation with one guest.
ResGuest – reservation details per guest per reservation (Can be multiple)
ResProfile (guest) – guest profile details (Can be multiple in case of sharers or accompanying guests)
ResProfile (Company) – booking company profile details (one for each reservation)
ResProfile (Travel Agent) – booking company profile details (one for each reservation)
ResProfile (Wholesaler) – booking company profile details (one for each reservation and will be inserted as Source Profile in OPERA)
ResProfile (Group) – booking company profile details (one for each reservation)
RoomStay – reservation details per room stay per reservation (Can only occur once per message)
RatePlan – rate code per room stay (Can be multiple within the room stay in case the rate code is changing during the stay)
Rate – rate details per rate plan (Can be multiple within the rate plan in case the rate amount is changing during the stay)

ResCreditCard – credit card details per guest per reservation (Can only be one per guest and will always be linked to the main reservation holder)
ResComments – reservation comment per guest per reservation (Can be multiple)
SpecialRequests – special requests per guest per reservation (Can be multiple)
Services – product code per guest per reservation (Can be multiple)
Selected Memberships – membership selected by guest per reservation (Can only be one per guest and will always be linked to the main reservation holder)

In this example no 'RPH' is used as all elements appear only once.

Sample2: one reservation with two sharing guests, rate code change during stay, and multiple special requests.
ResGuestRPH0 - reservation details for main guest in reservation
ResGuestRPH1 - reservation details for sharing guest in reservation
mfSharedGuestRPH1 – details for sharer (note that the number (1) identifies which of the ResGuestRPH is identified as the sharer)
RoomStayRPH0 – reservation details for room stay (will always occur only once)
RatePlanRPH0 – first rate code per room stay
RatePlanRPH1 – second rate code per room stay
RateRPH0 – rate details for first rate plan 0
RateRPH1 – rate details for second rate plan 1
SpecialRequestRPH0 – special request code for first guest in reservation
SpecialRequestRPH0 – special request code for first guest in reservation
SpecialRequestRPH0 – special request code for first guest in reservation (notes that all three special request objects belong to
ResGuestRPH0 as they contain the RPH0)

Following RPHs can be linked to the reservations:

ResGuestRPH	Reservation details per guest per reservation
mfSharedGuestRPH	The sharing guest
RoomStayRPH	Reservation details in room stay (once in reservation)
ResProfileRPH	Profile details per guest per reservation
ResCommentRPH	Comment per guest per reservation
ResCreditCardRPH	Credit card for main guest per reservation
SpecialRequestRPH	Special Request Code per guest per reservation
RatePlanRPH	Rate plan per reservation
RateRPH	Rates per rate plan per reservation
SelectedMembershipRPH	Selected membership for main guest per reservation
ServiceRPH	Product code per guest per reservation
masterRoomStayRPH	
AnticipatedSettlementRPH	not used

Options and Restrictions for Reservations from External System to OPERA

- All reservations can be sent and have to carry a property code and external system ID number.

- Several OXI parameters can be applied to manipulate the application of data from the external system to OPERA.

- Multi leg reservations must be sent with leg numbers from the external system.

- Reservations created in the external system can be modified or cancelled in OPERA.

- Waitlist reservations will be accepted in OPERA- the message must have a clear indicator for waitlist.

- Rate discounts will be accepted in OPERA.

- Day-use reservations will be accepted in OPERA generically. Certain external systems (Holidex for example does not handle day use reservations.)

- Cancellation reinstatement from external system is supported.

- No-show reinstatement from external system is supported.

- Reverse Check-Ins are supported in OPERA

- Once checked into OPERA PMS, the reservation can still be changed by the external system except for changes to the room type and arrival date. This requires that the OXI reservation parameter UPDATE_INHOUSE_RES is set to 'Y'. If this parameter is set to 'N', all changes to checked-in reservations will be rejected by OXI.

- Accompanying guests have to show as multiple ResGuestRPH, e.g. one main guest and one accompanying guest: resGuestRPH0, 1.

- Reservations starting with a past arrival date will be rejected in OPERA as these are either checked-in, cancelled, or no-shows. If these reservations are sent as part of data synchronization however, the direct insertion of a checked-in, cancelled, or no-showed reservation will be allowed. The identifier for a data synchronization message is ReservationActionType = SYNC.

Handling Of Defaults and Conversion for Reservations from External System to OPERA

If the conversion table for a data element is NOT activated:

- OXI will validate the data element against valid OPERA codes and if that validation passes, insert the original code. (One to one matching).

- If validation fails, check if OXI default exists->use default

- If default check fails->OXI will fail the message in case the data element is mandatory (e.g. room type), or ignore element in case the data element is optional. In this case the message will still be processed but this data element will be ignored.

If the conversion table for a data element is activated:

- Check if conversions exist and convert value

- If fails, OXI will validate the data element against valid OPERA codes and if that validation passes, insert the original code.

- If fails and OXI default exists->use default

- If fails, OXI will fail the message in case the data element is mandatory (e.g. room type), or ignore element in case the data element is optional. In this case the message will still be processed but this data element will be ignored.

Sharers

- The mfSharedGuestRPH is an indicator that the reservation has sharing guests. The secondary sharer's guestResRPH number will be reflected in the mfSharedGuestRPH number

- Share reservations with multiple rooms are not supported

- Share reservations within multi segment bookings are not supported

Shares created in external system:

- In OPERA, the main reservation will be written with all details like full room rate, market, source, room type, total no of persons in the table. In addition, a share reservation record is created for each sharer. One record per day will be added to the daily_elements table for each reservation record. One record for each of the sharers per day will be entered into daily elements name table.

- All sharers have to be listed as mfSharedGuestRPHs in the XML message.

- The room stay dates of the entire reservation must comprise the earliest arrival and latest departure date of all sharers together.

- If one of the sharers is removed in the external system, the updated master record must be sent to OPERA, which will delete the sharer and keep the remaining guest as main reservation holder.

- OXI will reassign the main sharer based on the share records that are sent on a reservation with the 1st ResGuest being the headliner.

- OXI supports break and combine share functionality from the external system.

- If a share requires separate rooms, a new single reservation for the former share has to be sent to OPERA.

- If a reservation for one room contains more than one name, the first name will become the primary guest and all others will become secondary sharing guests. Profiles for all guests will be created.

- If a combination of multi segment and share reservation is sent together in a download message, OXI will reject the message.

- One ResGuest section for each sharer has to be sent. Each of them contains the details for that particular sharer.

- Rates: Rates will be applied according to the OXI_RESERVATION parameter SHARE_RATE_CALC_METHOD. The following settings are available contingent upon the OPERA Full Shares not being set to 'Y"

    - SPLIT: Each sharer will carry an equal portion of the total rate amount.

    - FULL: Each sharer will have the full rate amount.

    - ENTIRE: First sharer will be determined as the primary and carry the entire rate amount, all other sharers will have a zero rate amount.

- Share being processed inbound, but not existent in the receiving system shall be handled according to the OXI_RESERVATION parameter Sharer Removal Mode which is applicable only when FULL OPERA SHARES=N. This parameter determines how OXI should handle share reservations those found in OPERA but not coming in the message.

- o CANCEL: Cancels any sharer present in OPERA which does not appear in the incoming message.
- o DELETE: Deletes any sharer present in OPERA which does not appear in the incoming message.
- o NEITHER: Leaves sharer(s) those present in OPERA untouched, even if they don't appear in the message.
- Payment on shared reservations can either assume the payment type of the primary or retain the payment details ODF the secondary .The user will be prompted to choose when creating the share.
- If the reservation contains a membership number, this will be applied to the main sharer only as selected reservation membership. The profile of the main sharer will be updated with the membership details as well.

Shares created in external system and modified in OPERA:

- Can be deleted (inactivated) in external system.
- Can be cancelled in external system.
- Can be changed in external system as OXI will accept changes to share reservations if the OXI reservation parameter UPDATE_SHARE_RES is set to 'Y'.

Multi Leg (Multi Segment) Reservations from External System to OPERA

OPERA handles rate code changes by creating multiple elements within one reservation. In addition, multi leg reservations can also indicate multiple stays at different properties or multiple stays at one property with a gap between the stays. In these cases the reservations have to be sent as separate messages.

A leg indicator must be sent in addition to the external system reservation number, even for consecutive stays without rate changes.

1. **Reservation for one property for consecutive days with rate code change**
   - **External system handling:**
     External System creates a leg for each rate code change.

   - **OXI and OPERA handling:**
     Each change will carry the original external system number and the leg IDs in the message. The reservation is retrieved through a combination of property ID, original external system number, and leg numbers in OPERA. The reservation segments containing leg indicators are updated with the modified leg indicators.

2. **Reservation for one property for non-consecutive days with/without rate change**
   - **External system handling:**
     External System creates a leg for each rate change.

   - **OXI and OPERA handling:**

Same handling as in option 1, but since dates are non-consecutive, separate reservations are created. The reservations have to be sent separately, must carry the same external system number, and the difference is in the leg indicator. The reservations will be retrieved in OPERA through searching on a combination of resort ID, external system number, and leg ID.

3. **Reservation for different property for consecutive or non-consecutive days and with/without rate change**
Same as Above.

NOTE for ORS: the exact handling of multi leg (segment) reservations in OPERA Reservation System (ORS) is still being determined.

Multiple Room Reservations from External System to OPERA

Following business rules will apply to multiple room reservations:

- The external system can send a multi-room reservation in one message.
- If more than one name is linked to the reservation, the names will create profiles in OPERA.
- OXI will NOT split the reservations automatically.

If the reservation is split manually on either side, the other side will be updated properly and show the same number of reservations and rooms. This of course applies only to a 2-way interface. The impact of multi-room reservations from external system and their subsequent split in OPERA in case of a 1-way interface should be considered carefully.

Full Reservation from OPERA to External System

All reservations will be sent from OPERA to the external system.

