Oracle Hospitality Nor1 Cloud Services
Implementation Guide

Release 24.1

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Oracle Hospitality Nor1 Cloud Services Implementation Guide, Release 24.1

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Preface

This document is intended to help users prepare for and implement Oracle Hospitality Nor1 Cloud Services.

Purpose

This document provides information for implementing Oracle Hospitality Nor1 Cloud Services products.

Customer Support

The following support options are available:

- Live Chat is provided for Nor1 CheckIn Merchandising customers directly in the application.
- Nor1 eStandby Upgrade support is provided on the Customer Support Portal at the following URL: https://iccp.custhelp.com.
- Customers can contact their Account Relationship team or Account Revenue Manager directly.

When contacting Customer Support, please provide the following:

- Product and program/module name.
- Functional and technical description of the problem (include business impact).
- Detailed step-by-step instructions to be re-created.
- Exact error message received.
- Screen shots of each step you take.

Documentation

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

Revision History

Table   Revision History

Date	Description of Change
June 2024	Added Cookies Policy in the Introduction section under the Technical Assumptions chapter.
March 2025	Initial Publication
May 2025	Made updates to estandby URL throughout, and made updates to *Connectivity to Nor1 using the Extract* topic and to Appendix B section 2.

1
Introduction

About this Guide

This guide outlines the key implementation considerations you should review when planning a Nor1 CheckIn Merchandising, Nor1 eStandby Upgrade, and Nor1 eXpress implementation. It is designed to help you configure the solution to best meet your business process needs and maximize benefits of the solution.

The guide provides information on the following:

- Nor1 CheckIn Merchandising Pre-Installation Process
- Verification
- Post-Implementation Process
- Nor1 eStandby Upgrade and Nor1 eXpress

For information on integration with the OPERA Xchange Interface (OXI), see the Oracle® Hospitality Nor1 OXI Manual Configuration Guide.

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Implementation Summary

Introduction

This chapter describes a sample process of engaging customers and preparing them for implementation of Nor1 solutions. It outlines readiness actions, training, verification, and post implementation follow-up. While the chapter describes a generic full-service engagement, it is meant for reference purposes. Not all activities apply to all customers, and any specific engagement is mutually determined by all parties as part of an engagement.

Pre-Installation Process

The implementation process starts with a call between the Nor1 team and the property team, which typically includes the revenue manager and front office manager. The Nor1 representative introduces the solution and reviews the key processes and scope of the project:

1. After the call, the Nor1 representative emails a list of items/documents needed from the hotel and provides the following documents to the hotel:

    - Basic Data Form

2. Ensure Connectivity: The Nor1 representative requests the addition of the Nor1 IP Address and URLs to the hotel's priority list.

3. Collect Property Information: The Nor1 representative gathers and reviews the following property information with the hotel:

    - Posting codes.

    - OXI access.

    - Commission structure for the receptionists if any.

    - Currency. The Nor1 representative requests the hotel's currency exchange rate if the hotel charges guests for using currency that differs from the currency in the property management system (PMS). It is recommended the property use the same currency in its Nor1 setup that is in use for the property management system (PMS).

Implementation Call

The Implementation team configures the property with the items provided in the pre-installation step. The Nor1 representative schedules an implementation call with the hotel to review the hotel configuration for all applicable products.

Nor1 reviews the following items during the Implementation call:

- Confirm the room offers and discuss ancillary offers.

- Goal information and distribution/users.

- Review the Max offer set and room movement for the upsells.

- Validate data for the configuration.

- Property exclusions if applicable.
- Training expectations: number of leaders and agents, full participation of the team.
- Confirm transaction codes to be used in the configuration and posting.
- Set the **Go Live** date.

Integration Call

The Implementation Manager schedules a call with the property program manager 10 days prior to launch to review the following:

1. Review setup.
2. Set up OPERA Simple Reports (OSR) report scheduler in OPERA.
3. Test and confirm receipt in mailbox.
4. Verify/update OPERA OXI settings.
5. Verify OSR setup with Integration.
6. Confirm that both the 5 a.m. and the 10 p.m. OPERA Simple Report (OSR) reports are configured and scheduled with transaction codes unique to Nor1 CheckIn Merchandising.
7. Confirm Recovery Report is configured with transaction codes unique to Nor1 CheckIn Merchandising.

Transaction Codes:

Transaction code(s) must be unique to Nor1 Check-In Merchandising (No exceptions. You cannot share them with any other party or eStandby/eXpress/eReach).

Verify that correct transaction codes are added to all OSR Reports.

If the hotel currency code is different from the currency code in use in the Property Management System (PMS), then you must use package codes for the currency conversion.

CheckIn Merchandiser Portal Test:

The Implementation Manager schedules a call with the property to check functionality. Perform the following tests:

1. While on the call, award an In House and a future reservation.
2. Five minutes (processing time) after the award, verify that the property can see the fixed charge in OPERA, which confirms that the award is working.
3. Reverse the upgrade by denying it. After five minutes (processing time), verify that the property can see that the charge was removed from OPERA.

Go Live

A Nor1 Training team member will hold **Go Live** training sessions remotely with the hotel. The sessions include the following:

- Confirm the training schedule.
- Review the User list and confirm hotel's access to Nor1.
- Program Manager **Go Live** training.
- Agent **Go Live** training.

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- Confirm Nor1 onsite visit (if applicable).

Pre-onsite Visit Preparation (if applicable)

The Training Manager/Training Specialist schedules a pre on-site call (one week prior to launch). Required attendees are: Director of Revenue and Front Office Leadership. They will discuss and complete the following tasks:

1. Confirm Executive Leadership Meeting (General Manager, Director of Revenue, Director of Finance, Director of Rooms, Front Office Leadership to attend), Program Manager and Agent training sessions, 1:1's and Real-Time Coaching at the Front Desk, and so on. Obtain and attendee list for each session.

2. Send out Training Plan for the customer's review and signature.

3. Confirm Program Manager (liaison between Nor1 and Hotel).

4. Confirm Program Manager meeting on the day of arrival.

5. Request front desk check-in standards for use during training.

6. Confirm commission structure for the Front Office team, additional exclusions, and so on.

7. Confirm the live date (after first training or final training).

8. Send a post-launch report to the hotel; review criteria used to determine whether the hotel is set up to be successful.

On Site (if applicable)

On the day of arrival at the property, the Training Manager/Training Specialist will need access and disposition to check the following:

- Front Desk Terminal(s) Application Link: If the hotel has not already loaded the desktop link/icon, verify the website on the front desk PCs (If the hotel has loaded the link, make sure Nor1 can successfully log in). You might need to work with the property to verify the Nor1 IP Address.

- Nor1 CheckIn Merchandising Users: Create and/or update the property users for Nor1 CheckIn Merchandising access before training users. If possible, have users log in right after the training to ensure they have access and can start using Nor1 CheckIn Merchandising immediately.

Property Tour

At the first meeting on the day of arrival:

1. Verify any last-minute business rules with the Program Manager.

2. Make sure the meeting room is ready with all requirements (view Training Plan's Learning Environment).

3. Verify Matrix (Blockings) for the next 7-10 days: Check the availability for the next few days and whether the hotel pre-blocks rooms to balance their inventory.

Nor1 CheckIn Merchandising Users:

Create or update the property users for Nor1 CheckIn Merchandising access before each training session. If possible, have them log in right after the training using your computer to make certain they can start using Nor1 CheckIn Merchandising immediately.

Day 1 Meetings and Materials:

1. Executive Leadership Meeting.

2. The Art of Nor1 CheckIn Merchandising Executive Team.

3. The Art of Nor1 CheckIn Merchandising - Front Desk Agent Workshop.

4. Application Training: Live training of CM portal.

5. The Art of Nor1 CheckIn Merchandising Agent Manual.

6. The Art of Leadership Program Managers.

7. The Art of Nor1 CheckIn Merchandising Program Manager Manual.

8. Nor1 CheckIn Merchandising Hotel Implementation Worksheet.

9. Hotel Implementation Worksheet - Review with Program Manager what is completed and what is missing.

10. Introduction to the Intercom Help Center and Chat.

11. 1:1's and Real-Time Coaching at the Front Desk.

Day 2 - Meetings and Materials:

1. The Art of Nor1 CheckIn Merchandising - Front Desk Agent Workshop.

2. The Art of Nor1 CheckIn Merchandising Agent Manual.

3. Application Training: Live training of Nor1 CheckIn Merchandising portal.

4. 1:1's and Real-Time Coaching at the Front Desk.

Day 3 - Meetings and Materials:

1. The Art of Nor1 CheckIn Merchandising - Front Desk Agent Workshop.

2. The Art of Nor1 CheckIn Merchandising Agent Manual.

3. Application Training: Live training of CheckIn Merchandising portal.

4. 1:1's and Real-Time Coaching at the Front Desk.

Other important tasks:

1. Program Manager Responsibilities - Post Launch Report.

2. Review Post Launch responsibilities with Program Manager using the Program Manager Reference Guide.

3. Schedule and agree on weekly to monthly progress calls.

Verification Onsite

Post OXI Configuration Verification:

The Training Manager/Training Specialist verifies each awarded transaction from the previous day(s). Do this each day while on the property. Posted Nor1 CheckIn Merchandising transactions should be posting in OPERA. If not, make sure the correct transaction codes are in use:

- OSR reports.
- Nor1 CheckIn Merchandising.
- Nor1 CheckIn Merchandising Activation Form.

- Check traces on the reservation for error messages. You will not have access to the OPERA billing screen, therefore, the Program Manager will need to assist.

Error Verification:

- Review error notifications and troubleshoot any issues. Refer to Appendix A – Notification Icons.

Post Implementation

The Nor1 Account Revenue Manager performs the following tasks:

Weekly for Weeks 1-5 (15 Minute Performance and Engagement Call):

(FOM, Program Manager, Nor1 Account Manager)

1. Review performance.
2. Answer questions.
3. Make sure that goals are entered for at least a year.

Monthly (After 5th week):

1. (DR, FOM, Program Manager, Nor1 Account Manager).
2. Review performance.
3. Variation to goals.
4. Quarterly.
5. Additional training, as needed.
6. Program Manager Support.