Each message from OPERA must receive a response back after successful insertion at the external system. The response must contain the external system confirmation number, which will thereafter be used as main search criterion for further changes from the external system.

Each change message from OPERA will contain all reservation information and can be configured to transfer messages in Fulloverlay or Delta mode.

Options and Restrictions for Reservations from OPERA to External System

Reservations will be sent in XML format including attached profile details and on insertion, the external system must return a response with its own confirmation number.

Changes to reservations will contain the external system number and leg numbers for each reservation stay detail.

The total length of the reservation is sent in the StayDateRange object, which contains the earliest arrival date and latest departure date. The single guests and their respective stay lengths within the reservation are sent in the ResGuest objects.

- Day-use reservations will be sent.
- Reservations with consecutive dates that contain rate changes will be sent as one individual reservation with multiple rate plans for the rate changes. If this reservation originates in OPERA, it will not contain multiple leg numbers for the rate changes. If the reservation had originated in the external system, which had sent the rate changes as multiple legs, a change in OPERA will sent back the multiple legs in the reservation.
- Rate discounts will be sent to external system.
- Reservations created in OPERA can be modified or cancelled in the external system.
- If a reservation is deleted in OPERA, a cancel message will be sent for this.
- Waitlist reservations can be sent if the external system supports it.
- Cancellation reinstatements can be sent if the external system supports it.
- No-shows reinstatements can be sent if the external system supports it.
- Walk-Ins will be sent in the same way as other reservations.

Handling of Defaults and Conversion for Reservations from OPERA to the External System

If the conversion table for a data element is NOT activated:
- Check if OXI default exists->use default
- If default check fails->OXI will send the OPERA value in the XML message

If the conversion table for a data element is activated:
- Check if conversions exist and convert value
- If fails and OXI default exists->use default
- If default check fails->OXI will send the OPERA value in the XML message

Sharers

- The mfSharedGuestRPH is an indicator that the reservation has sharing guests. The secondary sharer's guestResRPH number will be reflected in the mfSharedGuestRPH number.
- Share reservations with multiple rooms are not supported.

Shares created in OPERA:

- New sharer: OPERA will send one reservation with ResGuestRPH for all guests in the reservation and identify secondary sharers by sending their profile IDs as MfSharedGuestRPHs.
- When the external system responds with its confirmation number, this will be inserted in all sharers alike.
- OPERA originating shares can be cancelled in the external system.
- OPERA originating shares can be viewed in the external system.

Share Functionality

We do not use share action types but only add/edit action types for upload of sharers. The share action is identified by the mfSharedGuestRPH

1. If a share is combined with another profile, the following messages will be created:

   - An edit message for the existing reservation will be sent, which has the existing guest as primary sharer and the new guest as secondary sharer. Sharers are identified through the mfSharedGuestRPH in the RoomStay element.
   - One new reservation for the new sharer is automatically created in OPERA and set.
   - Cancelation for the new reservation is sent. In case no external system number was present, the external system should be able to retrieve the reservation by OPERA confirmation number.
   - OXI will copy the external system reservation number from the primary sharer to the other sharers in OPERA.
   - If the external system sends the result message for the new reservation and OXI had already copied the external system number from the primary sharer to this reservation, the result message will be ignored.

2. If a share is combined with another reservation, the following messages will be created:
   - An edit message to the reservation with the lowest OPERA confirmation number will be sent, which is handled as the primary sharer. All additional sharers are inserted as mfSharedGuestRPHs in this message.
   - A cancel message will be sent for the shared reservation, which is not the primary sharer. The cancel will carry the former external system number of that reservation. In case no external system number was present, the external system should be able to retrieve the reservation by OPERA confirmation number.
   - OXI will copy the external system number from the identified primary sharer to the other sharers if existing.

The following rules will be applied for a combine share:

- The lowest OPERA confirmation number of all sharers determines the primary sharer. This guest will show as the first ResGuestRPH in the RoomStay element.
- An mfSharedGuestRPH will be contained in the RoomStay for each sharer apart from the primary sharer
- StayDateRange will contain the earliest arrival date and latest departure date of all sharers
- One ResGuest element for each guest will be shown with individual dates of each share reservation
- One ResProfile for each guest will be shown with individual details of each sharer.
- One RoomStay for the entire reservation will contain the following data:
- The first ResGuestRPH, which identifies the main sharer
- An mfSharedGuestRPH for each additional sharer
- Total time span for all reservations (as in StayDateRange the earliest arrival and latest departure date)
- Total guest count of reservation (count all sharers)
- Room type of primary sharer (which is the same for all sharers)

- Rate plan of primary sharer
- Market code of primary sharer
- Guarantee and deposit information of primary sharer
- Payment instructions of primary sharer
- Source code of primary sharer

3. If a change to a share reservation happens in OPERA, the following is sent to the external system:
   - When OPERA creates a change reservation business event, the reservation will be checked for the share flag. If 'Y', the following business rules will apply:
   - If the share flag is yes all the sharers to this reservation will be searched and the lowest OPERA confirmation number will determine the primary sharer.
   - A reservation edit message will be created that contains a RoomStay element with the details of the primary sharer and the overall reservation dates and guest counts.
   - The reservation status of the primary sharer will be shown in RoomStay.
   - If the change is in the dates, the new total reservation dates have to be calculated and inserted as earliest arrival and latest departure date in StayDateRange and RoomStay.
   - If the business event is 'New reservation', rules in point 1 apply.

4. If a break share happens in OPERA, the following messages are sent to the external system:
   - A reservation edit message for the remaining reservation without mfSharedGuestRPHs will be sent.
   - If the remaining reservation is still sharing, the same rules as in no.2 apply. The ResGuest elements will not show the broken-off guest details anymore. The RoomStay element will contain only the primary ResGuestRPH and the remaining mfSharedGuestRPHs. The total StayDateRange and RoomStay dates are adjusted.
   - If the primary sharer is broken, the next primary sharer has to be identified by the lowest OPERA confirmation number among the remaining sharers. The RoomStay will then contain details of this new primary guest. The first ResGuestRPH contains the number of this new primary guest.
   - The reservation status of the remaining reservation or new primary sharer will be shown in RoomStay.
   - OPERA creates a new reservation for the broken sharer. OXI will remove the external system number from this reservation and send a new reservation message to the external system.

5. If a sharer is cancel, depart, or no-show in a share reservation,
   When OPERA creates a cancel, checkout, or no-show reservation business event, the reservation will be checked for the share flag. If 'Y', the following business rules will apply:
   - A reservation edit message for the remaining reservation without mfSharedGuestRPHs will be sent.

- If the remaining reservation is still sharing, the same rules as in no.2 apply. The ResGuest elements will not show the broken-off guest details anymore. The RoomStay element will contain only the primary ResGuestRPH and the remaining mfSharedGuestRPHs. The total StayDateRange and RoomStay dates are adjusted.
- If the primary sharer is cancelled, checked-out, or no-show, the next primary sharer has to be identified by lowest OPERA confirmation number among the remaining sharers. The RoomStay will then contain details of this new primary guest. The first ResGuestRPH contains the number of this new primary guest.
- The reservation status of the remaining reservation or new primary sharer will be shown in RoomStay.

Sharers - Special Cases

The reservations that are shared in OPERA do not have external system confirmation numbers. In this case we will send the share message and respective cancel for the reservations before share without the external system confirmation number. The external system should accept this and should be able to retrieve the reservations based on the OPERA confirmation number.

First time Sync/Re-sync Utility for Reservations from OPERA to the External System

The OPERA Xchange Interface offers a synchronize utility to send all reservations to the external system.

The sync utility can be used for:

- First time synchronization for a new system
- Re-Sync the reservations if needed in a running system

The utility will create messages for all reservations existing in OPERA for the relevant property based on OXI resync parameters set. The following options and rules will apply:

- Before the first sync, the customer has to determine whether the external system or OPERA has more accurate data. The designated master system will be the one to do the resync.
- The OXI resync will send an XML message for every reservation in the given date range and for the given conditions set. The user can choose from multiple conditions that must apply for the data to be resynced.
- The OXI reservation resync utility should only run after automatic or manual resync of the following objects:
  - Rate Codes
  - Rate Restrictions
  - Profiles
  - Blocks

Business Events Needed in OPERA – Module Reservations

Business Event (Action type)	Business Type	XML Reservation Action Type	XML MfReservation Action
Cancel	Reservation cancellation	Cancel	Cancel
Check-in	Check in of reservation. Needed to lock reservation in External System and for Yield Management	Change	Check-in
Check out	Check out. Needed for yield management	Change	Edit
Delete reservation	Delete a reservation in OPERA	Delete	Delete
Join guest	Join sharer	Change	Edit
New reservation	New reservation	New	Add
New trace added	New trace was added to a reservation	Change	Edit
No show	No show of reservation	Change	Noshow
Reactivate no show	Reactivating a no-show is not directly possible in the external system, but the interface can upload this command and the external system will change the status of the reservation.	Change	Reinstate
Reactivate waitlist	Move waitlist to active reservation.	New	Waitlistto Active
Reverse check in	Reverse check in	Change	Cnxcheckin
Reverse check out	Reverse check out	Change	Reinstate
Rollback cancel	Reactivate a cancelled reservation	Change	Reinstate
Separate guest from share	Break share	Change	Split – download Add – upload
Update reservation	All changes to a common list of elements. Details in the mapping table.	Change	Edit

2   Mapping Table Data Elements

Legend for mapping table:

Data Elements	Description
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.

Reservations - Mapping Table between External System and XML Message

The original schemas contain more data elements then are described in the following mapping table. Whatever is not described is not used by OXI and can be ignored in the schema.

External System Column	XML Message Main Group	XML Message Label	Mandatory in XML Message?	Business Rules

Reservation Action Type	mfReservation Action	Yes for all messages	• Indicates specific type of reservation action during sending from OPERA to external system.