3

Nor1 eStandby Upgrade and Nor1 eXpress Upgrade

Introduction

This chapter discusses the activation of Nor1 eStandby Upgrade and Nor1 eXpress Upgrade such as: gathering pricing information, setting go-live dates, transitioning to an Account Revenue Manager, and the OPERA Xchange Interface (OXI).

Nor1 eStandby Upgrade Process

Once the Implementation Manager (IM) is assigned to the implementation at a property, the IM sends an introductory email to start gathering the necessary information.

The email includes a link for online data completion and implementation process detailed instructions. See the following email example:

From: (IM Name)

Sent: (Date/Time)

To: (Recipient Name)

Subject: The Revenue Hotel - Let's get your property LIVE on eStandby!

Importance: High

Dear (Property Name) team,

I am very happy to begin working with you to implement your property on Nor1 eStandby Upgrade. In order to see and complete the initial steps to take your property live on the solution, please complete the attached Basic Data Form.

Please reach out to me with any questions and complete the information by (Date).

I'm looking forward to hearing from you,

(IM signature)

IM Property Implementation Call

After the required information is completed, the Implementation Manager (IM) works to schedule a pricing/training call with the hotel to explain the eStandby Upgrade product and finalize the offer set and price points. The call should also cover UAC (Upsell Action Center/ Nor1 portal) training.

As part of the call, the Implementation Manager secures a go-live date convenient to the customer.

The Implementation Manager can schedule the UAC training as part of a regularly scheduled brand call, individually, or covered with online training depending on the complexity of the property and the number of attendees.

For OPERA OXI properties, the Implementation Manager must schedule a live training session with the hotel since the operation of the program setup is slightly different.

Property Activation

Property activation must be discussed with the hotel as part of the Implementation call. Once all the implementation steps are completed and the property has approved going live with the program, the Nor1 implementation Manager sends the hotel a notification email to the implementation main contact.

Property Transition to ARM

After Nor1 eStandby Upgrade is implemented and the property actions its first upgrade, the property is transitioned to an Account Revenue Manager (ARM). The ARM is introduced to the appropriate property representatives by email followed by an introductory call.

Nor1 eXpress Upgrade Process

How It Works

To use Nor1 eXpress Upgrade with the OPERA Xchange Interface (OXI), OXI must already be configured with Nor1.

1. You must determine a time window for switching offers from Nor1 eStandby Upgrade to confirmed in Nor1 eXpress Upgrade.

2. For bookings arriving within the pre-determined number of hours, a Nor1 eXpress Upgrade offer email is sent to the guest. Guests will not receive both a Nor1 eStandby Upgrade and Nor1 eXpress Upgrade email.

3. Bookings made inside the cutoff time will receive confirmed Nor1 eXpress Upgrade offers.

4. The guest selects a room upgrade offer and confirms selection.

5. OPERA PMS is updated with a fixed charge and the new room.

What's Needed from the Hotel

To successfully implement the solution, the Nor1 Implementation Manager needs to discuss and secure the following information from the hotel:

1. **Pricing Structure**: You must discuss the pricing structure and get the hotel's approval of it. You must schedule a pricing call with the property's main contact.

2. **Email Offers**: Offers are sent 48 or 72 hours prior the day of arrival. This will be discussed and approved by the hotel subject to each property and chain.

3. **Transaction Code**: A unique OPERA transaction code needs to be secured from the hotel. This is crucial for the process since automatic posting is done through the OXI interface.

> **Note:**
>
> Currently, add-ons and packages are not an option for Nor1 eXpress Upgrade; they are only for room types.

The following is an Implementation Manager Email communication example:

Dear (Name),

I'm very excited to assist with your Nor1 eXpress Upgrade implementation. Please see the following summary of necessary steps in order to go live with the solution, as well as some important notes to read at the end of this email.

Pricing Review: Attached you will find the pricing structure we currently have in place for eStandby as a reference, and then beside it starting in column G, you will find the pricing structure for Nor1 eXpress upgrades. The intention is to choose the pricing ranges you want to display (columns I and J), please feel free to modify if needed.

Pricing can remain the same as Nor1 eStandby Upgrade. They do not have to be different between products.

Room Categories and Codes: Please advise should we be missing any room codes that you have in the OPERA PMS. We will mirror your PMS system based on codes to make sure we provide you with maximum exposure. Again, we will only offer available rooms.

Set up Call: We need to have a call to review last details and make sure everything is in place before going live. Are you available later Monday – Friday next week? Please let me know what time works best in order to send you a calendar invite.

Important notes:

- Add-ons and packages are not visible, only room types.

- We recommend emails be sent in a period of 48 hours prior the day of arrival.

- You need to create a unique transaction code for the upgrade.

- Your blackout dates document has been received and we will reflect it accordingly.

I am looking forward to hearing from you,

Thank you for your partnership!

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Learn More about Nor1 Connectivity

Introduction

This chapter addresses the GET and POST data needed to dynamically create upgrade offers based on the booking data of each unique reservation provided to Nor1.

The Oracle Hospitality Nor1 Cloud Services solutions provide hotels with the opportunity to create additional revenue from post-booking, standby, and confirmed upgrades. Nor1 receives the booking data from the Learn More Image (LMI) web service. The LMI is a call-to-action for a guest to click through and view the dynamic upgrade offers.

The Nor1 integration partner passes the booking data to Nor1 in the LMI request. Nor1 returns an image or JSON to embed the LMI on the partner's Internet Booking Engine (IBE) and transaction emails, such as, the confirmation or pre-arrival email.

Nor1 manages the guest eligibility for standby or confirmed upgrades in the LMI web service. Eligibility is determined by business rule filters and upgrade availability. If a guest who is represented by the booking data in the LMI request is ineligible, then the response is a 1x1 transparent pixel image, or success is a false flag in the JSON payload.

The following is an example of embedding the LMI on the IBE confirmation page:

Implementation

The Learn More Image (LMI) web service is implemented as a REST API. The web service supports the following HTTP methods:

- GET – response is an image
- POST – response is JSON

The GET use case is for quickly embedding the Nor1 dynamically generated image on a web page or in an email body. The POST use case is for an integration partner to take the content response from Nor1 to customize the look and feel of the LMI on a web page or in an email body.

The URL for the LMI web service is the same for the GET and POST methods. Nor1 provides a Staging and Production URL. The Staging URL should be used for implementation and integration QA. The Staging environment contains the latest hotel content. Nor1 can set up a test hotel upon request. Switch to the Production URL when you are ready to go live.

The LMI web service supports http and https. Nor1 highly recommends using secure https for the LMI request.

LMI Web Service URLs

URL Name	URL
Staging URL	https://www.oci.nor1uat.com/dynLink/?
Production URL	https://www.nor1upgrades.com/dynLink/

> ✎ **Note:**
>
> The URLs in the table provide a presentation only if valid parameters are passed into them.

Request Data

The booking data provided in the LMI request is the same for GET and POST. Mandatory parameters are required to generate upgrade offers. Recommended parameters improve the likelihood of offer conversion. Optional parameters either replace static content or link to other data sources. The booking parameters are defined in the following table.

Booking Data for GET / POST

Field	Description	Priority	Example	Type (Limit)
PCD	Hotel / Property Code	Mandatory	SJCHOTEL	char(20)
EBC	Booking Code / Reservation number	Mandatory	MYP12346A	char(40)
RCC	Room Category Code	Mandatory	KIRRC	char(20)
GAD	Arrival Date	Mandatory	YYYYMMDD	date
NMN	Number of Nights	Mandatory	2	int(2)
TBP	Total booking price	Recommended	256.43	float(10,2)
GEM	Guest email	Mandatory	guest@gmail.com	char(100)
GLN	Guest last name	Mandatory	Doe	char(100)
GFN	Guest first name	Mandatory	John	char(100)
PID	Provider ID	Mandatory	Nor1 to provide	char (4)
PET	Provider Entry Type	Mandatory	IBE = WEB, Confirmation email = CONF, Pre-arrival email = PREA	char(5)
PRL	Rate Level (if applicable)	Recommended	LV1	char(12)
PRC	Rate Code	Recommended	BAR	char(12)
SRP	Group Code	Recommended	G1234	char(12)
NOA	Number of adults	Recommended	1 (default)	int(2)
NOC	Number of children	Recommended	0 (default)	int(2)
GNR	Number of Rooms	Mandatory	1 (default)	int(3)

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Field	Description	Priority	Example	Type (Limit)
LNG	Language (ISO 639-1 compliant)	Recommended	EN (default)	char(2)
PCH	Property Chain Code	Recommended	Nor1 to Provide	char(3)
PLC	Loyalty Code	Recommended	D	char(3)
GPC	Guest Postal Code	Recommended	95054	char(50)
GAR	Guest Address	Recommended	1 Upgrade Drive	char(125)
GCT	Guest City	Recommended	Santa Clara	char(150)
GST	Guest State	Recommended	California	char(100)
GCC	Guest Country Code (ISO 3166-1-alpha-2 code)	Recommended	US	char(2)
GPN	Guest Phone Number	Recommended	14088509937	char(50)
PTS	Timestamp of Booking	Recommended	YYYY-MM-DD H:MM:SS	date and time
PRT	Rate Tier*	Recommended	TIER	char(12)
PSC	Market Segment Code*	Recommended	AAA	char(12)
PCC	Channel Code*	Recommended	VOICE	char(12)
PCN	Room Name	Optional	King Std	char(255)
CUR	Currency Code	Optional	USD	char(3)
GEN	Guest gender ('M', 'F')	Recommended	F	enum('M','F')
GSL	Guest salutation	Recommended	Mr	char(50)
RTP	Record Type (N = New, M=Modify, or C=Cancel)	Optional	N	enum('N','M','C')
GDD	Departure Date	Optional	YYYYMMDD	date
PLN	Loyalty Program Number (member id)	Optional	NH0004	char(16)

> **Note:**
>
> * Only two of the three fields marked with asterisks can be used; advise which will be used.