Rules:

1. OXI conversion table for reservation action types is used. Please configure the conversion table as listed below. The OPERA value shows the OPERA business event in upper case with some explanatory text behind it. Also note the exact spelling of all values in upper case, as the value may be written with a space in OPERA and without space in the external system value.

Data from external system:

- Inactivated or deleted reservations must be sent as CANCEL.
- If a share is removed, an update to master reservation must be sent to OPERA, which results in deleting the sharer in OPERA.

Data from OPERA:

- A deleted reservation in OPERA is sent as CANCEL.
- If a reservation is sent that is inactive in the external system, a new reservation is created in the external system.
- If a sharer is cancelled but the main reservation is still active, an EDIT message to remaining reservation is sent. If entire share reservation

			is cancelled, a 'cancel' message is sent. • A reinstated cancelled reservation is sent to external system. **OPERA value from business events External system XML value** CANCEL of a reservation CANCEL CHECK IN of a reservation CHECKIN CHECK OUT of a reservation CHECKOUT DELETE RESERVATION DELETE JOIN GUEST to share a reservation SHARE NEW RESERVATION in OPERA ADD NEW TRACE ADDED in OPERA EDIT NO SHOW guest has not arrived NOSHOW REACTIVATE NO SHOW REINSTATE REACTIVATE WAITLIST WAITLISTTOACTIVE REVERSE CHECK IN if not arrived CNXCHECKIN REVERSE CHECK OUT if not depart. EDIT ROLLBACK CANCEL if not canceled REINSTATE SEPARATE GUEST FROM SHARE ADD UPDATE RESERVATION EDIT WAITLIST reservation if no vacancy WAITLIST
Share Action Type		mfShareAction	Is not used and will always be NA.
Chain Code	HotelReference	chainCode	Chain Code. Not currently used.

Property ID	HotelReference	hotelCode	Yes for all messages	Property code for which reservation is created. External system has to send property ID as part of every message. **Rules:** 1. OXI setup entry will be used for conversion of the property code. 2. In case of a multi property environment, OXI will retrieve a reservation based on a combined index including the property code, as the external system confirmation number could exist multiple times. 3. Required field for OPERA.
		roomStayReservation	Yes for all messages	Number of room stays in reservation. Defaults to 1.
External System Confirmation Number		confirmationID	Yes for all messages	External system confirmation number. **Rules:** Data from external system: 1. This column will be used as search and match criterion for every reservation record. It must be sent in every external system reservation. 2. It must be sent as result from external system for every booking from OPERA. Data from OPERA: 1. As soon as the reservation exists in both systems, OPERA will send the external system confirmation number for every booking change.

OPERA Reservation Number	reservationID	Yes for all reservations from OPERA	OPERA confirmation number. **Rules:** Data from external system: 1. Once the reservation exists in both systems, the external system should store the OPERA confirmation number and should sent it for all further booking changes. 2. Will be used as second search and match criterion by OPERA, in case the external system number cannot find the booking. Data from OPERA: 1. The OPERA confirmation number is sent for each booking from OPERA and should be stored in the external system. 2. Upon receipt of a booking from external system, OPERA will return a result message with this OPERA confirmation number.
GDS, Third Party System that created reservations	reservationOriginator Code		Reservation Originator Code. Not currently mapped into OPERA.
Total Leg Numbers in Booking	mfLegNumbers		The total number of legs (segments) of this external reservation ID. This is a summary of all leg numbers regardless which of the legs is being handled in the reservation. This will only occur in messages from external system to OPERA.

Original Booking Date		originalBookin gDate		Date of reservation creation **Rules:** 1. Will be inserted by OXI with OPERA system date for a new reservation. 2. Required field for OPERA.
Cancellation Number		cancellationID		This is the cancellation number created by OPERA or external system. **Rules:** The cancellation number from the external system will be inserted in OPERA, and the reservation can be searched by this number as well.
Cancel Code		cancelOriginat or Code		Cancellation reason.
Cancel Date		cancellationDat e		This is the cancellation date created by OPERA or the external system. The External System date only serves as information and will not be inserted
	StayDateRa nge	timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.

Arrival Date	StayDateRa nge	startTime	Yes for all messages	Arrival date for total reservation. Earliest arrival date of all sharers for upload. **Rules:** 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (StayDateRange) Reservation dates Sharer 1: August 01-03 (ResGuest) Reservation dates Sharer 2: Augus02-04 (ResGuest). 2. Required field for OPERA.
Nights	StayDateRa nge	numberOfTime Units	Yes for all messages	Number of nights for total reservation. Total number of nights for all share reservations.
Departure Date				Departure date for total reservation. Is calculated out of StartTime and NumberOfTimeUnits. Required field for OPERA.
Adults	GuestCount s	ageQualifying Code mfCount	Yes for all messages	Adults in this reservation from external system. If AgeQualifyingCode = 'ADULT' MfCount shows the number of adults. Required field for OPERA.
Children	GuestCount s	ageQualifying Code mfCount		Children in this reservation from external system. If AgeQualifyingCode = 'CHILD', MfCount shows the number of children.
Action Type Comment	ResComme nts	reservationActi onType		Action type for comment. Default is NA.
	ResComme nts	resCommentR PH		The reference placeholder (RPH) for this comment.
Comment Originator Code	ResComme nts	commentOrigi nator Code		System where the comment originates – not currently used.

Guest viewable	ResComments	guestViewable		Indicates whether comment is viewable to guest. Defaults to 1 in message from OPERA.
Comment	ResComments	comment		Comment text.
Comment Type	ResComments	mfCommentType	Only if Comment is populated	Comment Type. **Rules:** • OXI conversion table for Comment types will be used. Possible values: RESERVATION; CASHIER.
Comment Date	ResComments	mfCommentDate		Creation date of comment.
Action Type Credit Card	ResCreditCards	reservationActionType		Action type for credit card. Default is NA.
	ResCreditCards	resCreditCardRPH		The reference placeholder for this credit card.
	ResCreditCard	resCitId		Customer Initiated Transaction (CITID) provided by external system is update to PMS system.
Credit Card Code	ResCreditCards	creditCardCode		Credit Card Code. **Rules:** 1. A credit card in the ResCreditCards object will be linked with this particular reservation in OPERA. 2. OXI conversion table for pay methods is used.
Credit Card Name	ResCreditCards	CreditCardHolder Name		The name of the credit card holder.
Credit Card Number	ResCreditCards	CreditCardNumber	Only if CreditCard Code is populated	Credit Card Number.
Credit Card Expiry Date	ResCreditCards	CreditCardExpire	Only if CreditCard Code is populated	Credit Card Expiry Date.

Is CC primary YN	ResCreditCards	MfPrimaryYN		Indicator if credit card is primary. XML values: this has been added to the HITIS module.
Credit Card Token	ResCreditCards	creditCardUniqueId		Token provided for the Credit Card Number
Credit Card Last 4	ResCreditCards	creditCardFourDigits	Only if Credit Card Token is populated	Last 4 digits of the Credit Card Number
	ResGuests	reservationActionType		Action type for res guest component.
	ResGuests	resGuestRPH	Yes for all messages	Reference placeholder for res guest components. **Rules:** There has to be one ResGuestRPH for each guest in the reservation, including shares and accompanying guests. Sample: The reservation consists of two sharing guests. The ResGuestRPH would contain 0,1. The reservation consists of one main guest and two accompanying guests. The ResGuestRPH would contain 0,1,2.

		ResGuests	mfConfirmatio nLegNo	Yes for all messages	Confirmation leg no for itinerary reservations in OPERA. **Rules:** 1. The confirmation leg number that identifies an itinerary booking in OPERA will be sent in messages from OPERA to external system in the ResGuest tag. 2. External system must always send the confirmation leg no if present, as this serves as retrieval criteria for multi leg reservations in OPERA. Since the OPERA confirmation number does not need to be unique, the combination of confirmation and leg number allows OXI to find a reservation in OPERA.
Attached profiles Company, Travel Agent, Source, Group		ResGuests	profileRPHs	Yes for all messages	All profiles linked to reservation. Guest/Company/TA/Source /Group profile linked to reservation. See profile mapping table for all details. **Rules:** 1. Profiles will be linked to the reservation in OPERA through the internal OPERA name ID. 2. There will be one ProfileRPH for each guest in the room and for each additionally linked profile to the reservation. 3. One reservation can have multiple guest profiles, 1 company profile, 1 agent profile, 1 wholesaler/source profile, and 1 group profile in OPERA.

Mapping Table Data Elements

Accompanying guest	ResGuests	resGuestRPH		Accompanying guest. **Rules:** 1. Will not be inserted as separate reservation, but only as last/first name. 2. Any additional ResGuestRPH in reservation, which is not presented as MfSharedGuestRPH in room stay, is considered an accompanying guest. 3. A complete record will be created
	ResGuests	ageQualifying Code		Ignore as only the adults segment from the main object will be used.
Arrival Date	ResGuests InHouseTi meSpan	timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Arrival Date	ResGuests InHouseTi meSpan	startTime	Yes for all messages	Arrival date of reservation for this guest. In case of sharing guests in one reservation this date could be different from StayDateRange StartTime. **Rules:** 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (StayDateRange) Reservation dates Sharer 1: August 01-03 (ResGuests) Reservation dates Sharer 2: Augus02-04 (ResGuests). 2. Required field in OPERA.

Flight information arrival	ResGuests ArrivalTransport	transportType	Type of arrival transportation. • **Rules:** • OXI conversion table for transport types will be used. Possible values: AIR; RAIL; BUS; BOAT; PRIVATEAUTO; OTHER. Default: NA.
Transport ID	ResGuests ArrivalTransport	transportID	Arrival flight number.
Location Code	ResGuests ArrivalTransport	locationCode	Airport for arrival.
Transport Time	ResGuests ArrivalTransport	transportTime	Estimated arrival time of transport mode in date/time format.
Transport Required	ResGuests	mfTransportRequired	Flag whether arrival transport required. **Rules:** Value '1' means transport is required, value '0' means no transport is required.
Flight information departure	ResGuests Departure Transport	transportType	Type of departure transportation. • **Rules:** • OXI conversion table for transport types is used.
TransportID	ResGuests Departure Transport	transportID	Departure flight number.
LocationCode	ResGuests Departure Transport	locationCode	Airport for departure.
TransportTime	ResGuests Departure Transport	transportTime	Estimated departure time of transport mode in date/time format.