POST Implementation

The booking parameters, defined above, are structured as JSON objects in the body of the POST request. The LMI response will be JSON. The following is an example request. Note this is not a real hotel and the response will not be eligible for upgrade offers:

POST Request Example

POST Request Header	Content-Type = application/JSON

POST Request Body	{
	"PID" : "NOR1",
	"PCD" : "SCWA",
	"EBC" : "123456789",
	"RCC" : "STDK",
	"GAD" : "20150317",
	"NMN" : 3,
	"NOA" : 1,
	"NOC" : 0,
	"LNG" : "EN",
	"TBP" : 500,
	"GEM" : "guest@gmail.com",
	"GEN" : "M",
	"GSL" : "Mr",
	"GLN" : "Doe",
	"GFN" : "John",
	"GCC" : "US",
	"GST" : "California",
	"GCT" : "Santa Clara",
	"GPC" : "95054",
	"GAR" : "3945 Freedom Circle"
	"GPN" : "14089237",
	"PLC" : "D",
	"GNR" : 1,
	"PET" : "WEB",
	"PRC" : "BAR",
	"PRT" : "TIER1",
	"PCC" : "VOICE",
	"PCH" : "NOR1"
	}

The POST response informs the partner if the guest is eligible for an upgrade offer. If the success field in the response is true, then the guest is eligible and an LMI can be rendered on the web page or in the email body. The call-to-action of the LMI is a click through URL to view the upgrade offers. The Offer Link field in the response contains the click through URL.

If eligible, then the JSON response will be similar to the following:

```
1 ▾ {
2        "success": true,
3        "requested": false,
4        "img_src": "https://www.oci.nor1uat.com/dynLink/?PCD=800&EBC=testnr1485969295&RCC=STD&GAD=2017
             -02-08&NMN=1&TBP=105&GEM=              :%40nor1.com&GLN=       &GFN=       &PID=TEST&PET=WEB&PRL
             =S&PRC=BAR&LNG=EN",
5        "offer_link": "https://ui_cm.nor1upgrades.com
             /?bd5a4602f3bedae4712c156ecfebc2bb70e3d51414bba7e93651e06dbe9f3bb4181861",
6 ▾      "colors": {
7            "title": "000000",
8            "description": "000000"
9        },
10 ▾     "content": {
11           "salutation": "",
12           "first_name": "    ",
13           "last_name": "    ",
14           "title": "You are Eligible for a Custom Upgrade",
15           "description": "Premium rooms can be offered at check-in for as little as &#36;0 extra per
                 night!",
16           "button": "Show My Custom Upgrade"
17       }
18 }
```

If ineligible, then the JSON response will be similar to the following:

```
1 ▾ {
2        "success": false,
3        "requested": false,
4        "error": "No upgrades available"
5 }
```

Post Response JSON Fields

Field	Description
success	If true, the guest is eligible for an upgrade; otherwise, false.
requested	If true, guest committed to at least one offer; otherwise, false.
error	Reason for no upgrades.
img_src	Image source URL for the LMI; equivalent to GET request.
offer_link	Click through URL for the guest to view the upgrade offers.
colors	Branded font colors for the title and description body of the LMI. The font colors are typically set by the Brand style guidelines.
content	Recommend content to create the LMI on the web page or in the body of the email if the img_src is not used.

GET Implementation

The booking parameters, defined above, are implemented as a query string in the URL for the GET request. The LMI response is an image. The LMI web service supports the parameters as key-value pairs in the query string.

Two URLs are implemented on the web page or in the email body for the GET request. One URL is the image source to get the LMI. The other is the click through URL to view the upgrade offers. The URLs share the same query string and domain name. The difference is the dynLink path for the LMI request.

GET Request URLs

URL Name	URL
Staging Image Source URL	https://www.oci.nor1uat.com/dynLink/?
Staging Click Through URL	https://ui.oci.nor1uat.com/?
Production Image Source URL	https://www.nor1upgrades.com/dynLink/?
Production Click Through URL	https://ui.nor1upgrades.com/?

The LMI request and click through URL are typically implemented using an HTML anchor tag. The click through URL is the href tag and the LMI request is the image source. The following is an example HTML snippet. Note, the query parameters were truncated to fit the page in the following example and therefore are not valid URLs.

GET Request Anchor Tag Example

```
<a href="https://www.oci.nor1uat.com/?
PID=TEST&PCD=SCWA&EBC=abcde1555376023&RCC=DLXK1&GAD=20150705&NMN=1&
NOA=1&TBP=500&GEM=guest%40gmail.com&GEN=M&GSL=Mr.&GLN=Last&GFN=First&G
NR=1&PET=WEB">
```

```
<img src="https://www.oci.nor1uat.com/dynLink/?
PID=TEST&PCD=LBBB&EBC=abcde1555376023&RCC=DLXK1&GAD=20150705&NMN=1&
NOA=1&TBP=500&GEM=guest%40gmail.com&GEN=M&GSL=Mr.&GLN=Last&GFN=First&G
NR=1&PET=WEB">
```

```
</a>
```

The image source URL returns an LMI as an image if the guest is eligible for an upgrade. A 1x1 pixel is returned if no upgrades are available. The 1x1 pixel avoids the broken image icon on the web page or in the email body. In the event a guest manages to click through the 1x1 pixel, the guest is informed that no offers are available at this time.

5

Connectivity to Nor1 using the Extract

Introduction

This chapter addresses extracting reservation information from the property management systems (PMS). It describes how the extract works, Nor1 database parameters, and customer use of SFTP to transfer information to Nor1.

How it Works

The Nor1 extract for PMS exposes additional hotel guests to Nor1 eStandby Upgrade offers from the Nor1 pre-arrival email. Extracts should contain all the reservation activities that took place during the day (preceding 24 hrs. + x). You can send them to the Nor1 data center by a secure SSL encrypted connection. It contains absolutely no payment information of any kind.

Depending on the typical variance of the time your night audits run, you might want to add the corresponding hours to the update window. If your extract runs consistently on a scheduler basis, you may leave X as the number of minutes the process needs to complete. Nor1's framework excludes bookings that have been previously exposed from being re-submitted for email delivery. If such a time cannot be handled, you can select the option to provide all active reservations on a nightly basis.

Upon completion of the night audit, or on a fixed schedule, you can deliver an extract using an https post (the file content is the payload of the post) or by Secure File Transfer Protocol (SFTP).

The payload of the post contains the content of the file and is described in the next section.

The following data is contained in the extract:

- PROPERTY (code) (mandatory field)
- CONFIRMATION NUMBER (mandatory field)
- BOOKED ROOM CODE (mandatory field)
- ARRIVAL DATE (mandatory field)
- NUMBER OF NIGHTS (mandatory field)
- TOTAL BOOKING PRICE (without taxes) (mandatory field)
- GUEST EMAIL ADDRESS (mandatory field)
- GUEST LAST NAME (mandatory field)
- GUEST FIRST NAME (mandatory field)
- RATE CODE (mandatory field)
- NUMBER OF ADULTS (mandatory field)
- NUMBER OF CHILDREN (mandatory field)
- GUEST LANGUAGE (mandatory field)

- GUEST TITLE

- GUEST COUNTRY OF RESIDENCE

- GUEST ZIP CODE

- GUEST STATE

- DEPARTURE DATE

- NUMBER OF ROOMS

- INSERT DATE

- MEMBERSHIP ID

- ROOM CATEGORY

- MEMBERSHIP LEVEL

- RESERVATION STATUS (mandatory field)

- BLOCK CODE

- GUEST PHONE NUMBER

- EXTERNAL REFERENCE TYPE

- EXTERNAL REFERENCE

- MARKET CODE

- SOURCE CODE (ORIGIN OF BOOKING)

- GUARANTEE CODE

Nor1 merges this data with previously exposed requests and uses this data to determine who should receive an offer email, and what the offer and pricing should be. Nor1 generates a hotel-branded email that is sent to the guest.

> **Note:**
>
> No credit card or payment information is included.

Sample Data/Payload

```
GSDH    786042    SK      2012-08-01 4       250        elastname@abc.com    Lastname    Eric                    2
        0         E       Mr       US       412-561-1234           2012-08-05 1            2011-12-16 22430     SK
        RESERVED  MICR080112                        AX       1000       ITRAN       TAD

GSDH    786792    SK      2012-09-01 4       549        elastname@abc.com    Lastname    Eric        BAR         1
        0         E       Mr       US       412-561-1234           2012-09-05 1            2011-12-16          SK
        CANCELLED RATE090112GENARES  99NC37LBB60       AX       2196       ITRAN       TAD

GSDH    786542    SQ      2012-08-01 2       250        elastname@abc.com    Lastname    Eric                    1
        0         E       Mr       US       412-561-1234           2012-08-03 1            2011-12-16          SQ
        RESERVED  MICR080112         GENARES  99NBR85ABD0       AX       500        ITRAN       TAD

GSDH    787542    SK      2012-09-01 4       549        elastname@abc.com    Lastname    Eric        BAR         2
        0         E       Mr       US       412-561-1234           2012-09-05 1            2011-12-16          SK
        CANCELLED RATE090112GENARES  99NCMCC82F9       AX       2196       ITRAN       TAD

GSDH    788542    SK      2012-09-06 4       2          elastname@abc.com    Lastname    Eric        BAR         1
        0         E       Mr       US       412-561-1234           2012-09-10 1            2011-12-16          SK
        RESERVED           GENARES  99ND7CR4CFL       AX       8          ITRAN       GD

GSDH    788042    SK      2012-09-06 5       499        elastname@abc.com    Lastname    Eric        BAR         1
        0         E       Mr       US       412-561-1234           2012-09-11 1            2011-12-16          SK
        CANCELLED          GENARES  99ND0MABN56       AX       2495       ITRAN       GD
```

Nor1 Database Parameters

This table describes the data fields and values used by Nor1. Contact Nor1 to discuss the exact values that will be used.