MfTransport Required	ResGuests Departure Transport	mfTransportRequired		Is departure transport required. **Rules:** Value '1' means transport is required, value '0' means no transport is required. XML values: this has been added to the HITIS module.
Arrival Time	ResGuests	arrivalTime		Estimated arrival time in hotel.
Departure Time	ResGuests	departureTime		Estimated departure time from hotel.
	ResProfiles		Yes for all messages	Reservation Profile section starts. There will be as many ResProfiles as guest names, agent, company, and group profiles linked to a reservation. Details are described in the profile mapping table of this document.
Reservation Action Type	Room Stay	reservationAction Type		Indicates the type of notification. OPERA will send NEW and CHANGE.
	RoomStay	roomStayRPH		Reference placeholder for room stay elements. Only one per message is allowed.

Reservation Status	RoomStay	reservationStatusType	Yes for all messages	Reservation status. **Rules:** 1. OXI conversion table for reservation status will be used. Please setup the conversion table with the following values and notice the different spelling in OPERA and external system values. **OPERA value from business events External system XML value** CANCELLED CANCELED CHECKED IN INHOUSE CHECKED OUT CHECKEDOUT NO SHOW NOSHOW PROSPECT REQUESTED RESERVED RESERVED WAITLIST WAITLISTED 2. All other external system or OPERA status types will be ignored. 3. Required field for OPERA.
Room Type	Room Stay	roomInventoryCode	Yes for all messages	Room type. **Rules:** 1. OXI conversion table for room types will be used. 2. Pseudo room types in OPERA can be transmitted based on OXI generic parameter HANDLE_PSEUDO_ROOMTYPES. 4. Required field for OPERA.

Room Number	RoomStay	roomID		Room number in OPERA, will be sent to external system. **Rules:** 1. If a room type change is sent from external system, the assigned room number in the OPERA record is removed and a warning message is issued. 2. If a date change is sent from external system, OXI will check if the room number is already assigned for that new date if so, remove the room number and issue a warning. 3. For all other changes the assigned room number remains blocked.
	RoomStay TimeSpan	timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Arrival Date	RoomStay TimeSpan	startTime	Yes for all messages	Arrival date for total reservation. Equal to StayDateRange: earliest arrival date of all sharers for upload. **Rules:** 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (RoomStay) Reservation dates Sharer 1: August 01-03 (ResGuests) Reservation dates Sharer 2: Augus02-04 (ResGuests). 2. Required field for OPERA.

Nights	RoomStay TimeSpan	numberOfTime Units	Yes for all messages	Number of nights for total reservation. Equal to StayDateRange: total number of nights for all share reservations.
Adults	RoomStay GuestCount s	AgeQualifying Code mfCount		Ignore as only the adults segment from the main object will be used.
Children	RoomStay GuestCount s	ageQualifying Code mfCount		Ignore as only the adults segment from the main object will be used.
Action Type Rate Plan	RoomStay RatePlans	reservationActi onType		Action type for rate plan. This is not used for download from External System to OPERA OPERA will send action types NEW, CHANGE.
	RoomStay RatePlans	ratePlanRPH	Yes for all messages	Reference placeholder for rate plans in reservation.

Rate Code	RoomStay RatePlans	ratePlanCode	Rate code.
			Rules:
			OXI rate code conversion table will be used.
			Data from external system:
			1. The rate detail for the reservation dates will be looked up in rate detail table in OPERA.
			2. The property ID, start date, end date, room type, and active YN will be evaluated. If this evaluation is not successful, a warning will be issued and the default OXI rate code will be used.
			3. The price will always be considered as daily rate by OPERA.
			4. Rate code changes during the stay can be sent as multi-leg reservation with consecutive dates. The daily elements will carry leg IDs. This is not required by OPERA but will be accepted in case the external system has to send it like this.
			Data from OPERA:
			5. A reservation without rate code is possible in OPERA and is parameter-driven. If the external system requires a rate code, the OXI default rate code must be set.
			6. Market codes and source codes can be linked to the rate codes details in OPERA. This means that a rata code change in a reservation can affect a market/source code change as well. A business process

				should determine the exact handling for the customer.
	RoomStay RatePlans	TimeSpan timeUnitType		Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Start Date Rate Plan	RoomStay RatePlans	TimeSpan startTime	Yes if RatePlanC ode is populated	Start date for this rate plan in reservation. Required field for OPERA.
Duration Rate Plan	RoomStay RatePlans	TimeSpan numberOfTime Units	Yes if RatePlanC ode is populated	Duration of this rate plan in reservation.
Market Code	RoomStay RatePlans	mfMarketCode		Market Code (also see MarketSegmentCode). **Rules:** 1. OXI conversion table for market codes will be used. 2. An OXI parameter can be set to determine if market code is converted or derived from block, rate details, or rate header.
Action Type Rate	RoomStay RatePlans	Rates reservationActi onType		Action type for rate. **Rules:** 1. This is not used for download from External System to OPERA. 2. OPERA will send action types NEW, CHANGE.
	RoomStay Rate Plans	Rates rateRPH	Yes for all messages	Reference placeholder for rates in reservation.

Currency Code	RoomStay RatePlans	Rates Amount currencyCode		Currency code for rate. **Rules:** 1. OXI conversion table for currency codes will be used. 2. We will look up the rate header to determine the currency for the rate code in OPERA. If the currency in the rate header differs from the sent currency code, we will convert the rate amount into the value for the OPERA currency code, using the exchange rate for postings. 3. OXI will insert the rate in correctly calculated OPERA rate code currency, and enter the used exchange rate in the reservation. We will round the exchanged rate amount to match the decimal limitation. 4. OXI will issue a warning if the OPERA currency code differs from external system currency code for the same rate code.
Rate	RoomStay RatePlans	Rates Amount valueNum	Yes for all messages	Rate amount. **Rules:** The rate amount inserted will depend on the OXI parameter settings, which could be OPERA or external system price control. The rate amount will be based on number of adults/children in OPERA. If the rate amount linked to the rate code in OPERA differs from the rate amount sent, a warning is issued for OPERA user. See Rate Discount Amount.

	RoomStay RatePlans	Rates rateBasisTime Unit Type		Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
	RoomStay RatePlans	Rates rateBasisUnit		Default to 1.
	RoomStay RatePlans	Rates TimeSpan timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Start Date Rate	RoomStay RatePlans	Rates TimeSpan startTime	Yes for all messages	Start date for this rate within the rate plan in reservation.
Duration Rate	RoomStay RatePlans	Rates TimeSpan numberOfTime Units	Yes for all messages	Duration of this rate within the rate plan in reservation.
Adults for each Date within Reservation	RoomStay RatePlans	Rates mfAdults		The number of adults for that particular date within the reservation. If the number of adults differs between dates within the stay, this data element can be used to indicate this.
Children for each Date within Reservation	RoomStay RatePlans	Rates mfChildren		The number of children for that particular date within the reservation. If the number of children differs between dates within the stay, this data element can be used to indicate this.

Cribs for each Date within Reservation	RoomStay RatePlans	Rates mfCribs	The number of cribs for that particular date within the reservation. If the number of cribs differs between dates within the stay, this data element can be used to indicate this.
Extrabeds for each Date within Reservation	RoomStay RatePlans	Rates mfExtraBeds	The number of extrabeds for that particular date within the reservation. If the number of extrabeds differs between dates within the stay, this data element can be used to indicate this.
Source Code for each Date within Reservation	RoomStay RatePlans	Rates mfSourceCode	The source code for that particular date within the reservation. If source code differs between dates within the stay, this data element can be used to indicate this. **Rules:** OXI conversion table for source codes will be used.
Market Code for each Date within Reservation	RoomStay RatePlans	Rates mfMarketCode	The market code for that particular date within the reservation. If market code differs between dates within the stay, this data element can be used to indicate this. **Rules:** OXI conversion table for market codes will be used.

Block Code	RoomStay	inventoryBlock Code	Block code in case of a group reservation.

Rules:
Data from external system:
1. A reservation picked up from a block has to be covered entirely by the block dates. If either arrival or departure date is outside the block dates but the block is elastic, OXI will force the reservation into the block and expand the block dates. If the block is not elastic, the reservation will be picked up from the OPERA house inventory. An appropriate warning is issued.
2. If the room type sent for the block reservation does not exist in the block: OXI will borrow from the next remaining room type in the block that still has inventory and accept the reservation for this room type.
3. If the block is sold out: If the block is elastic, OXI will force the reservation into the block and increase the block inventory. If the block is not elastic, the reservation will be picked up from the OPERA house inventory. An appropriate warning is issued.

Market Code	RoomStay	marketSegmentCode	Market Code (also see MfMarketCode). **Rules:** 1. OXI conversion table for market codes will be used. 2. An OXI parameter can be set to determine if market code is converted or derived from block, rate details, or rate header. 3. If the rate code in an OPERA reservation changes, this can result in a market code change as well. The OPERA user is prompted and can accept the change or not. 4. A market code in the OPERA reservation can differ for each rate segment. If the guest is changing rate codes several times during the stay, a changed market code can apply for each new rate code and will be sent as part of the rate section.
		resGuestRPHs	Reference placeholders for res guests.
	RoomStay GuaranteeInfo	guaranteeType	Description of guarantee type. Information only, does not map into OPERA. NOGUARANTEE; CCDCVOUCHER; PROFILE; DEPOSIT.