Number	Priority	Field	Description	Example	Type (Limit)
1	Mandatory	PCD	Hotel / Property Code	SJCHOTEL	char (20)
2	Mandatory	EBC	Booking Code / Reservation number	MYP12346A	char (40)
3	Mandatory	RCC	Room Category Code	KIRRC	char (20)
4	Mandatory	GAD	Arrival Date	YYYYMMDD	date
5	Mandatory	NMN	Number of Nights	2	int (2)
6	Mandatory	TBP	Total booking price	256.43	float (10,2)
7	Mandatory	GEM	Guest email	guestuser@yahoo.com	char(100)
8	Mandatory	GLN	Guest last name	Doe	char(100)
9	Mandatory	GFN	Guest first name	John	char(100)
10	Mandatory	PID	Provider ID (Nor1 to Provide)	NOR1	char (5)
11	Mandatory	PET	Provider Entry Type	WEB	char(5)
12	Mandatory	PRL	Rate Level (if applicable)	LV1	char(12)
13	Mandatory	PRC	Rate Code	BAR	char(12)
14	Mandatory	SRP	Group Code	G1234	char(12)
15	Mandatory	NOA	Number of adults	1	int(2)
16	Mandatory	NOC	Number of children	0	int(2)

Number	Priority	Field	Description	Example	Type (Limit)
17	Mandatory	GNR	Number of Rooms	1	int(3)
18	Mandatory	LNG	Language (ISO 639-1 compliant)	EN (default)	char (2)
19	Mandatory	PCH	Property Chain Code	(Nor1 to Provide)	char(7)
20	Mandatory	PLC	Loyalty Code	D	char(3)
21	Mandatory	GPC	Guest Postal Code	95054	char(50)
22	Mandatory	GST	Guest State	California	char(100)
23	Recommended	PTS	Timestamp of Booking	YYYY-MM-DD H:MM:SS	date and time
24	Recommended	PRT	Rate Tier *	TIER	char(12)
25	Recommended	PSC	Market Segment Code *	AAA	char(12)
26	Recommended	PCC	Channel Code *	VOICE	char(12)
27	Recommended	PCN	Room Name	King Std with View	char(255)
28	Optional	CUR	Currency Code	USD, EUR, GBP	char(3)
29	Optional	GEN	Guest gender ("F", "M")	F	enum('M','F')
30	Optional	GSL	Guest salutation	Mr.	char(50)
31	Optional	GCC	Guest country code (ISO 3166-1-alpha-2 code)	US	char (2)
32	Optional	RTP	Record Type (N = New, M=Mod, or =Cancel)	N	enum('N','M','C')
33	Optional	GDD	Departure Date	YYYYMMDD	date
34	Optional	PLN	Loyalty Program Number (member id)	NH0004	char(16)

> **Note:**
>
> Use only two of the three fields marked with asterisks. Contact Nor1 and advise which fields you are using.

Exchanges using SFTP

To use the Secure File Transfer Protocol (SFTP), customers must provide the following information to Nor1 by email:

- The public IP address of the customer computer that will perform the file transfer. This allows a connection only to the allowed IP address.

- To find public IP addresses, refer to: **http://www.whatismyip.com/**

- Nor1 uses Public key infrastructure (PKI) to further secure the login, so the Secure Shell (SSH) Public Key of the account that will perform the file transfer is required.

- For help with key file generation, refer to **Appendix B**.

- Send the above information to Nor1 by email.

Once Nor1 receives the above information, Nor1 sets up an account for the customer, for example: customer1.

To transfer a file from the computer where the key was generated, do the following:

1. **sftp** <customer1>@extracts2.nor1.com.

   You should get the following prompt: sftp>.

   If not, refer to the troubleshooting steps in **Appendix A**.

2. Change to the extracts directory using the following command

   sftp> cd extracts

3. Enter the file name (for example, file1) with the following command:

   sftp> put <file1>

4. List the file, with the following command:

   sftp> ls

5. Close the connection:

   sftp> quit

> **Note:**
>
> Customers can automate the above steps using scripts or tools to transfer files automatically.

On Premise SFTP Setup for OPERA Simple Reports (OSRs)

Use the following instructions to set up on premise SFTP for your property.

1. Allowlist the following IP address from the property:

   - 147.154.12.24

   Be sure to enable outbound traffic to that IP addresses over port 22.

2. Provide IP address from the App server.

3. Generate keys from Puttygen.com and provide the public key for allowlisting on the NOR1 side.

4. Once allowlisting is completed on both ends, set up configuration in OPERA as follows:

   - Access OPERA Configuration > Property > Delivery Method > General and click the **SFTP** tab.

5. Import and validate the public key previously generated.

6. The Implementations team will upload the OPERA Simple Reports (adding unique transactions codes provided by the property): 5am, 10pm, and Recovery Report.

7. In the Reports Scheduler section Distribution dialog, select **Type: SFTP and Value: NOR1 SFTP TRANS**.

8. Run reports to validate communications.

6
Technical Assumptions

Introduction

This chapter describes some of the technical considerations that may be of interest to customers when utilizing Nor1 Cloud Services.

Global Single Instance

Nor1 Cloud Services are deployed using a global single instance model. This means one deployment serves all worldwide customers. While this model allows Oracle to continually improve the service for everyone, it also means certain customizations cannot be considered.

Data Residency

Data stored in Nor1 Cloud Services, when not being accessed, is located in the United States. Data is secured and maintained according to Oracle's standard security policies. Geographic replication is a component of Oracle policies. The redundant storage is also in the United States. Alternate data storage locations are not available at this time.

Data Processing

Data processed by Nor1 Cloud Services is hosted on servers in the United States. Access for maintenance, support, and operations by Oracle leverages Oracle's global network of technology professionals. Processing of data in alternate, or specific, regions or countries is not available at this time.