Guarantee Type	RoomStay GuaranteeInfo	mfGuaranteeType		Reservation guarantee type **Rules:** 1. OXI conversion table for reservation types is used. 2. Reservation types are totally definable in OPERA but can be linked to certain restrictions in OPERA, which will be checked by OXI before inserting the reservation into OPERA. This means e.g. that a GTD type of CC must come along with CC details in the message. Otherwise a warning will be issued and the default IFC GTD type will be inserted. 3. Required field for OPERA.
Deposit Due Date	RoomStay Guarantee Info	GuaranteeDeposit dueDate		Deposit due date – no longer used. Please use the CancelPenalties object instead.
Deposit Amount	RoomStay Guarantee Info	GuaranteeDeposit Amount		Deposit amount date – no longer used. Please use the CancelPenalties object instead.
Cancel if not received	RoomStay Guarantee Info	GuaranteeDeposit cancelfNoReceived		Not used.

	RoomStay Payment Instructions	paymentMethodType	Payment type Valid values are: XML Message CASH CREDITCARD DEBITCARD VOUCHER CHECK OTHER These are indicators of the type of payment the following method belongs to. They are linked to the payment type transactions in OPERA.
Method of Payment	RoomStay Payment Instructions	mfPaymentMethod	Payment method for reservation. **Rules:** 1. OXI conversion table for payment methods is used. 2. If a reservation is sent to OPERA without guarantee code or payment type, the payment method will use the OXI default. 3. If a reservation credit card is sent but the payment type is cash, the cc details will be ignored and not be entered in the OPERA reservation. 4. Required field for OPERA.
	RoomStay Payment Instructions	resCreditCardRPH	Reference placeholder for credit cards in reservation.

3 Functional Specifications Profile Object

Profiles from External System to OPERA

All profiles from the external system should be sent to OPERA including all new profiles and changes.

Each profile message will receive a response back after successful insertion into OPERA. The response will contain the OPERA internal profile number.

Two modes of profile handling will be accepted:

1. Full overlay mode where each message has to send all profile information and has to be a total overlay of the existing profile contents in OPERA.

2. Partial delta modification mode where the external system can send only the data elements stored in their system, even if OPERA has more details stored for the profile. Minimum requirements still have to be fulfilled and a sample of a minimum-content profile message can be found in appendix 2. For successful partial delta modification processing, the external system has to indicate clearly when a data element shall be deleted. The following deletion indicators can be applied for data elements in the main profile table and will be accepted by OXI:

   - For the deletion of character values: ~; ^; *
   - For the deletion of numeric values: -99999
   - For the deletion of date values: 12/12/1800

Also a Keep Data indicator has been introduced to designate fields that should be kept in messages from external systems. The '~~" double byte character is used.

Please also note that various data elements in the profile message can now contain an inactive date, which will lead to the deletion of this data element in OPERA.

Options and Restrictions for Profiles from External System to OPERA

- Inactivated profiles should not be sent to OPERA.
- Profiles created in OPERA can be changed by the external system.
- Profiles created in the external system can be changed by OPERA.
- Several OXI parameters can be applied to manipulate the application of data from the external system to OPERA.

The update of matched and merged profiles depends on the OXI parameters, where users can determine whether external system or OPERA will have profile overwrite priority for each profile type. Set to 'Y' in order to use the OXI Profile Matching routine with entry match criteria and weighing point match criteria. In case you do not require profile matching, e.g. if OPERA and the external system share their internal profile numbers both ways and always have an ideal match, you can select to set this parameter to 'N'. The OXI Profile Matching routine will then be ignored.

Handling of Defaults and Conversion for Profiles from External System to OPERA

If the conversion table for a data element is NOT activated:
- OXI will validate the data element against valid OPERA codes and if that validation passes, insert the original code.
- If validation fails, check if OXI default exists->use default.
- If default check fails, OXI will fail the message in case the data element is mandatory (e.g., room type), or ignore element in case the data element is optional. In this case the message will still be processed but this data element will be ignored.

If the conversion table for a data element is activated:
- Check if conversions exist and convert value.
- If fails, OXI will validate the data element against valid OPERA codes and if that validation passes, insert the original code.
- If fails and OXI default exists, use default.
- If fails, OXI will fail the message in case the data element is mandatory (e.g., room type), or ignore element in case the data element is optional. In this case the message will still be processed but this data element will be ignored.

Profiles from OPERA to External System

OXI will send all profiles in full overlay mode to the external system. This will include new profiles and changes.

Each profile message should receive a response back after successful insertion at the external system.

Options and Restrictions for Profiles from OPERA to External System

- Profiles created in OPERA can be changed by the external system.
- Profiles created in the external system can be changed by OPERA.

Handling of Defaults and Conversion for Profiles from OPERA to the External System

If the conversion table for a data element is NOT activated:
- Check if OXI default exists, use default
- If default check fails, OXI will send the OPERA value in the XML message

If the conversion table for a data element is activated:
- Check if conversions exist and convert value
- If fails and OXI default exists, use default
- If default check fails, OXI will send the OPERA value in the XML message

First Time Sync of Profiles into the External System

OXI offers a synchronize utility to resync all OPERA profiles to the external system.

The sync utility can be used for:

- First time synchronization for a new system

- Re-Sync of data if needed in a running system

The utility will create messages for all profiles existing in OPERA based on the resync parameters set in OXI.

Business Events Needed in OPERA - Module Profiles

Business Event (Action type)	Business Type
New profile	Creation of a new profile.
Update profile	All profile changes to a common list of elements. Details are in the mapping table.
Delete profile	The deletion of a profile. Note that OXI does not currently support a profile deletion and will send this business events like a profile change.
Merge profile	Merge one profile with another one. OXI will reflect the changes to the remaining profile in the xml message.
Subscribed profile	Sends a business event if profile subscription is added or updated.

4   Mapping Table Data Elements

Legend for mapping table:

Data Elements	Description
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.

Profiles - Mapping Table between External System and XML Message

The original schemas contain more data elements then are described in the following mapping table. Whatever is not described is not used by OXI and can be ignored in the schema.

External System Column	XML Message Main Group	XML Message Label	Mandatory in XML Message?	Business Rules

Reservation Action Type	mfReservationAction	Yes for all messages	Indicates specific type of reservation action during sending from OPERA to external system.

Rules:

OXI conversion table for reservation action types is used. Please configure the conversion table as listed below. The OPERA value shows the OPERA business event in upper case with some explanatory text behind it. Also note the exact spelling of all values in upper case, as the value may be written with a space in OPERA and without space in the external system value.

Data from external system:

- Inactivated or deleted reservations must be sent as CANCEL.
- If a share is removed, an update to master reservation must be sent to OPERA, which results in deleting the sharer in OPERA.

Data from OPERA:

- A deleted reservation in OPERA is sent as CANCEL.
- If a reservation is sent that is inactive in the external system, a new reservation is created in the external system.
- If a sharer is cancelled but the main reservation is still active, an EDIT message to remaining reservation is sent. If entire share reservation is cancelled, a 'cancel' message is sent.
- A reinstated cancelled reservation is sent to external system.

		OPERA value from business events	External system XML value
		CANCEL of a reservation	Cancel
		CHECK IN of a reservation	Check-in
		CHECK OUT of a reservation	Checkout
		DELETE RESERVATION	Delete
		JOIN GUEST to share a reservation	Share
		NEW RESERVATION in OPERA	Add
		NEW TRACE ADDED in OPERA	Edit
		NO SHOW guest has not arrived	No Show
		REACTIVATE NO SHOW	Reinstate
		REACTIVATE WAITLIST	Waitlist to A
		REVERSE CHECK IN if not arrived	CNX Check-
		REVERSE CHECK OUT if not depart.	Edit
		ROLLBACK CANCEL if not canceled	Reinstate
		SEPARATE GUEST FROM SHARE	Add
		UPDATE RESERVATION	Edit
		WAITLIST reservation if no vacancy	Edit Waitlist
Share Action Type	mfShareAction	Is not used and will always be NA.	

Chain Code	HotelRefe rence	chainCode		Chain Code. Not currently used.
Property ID	HotelRefe rence	hotelCode	Yes for all messages	Property code for which reservation is created. External system has to send property ID as part of every message. Rules: 1. OXI setup entry will be used for conversion of the property code. 2. In case of a multi property environment, OXI will retrieve a reservation based on a combined index including the property code, as the external system confirmation number could exist multiple times. 3. Required field for OPERA.
		roomStayR eservation	Yes for all messages	Number of room stays in reservation. Defaults to 1.
External System Confirmati on Number		confirmati onID	Yes for all messages	External system confirmation number. Rules: 1. Data from external system. 2. This column will be used as search and match criterion for every reservation record. It must be sent in every external system reservation. 3. It must be sent as result from external system for every booking from OPERA. Data from OPERA: As soon as the reservation exists in both systems, OPERA will send the external system confirmation number for every booking change.

OPERA Reservation Number	reservation ID	Yes for all reservations from OPERA	OPERA confirmation number. Rules: Data from external system: 1. Once the reservation exists in both systems, the external system should store the OPERA confirmation number and should sent it for all further booking changes. 2. Will be used as second search and match criterion by OPERA, in case the external system number cannot find the booking. Data from OPERA: 1. The OPERA confirmation number is sent for each booking from OPERA and should be stored in the external system. 2. Upon receipt of a booking from external system, OPERA will return a result message with this OPERA confirmation number.
GDS, Third Party System that created reservations	reservation Originator Code		Reservation Originator Code. Not currently mapped into OPERA.
Total Leg Numbers in Booking	mfLegNu mbers		The total number of legs (segments) of this external reservation ID. This is a summary of all leg numbers regardless which of the legs is being handled in the reservation. This will only occur in messages from external system to OPERA.
Original Booking Date	originalBo okingDate		Date of reservation creation Rules: 1. Will be inserted by OXI with OPERA system date for a new reservation. 2. Required field for OPERA.

Cancellatio n Number		cancellatio nID		This is the cancellation number created by OPERA or external system. Rules: The cancellation number from the external system will be inserted in OPERA, and the reservation can be searched by this number as well.
Cancel Code		cancelOrigi nator Code		Cancellation reason.
Cancel Date		cancellatio nDate		This is the cancellation date created by OPERA or the external system. The External System date only serves as information and will not be inserted.
	StayDateR ange	timeUnitT ype	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Arrival Date	StayDateR ange	startTime	Yes for all messages	Arrival date for total reservation Earliest arrival date of all sharers for upload. Rules: 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (StayDateRange) Reservation dates Sharer 1: August 01-03 (ResGuest) Reservation dates Sharer 2: Augus02-04 (ResGuest). 2. Required field for OPERA.
Nights	StayDateR ange	numberOf TimeUnits	Yes for all messages	Number of nights for total reservation. Total number of nights for all share reservations.

Departure Date				Departure date for total reservation. Is calculated out of StartTime and NumberOfTimeUnits. Required field for OPERA.
Adults	GuestCounts	ageQualifyingCode mfCount	Yes for all messages	Adults in this reservation from external system. If AgeQualifyingCode = 'ADULT', MfCount shows the number of adults. Required field for OPERA.
Children	GuestCounts	ageQualifyingCode mfCount		Children in this reservation from external system If AgeQualifyingCode = 'CHILD', MfCount shows the number of children.
Action Type Comment	ResComments	reservationActionType		Action type for comment. Default is NA.
	ResComments	resCommentRPH		The reference placeholder (RPH) for this comment.
Comment Originator Code	ResComments	commentOriginatorCode		System where the comment originates – not currently used.
Guest viewable	ResComments	guestViewable		Indicates whether comment is viewable to guest. Defaults to 1 in message from OPERA.
Comment	ResComments	comment		Comment text.
Comment Type	ResComments	mfCommentType	Only if Comment is populated	Comment Type. Rules: OXI conversion table for Comment types will be used. Possible values: RESERVATION; CASHIER.
Comment Date	ResComments	mfCommentDate		Creation date of comment.
Action Type Credit Card	ResCreditCards	reservationActionType		Action type for credit card. Default is NA.
	ResCreditCards	resCreditCardRPH		The reference placeholder for this credit card.

Credit Card Code	ResCredit Cards	creditCard Code		Credit Card Code. Rules: 1. A credit card in the ResCreditCards object will be linked with this particular reservation in OPERA. 2. OXI conversion table for pay methods is used.
Credit Card Name	ResCredit Cards	CreditCard Holder Name		The name of the credit card holder.
Credit Card Number	ResCredit Cards	CreditCard Number	Only if CreditCardC ode is populated	Credit Card Number.
Credit Card Expiry Date	ResCredit Cards	CreditCard Expire	Only if CreditCardC ode is populated	Credit Card Expiry Date.
Is CC primary YN	ResCredit Cards	MfPrimary YN		Indicator if credit card is primary. XML values: this has been added to the HITIS module.
	ResGuests	reservation ActionTyp e		Action type for res guest component.
	ResGuests	resGuestR PH	Yes for all messages	Reference placeholder for res guest components. Rules: There has to be one ResGuestRPH for each guest in the reservation, including shares and accompanying guests. Sample: The reservation consists of two sharing guests. The ResGuestRPH would contain 0,1 The reservation consists of one main guest and two accompanying guests. The ResGuestRPH would contain 0,1,2.

		ResGuests	mfConfirmationLegNo	Yes for all messages	Confirmation leg no for itinerary reservations in OPERA. Rules: 1. The confirmation leg number that identifies an itinerary booking in OPERA will be sent in messages from OPERA to external system in the ResGuest tag. 2. External system must always send the confirmation leg no if present, as this serves as retrieval criteria for multi leg reservations in OPERA. Since the OPERA confirmation number does not need to be unique, the combination of confirmation and leg number allows OXI to find a reservation in OPERA.
Attached profiles Company, Travel Agent, Source, Group		ResGuests	profileRPHs	Yes for all messages	All profiles linked to reservation Guest/Company/TA/Source/Group profile linked to reservation. See profile mapping table for all details. Rules: 1. Profiles will be linked to the reservation in OPERA through the internal OPERA name ID. 2. There will be one ProfileRPH for each guest in the room and for each additionally linked profile to the reservation. 3. One reservation can have multiple guest profiles, 1 company profile, 1 agent profile, 1 wholesaler/source profile, and 1 group profile in OPERA.

Accompan ying guest	ResGuests	resGuestR PH		Accompanying guest. Rules: 1. Will not be inserted as separate reservation, but only as last/first name. 2. Any additional ResGuestRPH in reservation, which is not presented as MfSharedGuestRPH in room stay, is considered an accompanying guest. 3. A complete record will be created.
	ResGuests	ageQualify ingCode		Ignore as only the adults segment from the main object will be used.
Arrival Date	ResGuests InHouseT imeSpan	timeUnitT ype	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Arrival Date	ResGuests InHouseT imeSpan	startTime	Yes for all messages	Arrival date of reservation for this guest. In case of sharing guests in one reservation this date could be different from StayDateRange StartTime. Rules: 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (StayDateRange) Reservation dates Sharer 1: August 01-03 (ResGuests) Reservation dates Sharer 2: Augus02-04 (ResGuests). 2. Required field in OPERA.

Flight information arrival	ResGuests ArrivalTransport	transportType		Type of arrival transportation Rules: OXI conversion table for transport types will be used. Possible values: AIR; RAIL; BUS; BOAT; PRIVATEAUTO; OTHER. Default: NA.
Transport ID	ResGuests ArrivalTransport	transportID		Arrival flight number.
Location Code	ResGuests ArrivalTransport	locationCode		Airport for arrival.
Transport Time	ResGuests ArrivalTransport	transportTime		Estimated arrival time of transport mode in date/time format.
Transport Required	ResGuests	mfTransportRequired		Flag whether arrival transport required. Rules: Value '1' means transport is required, value '0' means no transport is required.
Flight information departure	ResGuests DepartureTransport	transportType		Type of departure transportation. Rules: OXI conversion table for transport types is used.
TransportID	ResGuests DepartureTransport	transportID		Departure flight number.
LocationCode	ResGuests DepartureTransport	locationCode		Airport for departure.
TransportTime	ResGuests DepartureTransport	transportTime		Estimated departure time of transport mode in date/time format.
MfTransportRequired	ResGuests DepartureTransport	mfTransportRequired		Is departure transport required. Rules: Value '1' means transport is required, value '0' means no transport is required. XML values: this has been added to the HITIS module.
Arrival Time	ResGuests	arrivalTime		Estimated arrival time in hotel.

Departure Time	ResGuests	departureTime		Estimated departure time from hotel.
	ResProfiles		Yes for all messages	Reservation Profile section starts. There will be as many ResProfiles as guest names, agent, company, and group profiles linked to a reservation. Details are described in the profile mapping table of this document.
Reservation Action Type	Room Stay	reservationActionType		Indicates the type of notification. OPERA will send NEW and CHANGE.
	RoomStay	roomStayRPH		Reference placeholder for room stay elements. Only one per message is allowed.
Reservation Status	RoomStay	reservationStatusType	Yes for all messages	Reservation status. Rules: 1. OXI conversion table for reservation status will be used. Please setup the conversion table with the following values and notice the different spelling in OPERA and external system values. OPERA value from business events External system XML value CANCELLED CANCELED CHECKED IN INHOUSE CHECKED OUT CHECKEDOUT NO SHOW NOSHOW PROSPECT REQUESTED RESERVED RESERVED WAITLIST WAITLISTED 2. All other external system or OPERA status types will be ignored. 3. Required field for OPERA.

Room Type	Room Stay	roomInventoryCode	Yes for all messages	Room type. Rules: 1. OXI conversion table for room types will be used. 2. Pseudo room types in OPERA can be transmitted based on OXI generic parameter HANDLE_PSEUDO_ROOMTYPES. 4. Required field for OPERA.
Room Number	RoomStay	roomID		Room number in OPERA, will be sent to external system. Rules: 1. If a room type change is sent from external system, the assigned room number in the OPERA record is removed and a warning message is issued. 2. If a date change is sent from external system, OXI will check if the room number is already assigned for that new date if so, remove the room number and issue a warning. 3. For all other changes the assigned room number remains blocked.
	RoomStay TimeSpan	timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.

Arrival Date	RoomStay TimeSpan	startTime	Yes for all messages	Arrival date for total reservation Equal to StayDateRange: earliest arrival date of all sharers for upload. Rules: 1. Sample: two sharers are arriving on different dates. Total reservation dates: August 01-04 (RoomStay) Reservation dates Sharer 1: August 01-03 (ResGuests) Reservation dates Sharer 2: Augus02-04 (ResGuests). 2. Required field for OPERA.
Nights	RoomStay TimeSpan	numberOf TimeUnits	Yes for all messages	Number of nights for total reservation. Equal to StayDateRange: total number of nights for all share reservations.
Adults	RoomStay GuestCou nts	AgeQualif yingCode mfCount		Ignore as only the adults segment from the main object will be used.
Children	RoomStay GuestCou nts	ageQualify ingCode mfCount		Ignore as only the adults segment from the main object will be used.
Action Type Rate Plan	RoomStay RatePlans	reservation ActionTyp e		Action type for rate plan. Rules: This is not used for download from External System to OPERA. OPERA will send action types NEW, CHANGE.
	RoomStay RatePlans	ratePlanRP H	Yes for all messages	Reference placeholder for rate plans in reservation.

Rate Code	RoomStay RatePlans	ratePlanCode		Rate code.

Rate code.

Rules:

OXI rate code conversion table will be used.

Data from external system:

1. The rate detail for the reservation dates will be looked up in rate detail table in OPERA.

2. The property ID, start date, end date, room type, and active YN will be evaluated. If this evaluation is not successful, a warning will be issued and the default OXI rate code will be used.

3. The price will always be considered as daily rate by OPERA.

4. Rate code changes during the stay can be sent as multi-leg reservation with consecutive dates. The daily elements will carry leg IDs. This is not required by OPERA but will be accepted in case the external system has to send it like this.

Data from OPERA:

5. A reservation without rate code is possible in OPERA and is parameter-driven. If the external system requires a rate code, the OXI default rate code must be set.

6. Market codes and source codes can be linked to the rate codes details in OPERA. This means that a rata code change in a reservation can affect a market/source code change as well. A business process should determine the exact handling for the customer.

	RoomStay RatePlans	TimeSpan timeUnitType		Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Start Date Rate Plan	RoomStay RatePlans	TimeSpan startTime	Yes if RatePlanCode is populated	Start date for this rate plan in reservation. Required field for OPERA.
Duration Rate Plan	RoomStay RatePlans	TimeSpan numberOf TimeUnits	Yes if RatePlanCode is populated	Duration of this rate plan in reservation.
Market Code	RoomStay RatePlans	mfMarket Code		Market Code (also see MarketSegmentCode). Rules: 1. OXI conversion table for market codes will be used. 2. An OXI parameter can be set to determine if market code is converted or derived from block, rate details, or rate header.
Action Type Rate	RoomStay RatePlans	Rates reservation ActionType		Action type for rate. Rules: 1. This is not used for download from External System to OPERA. 2. OPERA will send action types NEW, CHANGE.
	RoomStay Rate Plans	Rates rateRPH	Yes for all messages	Reference placeholder for rates in reservation.

Currency Code	RoomStay RatePlans	Rates Amount currencyCode		Currency code for rate. Rules: 1. OXI conversion table for currency codes will be used. 2. We will look up the rate header to determine the currency for the rate code in OPERA. If the currency in the rate header differs from the sent currency code, we will convert the rate amount into the value for the OPERA currency code, using the exchange rate for postings. 3. OXI will insert the rate in correctly calculated OPERA rate code currency, and enter the used exchange rate in the reservation. We will round the exchanged rate amount to match the decimal limitation. 4. OXI will issue a warning if the OPERA currency code differs from external system currency code for the same rate code.
Rate	RoomStay RatePlans	Rates Amount valueNum	Yes for all messages	Rate amount. Rules: The rate amount inserted will depend on the OXI parameter settings, which could be OPERA or external system price control. The rate amount will be based on number of adults/children in OPERA. If the rate amount linked to the rate code in OPERA differs from the rate amount sent, a warning is issued for OPERA user. See Rate Discount Amount.
	RoomStay RatePlans	Rates rateBasisTimeUnitType		Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.

	RoomStay RatePlans	Rates rateBasisUnit		Default to 1.
	RoomStay RatePlans	Rates TimeSpan timeUnitType	Yes for all messages	Type of time unit for message. Information only, does not map into OPERA. NA; YEAR; MONTH; WEEK; DAY; HOUR; MINUTE; SECOND. Defaults to 'DAY'.
Start Date Rate	RoomStay RatePlans	Rates TimeSpan startTime	Yes for all messages	Start date for this rate within the rate plan in reservation.
Duration Rate	RoomStay RatePlans	Rates TimeSpan numberOfTimeUnits	Yes for all messages	Duration of this rate within the rate plan in reservation.
Adults for each Date within Reservation	RoomStay RatePlans	Rates mfAdults		The number of adults for that particular date within the reservation. If the number of adults differs between dates within the stay, this data element can be used to indicate this.
Children for each Date within Reservation	RoomStay RatePlans	Rates mfChildren		The number of children for that particular date within the reservation. If the number of children differs between dates within the stay, this data element can be used to indicate this.
Cribs for each Date within Reservation	RoomStay RatePlans	Rates mfCribs		The number of cribs for that particular date within the reservation. If the number of cribs differs between dates within the stay, this data element can be used to indicate this.
Extrabeds for each Date within Reservation	RoomStay RatePlans	Rates mfExtraBeds		The number of extrabeds for that particular date within the reservation. If the number of extrabeds differs between dates within the stay, this data element can be used to indicate this.

Source Code for each Date within Reservation	RoomStay RatePlans	Rates mfSourceC ode		The source code for that particular date within the reservation. If source code differs between dates within the stay, this data element can be used to indicate this. Rules: OXI conversion table for source codes will be used.
Market Code for each Date within Reservation	RoomStay RatePlans	Rates mfMarket Code		The market code for that particular date within the reservation. If market code differs between dates within the stay, this data element can be used to indicate this. Rules: OXI conversion table for market codes will be used.

Block Code	RoomStay	inventoryB lockCode		Block code in case of a group reservation. Rules: Data from external system: 1. A reservation picked up from a block has to be covered entirely by the block dates. If either arrival or departure date is outside the block dates but the block is elastic, OXI will force the reservation into the block and expand the block dates. If the block is not elastic, the reservation will be picked up from the OPERA house inventory. An appropriate warning is issued. 2. If the room type sent for the block reservation does not exist in the block: OXI will borrow from the next remaining room type in the block that still has inventory and accept the reservation for this room type. 3. If the block is sold out: If the block is elastic, OXI will force the reservation into the block and increase the block inventory. If the block is not elastic, the reservation will be picked up from the OPERA house inventory. An appropriate warning is issued.

Market Code	RoomStay	marketSeg mentCode		Market Code (also see MfMarketCode). Rules: 1. OXI conversion table for market codes will be used. 2. An OXI parameter can be set to determine if market code is converted or derived from block, rate details, or rate header. 3. If the rate code in an OPERA reservation changes, this can result in a market code change as well. The OPERA user is prompted and can accept the change or not. 4. A market code in the OPERA reservation can differ for each rate segment. If the guest is changing rate codes several times during the stay, a changed market code can apply for each new rate code and will be sent as part of the rate section.
		resGuestR PHs		Reference placeholders for res guests.
	RoomStay Guarantee Info	guaranteeT ype		Description of guarantee type. Information only, does not map into OPERA. NOGUARANTEE; CCDCVOUCHER; PROFILE; DEPOSIT.

Guarantee Type	RoomStay Guarantee Info	mfGuarant eeType		Reservation guarantee type. Rules: 1. OXI conversion table for reservation types is used. 2. Reservation types are totally definable in OPERA but can be linked to certain restrictions in OPERA, which will be checked by OXI before inserting the reservation into OPERA. This means e.g., that a GTD type of CC must come along with CC details in the message. Otherwise a warning will be issued and the default IFC GTD type will be inserted. 3. Required field for OPERA.
Deposit Due Date	RoomStay Guarantee Info	Guarantee Deposit dueDate		Deposit due date – no longer used. Please use the CancelPenalties object instead.
Deposit Amount	RoomStay Guarantee Info	Guarantee Deposit Amount		Deposit amount date – no longer used. Please use the CancelPenalties object instead.
Cancel if not received	RoomStay Guarantee Info	Guarantee Deposit cancelfNo Received		Not used
	RoomStay Payment Instructio ns	paymentM ethodType		Payment type Valid values are: XML Message CASH CREDITCARD DEBITCARD VOUCHER CHECK OTHER These are indicators of the type of payment the following method belongs to. They are linked to the payment type transactions in OPERA.

Method of Payment	RoomStay Payment Instructions	mfPaymen tMethod		Payment method for reservation Rules: 1. OXI conversion table for payment methods is used. 2. If a reservation is sent to OPERA without guarantee code or payment type, the payment method will use the OXI default. 3. If a reservation credit card is sent but the payment type is cash, the cc details will be ignored and not be entered in the OPERA reservation. 4. Required field for OPERA.
	RoomStay Payment Instructions	resCreditC ardRPH		Reference placeholder for credit cards in reservation.
Payment Currency	RoomStay Payment Instructions	PaymentD ue currencyC ode		Not currently used.
Payment Amount	RoomStay Payment Instructions	PaymentD ue Amount		Not currently used.
Cancel if not received	RoomStay Payment Instructions	PaymentD ue cancelfNo Received		Not currently used.
Source Code	RoomStay	mfSourceC ode		Source code of reservation. Rules: 1. OXI conversion table for source codes will be used. 2. OXI parameter can be set to determine if source code is converted or derived from block, rate details, or rate header. 3. Required field for OPERA.
Campaign Code	RoomStay	promotion Code		Promotion code for reservation
Commissio n Code TA profile	RoomStay	tACommis sionPlan Code		Commission code for reservation – not currently used.

	RoomStay	mfComple mentaryCo de		Roomtype to charge in OPERA This code is used for another purpose than its name would suggest. If the OPERA guest receives a room type upgrade while still paying the price of the originally booked room type, the original or 'chargeable' room type will be placed in the OPERA reservation field RTC, which is sent as mfcomplementaryCode to the external system.
Confidentia l	RoomStay	mfConfide ntialRate		Print rate on folio/registration card in OPERA. Rules: Set to '1' for confidential and to '0' for non-confidential.
Channel Code	RoomStay	mfChannel Code		Channel code. Rules: OXI conversion table for channel codes will be used.

Rate Discount Amount	RoomStay	mfDiscoun tAmount	Rate discount amount. Rules: Data from external system: If a discounted rate is sent with a rate code, OXI will check the OXI reservation parameter CRS_PRICE_CONTROL to determine whether OPERA or external system has price control. 1. In case the OPERA has price control, the rate difference will be ignored and the rate amount linked to the OPERA rate code will be inserted in the reservation. A warning will be issued that the OPERA original rate was used instead of the downloaded rate. 2. In case external system has price control, the sent rate amount will be compared with the rate amount linked to rate code in OPERA. If the rate differs, OXI will check the OPERA parameter RATE_FIXED setting. If 'N', the external system sent rate is inserted in rate amount and the difference amount is inserted in discount amount. If the OPERA original amount is greater than the sent rate, the difference amount must be inserted with a minus (-50). If the OPERA original amount is smaller than the sent rate, the difference amount must be inserted without prefix (50). If the OPERA parameter RATE_FIXED is set to 'Y', the rate amount will be inserted as it comes and the fixed flag will be set to yes in the reservation.

				3. In case external system has price control and a reservation that has rate code/rate amount variations during stay is sent with a discount, the discounted price will be inserted and the discount column will be left empty. Instead the rate_fixed flag will be set to 'Y' and a warning message will be issued to notify users that a manual rate/discount check is required due to rate changes during stay. Data from OPERA: The discount amount will be populated from the reservation in OPERA.
Discount Reason	RoomStay	mfDiscoun tReason	Yes if MfDiscount Amount is populated	Rate discount reason code. Rules: OXI default discount reason will be used if it is not sent.

Sharers	mfSharedGuestRPHs	Any sharing guest except for the main reservation holder will be identified by an MfSharedGuestRPH.

Rules:

Data from external system:

- If anyone sharer is cancelled in the external system, an updated main reservation has to be sent. The sharer will be deleted in OPERA and the main reservation will be kept.

Data from OPERA:

- When a combine share is done in OPERA, OXI sends three messages:

1. A new reservation for the combined share, in case it was a combine with profile.

2. An edit reservation for the now shared record where the main sharer is the main res guest and all room stay values are taken from the main share reservation. All additional sharers are presented as MfSharedGuestRPHs.

3. A cancel for the formerly sent new reservation.

- When a break share happens in OPERA, two messages are sent:

1. An edit for the remaining reservation. If this reservation still shares, the lowest reservation number determines the main sharer.

2. A new reservation for the broken sharer.

- When one sharer is cancelled in OPERA, one message is sent:

1. An edit for the remaining reservation. If this reservation still shares, the

				lowest reservation number determines the main sharer. Please read body document for detailed rules.
Action Type Membership	Selected Memberships	reservation ActionType		Action type for selected memberships. Rules: OPERA will send action types NEW, CHANGE.
	Selected Memberships	selectedMe mbership RPH		Reference placeholder for selected memberships in reservation.
Membership Card Type	Selected Memberships	programC ode		Membership type. Rules: 1. OXI conversion table for membership types is used. 2. The selected membership will be inserted for the first guest in reservation, as links are not clearly identifiable if several guests are part of reservation. 3. The memberships table in OPERA will be checked if a record for this name ID and membership type already exists. If not, a new record will be created. 4. Based on the settings of OXI reservation parameter AUTOPOPULATE_MEMBERS HIP_YN OXI will insert the selected reservation membership directly or will suppress it.
Membership Number	Selected Memberships	accountID	Yes if ProgramCod e is populated	Membership number.

Mapping Table Data Elements

Membership Level	Selected Memberships	mfMembership Category	Membership level. Rules: 1. OXI conversion table for membership levels is used. 2. The selected membership level will be inserted for the first guest in reservation, as links are not clearly identifiable if several guests are part of reservation.
Action Type Special Request	SpecialRequests	reservationActionType	Action type for special requests. Rules: OPERA will send action types NEW, CHANGE.
	SpecialRequests	specialRequestRPHs	Reference placeholder for special requests.
Special Requests	SpecialRequests	mfSpecialRequestType	Special request type for reservation. Rules: 1. OXI conversion table for guest preference types will be used. 2.The conversion table for types has to be setup as follows: XML Message OPERA Preference Type SPE Specials FEA Room_Features PRS Smoking PRV Floor NEW Newspaper INT Interests The type is converted in the preference conversion table. 3. Tables will be checked if preferences record already exists for name ID in OPERA. If not a new record will be created.

Special request code	Special Requests	requestCode	Yes if MFSpecialRequestType is populated	Specials request code for reservation. Rules: 1. OXI conversion table for guest preference types will be used, e.g., SPECIALS to identify where this code belongs to. 2. OXI conversion table for guest preference codes will be used, e.g., BR for bathrobe. 3. In OPERA, a preference code can be configured multiple times as long as it is linked to different preference types. This is not recommended as the types and codes are split in the OXI conversion and it would therefore be difficult to send the proper type/code combination to the external system if a code existed multiple times. 4. In OPERA it is possible to link preference codes to the reservation and to the profile and these can be different. In the XML message the respective codes will be reflected in the reservation and the profile part of the message.
	SpecialRequests	requestComments		Special request comments – not used.
	ResGuests	resCommentRPHs		Reference placeholder for reservation comments.
	ResGuests	serviceRPHs		Reference placeholder for reservation services (products/packages).
Action Type for Service	Services	reservationActionType		Action type for services, also called package elements in OPERA. Rules: 1. This is not used for download from external system to OPERA. 2. OPERA will send action types NEW, CHANGE.
Reservation Status Type	Services	reservationStatusType		Must be the same as reservation status type in Room Stay segment.

	Services	serviceRP H		Reference placeholder for services.
Service Pricing Type	Services	servicePrici ngType		Not used. Default to NA.
Service Code	Services	serviceInve ntoryCode		Products within a reservation Rules: 1. OPERA refers to services as package elements or product codes. 2. OXI conversion table for product codes will be used. 3. Products will only be accepted by OPERA if they have been built in the system before.
	Services	TimeSpan timeUnitT ype		Time unit type for service Defaults to 'DAY'.
Currency for service	Services	priceCurre ncyCode		Currency code of the service. Rules: 1. Is not validated against product currency code in OPERA. 2. Product will always be posted in currency configured in OPERA.
Price for service	Services	PriceCurre ncyCode valuNum		Price of the service in this reservation.
Quantity of services	Services	quantity		Number of products for reservation.
Update Date	MfSpecifi c	mfUpdate Date		Date of reservation update. Rules: Will be inserted by OXI for an updated reservation in OPERA.
Number of rooms	MfImage	numRoom s	Yes for all messages	Number of rooms in this reservation. Rules: Multi room reservations from external system will not be split during insertion into OPERA.

Reservation Leg Number	MfImage	legNo	Yes for all messages	Number of legs in reservation. Rules: External system can send multi leg reservations where the legs indicate: a. Multiple stays at one property if dates are not consecutive. All room stays will come in separate messages. The property code and leg IDs will be used as identifier for these reservations. External system number will be the same for all reservations. b. One reservation with consecutive dates and a rate code change. This will be stored as one reservation with rate code changes in the daily elements. Several reservation elements within a room stay will be indicated as legs. The storage of leg ID is necessary for matching reservations in OPERA. If legs are added to a reservation in the external system and the leg ID for the reservation is changing, the external system must send this change with the original external system number and updated leg IDs, which will overwrite the existing leg IDs in OPERA. The external system must send the original external system number/leg IDs as identifier for the interface.
Caller Name	MfSpecific	origContact		Contact/booker of reservation last, first name.

Hurdle Rate	MfSpecific	mfHurdleRate	Hurdle rate for reservation. Rules: The information in this column will not affect the hurdle table in OPERA a reservation is sent from the external system. This is for information purposes only.
Yieldable YN	MfSpecific	mfYieldable	Is rate yieldable yes or no? Rules: The information in this column will not affect the hurdle table in OPERA if a reservation is sent from the external system. This is for information purposes only.
Rule Type for Deposit or Cancellation Rule	CancelPenalties	mfRuleType	Deposit or cancellation rule type in OPERA. This deposit rule type determines if this is a deposit or a cancellation rule.
Cancel Date for Deposit or Cancellation Rule	CancelPenalties	cancelByDate	Deposit or cancellation due date in OPERA. Date for which deposit or cancel rule is due at the property.
Amount for Deposit or Cancellation Rule	CancelPenalties	Amount	Amount for deposit or cancellation penalty. Can be with or without decimals and will be converted based on home currency of receiving OPERA system.
Rule Scope for Deposit or Cancellation Rule	CancelPenalties	mfRuleScope	Deposit or cancellation rule scope in OPERA. The Rule Type will always be defaulted to 'R' for rooms.
Rule Scope for Deposit or Cancellation Rule	CancelPenalties	mfPercentage	Deposit or cancellation rule percentage in OPERA. A percentage can be sent instead of amount. This is mutually exclusive with amount.
Rule Description for Deposit or Cancellation Rule	CancelPenalties	mfRuleDescription	Deposit or cancellation rule description in OPERA. Description of deposit or cancel rule.

Due Percentage for Cancellation Rule	CancelPenalties	mfCancelPercentDue		Cancellation rule percentage due in OPERA. Percentage due can only be sent for cancels.
Room nights for Cancellation Rule	CancelPenalties	mfCancelRoomNights		Room nights that will be charged for in case of a cancellation. Room nights can only be sent for cancels.
Reservation Trace Department	ReservationTraces	traceDepartment		Trace department. Information sent by external system can be entered as traces in OPERA. Rules: 1. The trace department sent has to be valid in OPERA, otherwise OXI will default to 1st trace department under OXI 'other defaults'. 2. OXI trace department conversion will be used.
Reservation Trace Date	ReservationTraces	traceDate		Date for execution of trace. No validation is performed whether this date is after the reservation departure date.
Reservation Trace Text	ReservationTraces	traceText		Trace text in free format.
	ReservationAlerts	reservationActionType		Action type for alters. Rules: OPERA will send action types NEW, CHANGE.
Hotel Code for Alert	ReservationAlerts	hotelCode		Property code for which reservation alert is created. Rules: 1. OXI setup entry will be used for conversion of the property code. 2. In case of a multi property environment, OXI will retrieve a reservation based on a combined index including the property code, as the external system confirmation number could exist multiple times. 3. Required field for OPERA.

Alert Code	Reservati onAlerts	alertCode	Alert code in OPERA. Rules: 1. Will be validated for insertion into OPERA. 2. No conversion will take place, so alert codes have to be the same in OPERA and external system.
Alert Description	Reservati onAlerts	alertDescri ption	Alert description.

6   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|RESERVATION|532317?>

Label Name	Description
.	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. Should be a unique message ID.

The UDF Definition Files to Validate an XML Message

In order to validate and parse reservation and profile XML files, a UDF definition XML schema needs to be present even though the UDF data elements are not used for the interface.