Data Transmission

Nor1 Cloud Services send and receive data from around the world as part of the services' regular operation. A property provides data from a number of potential sources including, but not limited to, an on-premise property management system (PMS), a hosted PMS, and/or a third-party integrated partner. The service interacts with various users whether they are members of a property's staff, hotel guests, or Oracle personnel. These users may be located around the world.

Data Retention

When a customer terminates its account, the customer's data is deleted from the production system. A grace period may be provided for customers to retrieve reports, if so desired. Once access is removed, the data is purged. This purge includes all reservation data provided by the customer as well as all configuration and model data entered into or generated by the services. Within 45-60 days, backups will have rotated out and no storage of customer data will exist. For customer-managed integrations (such as from an on-premise PMS), it is the responsibility of the customer to stop sending data to the Nor1 Cloud Services once the account is closed.

PRiME

Nor1 Cloud Services use a proprietary engine, called PRiME, to provide the offers to guests.

Machine Learning / Modeling

PRiME continuously learns more about the customer's property and how it runs by using advanced learning and modeling algorithms. The PRiME process uses the property's key performance indicators, such as: how likely an offer is to be chosen, how likely it is to be awarded, and the pricing of offers. The PRiME model focuses on the property and the upgrades; it does not model guest personal information.

Decision Making

When an offer list is requested, the engine combines the property's custom model with business rules specified by the customer and the guest's reservation to generate an offer list. The engine then ranks and prices the list. For confirmed upgrade offers, the engine may also leverage inventory data from the property.

Business rules provided to the engine have access to the reservation data and affect decisions based on that data. Customers can use these rules to guide the engine in making a decision. This allows customers the freedom to provide additional loyalty options based on customer status or simply to ensure the presented room types are ideal upgrades. Customers cannot use the rules to affect changes based on a specific guest or protected class of guests.

Bootstrap Modeling

Before the system has enough data to generate a custom property model, it uses a bootstrap model. The bootstrap model is based on the aggregate success of offers at a given price from across the system. It does not account for or include any other key indicators.

Cookies Policy

Oracle might use cookies for authentication, session management, remembering application behavior preferences and performance characteristics, and to provide documentation support.

Also, Oracle might use cookies to remember your log-in details, collect statistics to optimize site functionality, and deliver marketing based on your interests.

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Appendix A – Troubleshooting

Notification Icons

The Nor1 implementation team should review notifications icons and troubleshoot any issues while at the property.

Pending PMS Revenue to Reconcile

The Pending PMS Revenue to Reconcile icon appears for upgrades that are manually posted in OPERA PMS. For properties that use the same transaction code for different upsell categories, such as for room upgrades and Late Check-Out, the data sync is sometimes unable to identify which posted upgrades to apply the manual charge. The notification can be cleared by clicking the icon and selecting the respective upgrade category in the drop-down menu. Afterwards, the notification icon changes to "Manually Assigned PMS Revenue."

Missing Revenue in PMS:

The Missing Revenue icon in the PMS notification icon appears for reservations that do not have pms_total_revenue. This means the agent awarded the upgrade in the Nor1 CheckIn Merchandising app, but there was no OPERA PMS transaction revenue received that matched the reservation ID the day after awarding.

Unassigned Agent

The benefit of the data sync is that it reconciles upgrades that were awarded in the Nor1 CheckIn Merchandising app and it helps to reconcile upgrades that were completed outside of the app. This happens when the agent does not use the Nor1 CheckIn Merchandising app to upgrade guests. The Unassigned Agent icon indicates that the reservation was manually upgraded and the credit agent could not be identified automatically.

Assigned Agent Did Not Use the App

After an agent is assigned to an Unassigned Agent upgrade, the upgrade changes to: Assigned agent did not use app. The Assigned Agent did not use app icon appears for upgrades that are not awarded in the Nor1 CheckIn Merchandising app but have already been assigned an agent.

Mismatching Revenue

The data sync helps with auditing the revenue of upgrades that were awarded in the CheckIn Merchandising app by checking if the revenue in OPERA PMS matches the app projected revenue and will notify hotel users if it does not match. In this instance, the Mismatching Revenue icon appears and will update the app revenue to the values in OPERA.

Performance Tracker – Number of Upgrades

The Tracker should only have the number of transactions recorded since the go-live date. If there are more, then the app is pulling previous upsell activates. Confirm that the launch date

is entered in the Control Panel-Integration tab under Nor1 CheckIn Merchandising Configuration Details.

Performance Tracker – Total Revenue

The Tracker should reflect the total of awarded transactions. If there are more, then the app is pulling previous upsell revenue. Confirm the launch date entered in the Control Panel-Integration tab under Nor1 CheckIn Merchandising Configuration Details.

Agent Drop List Does Not Appear

If Agent does not appear, read: Why doesn't my agent appear in the Leaderboard.

Get Implementation

Contact nor1-integrations_grp@oracle.com for assistance during the implementation of the LMI web service.

The following is a list of common issues experienced during the implementation:

- The hotel is not implemented or fully configured in the Nor1 system. Contact Nor1 to finish the implementation.
- Mandatory booking fields are invalid or missing.
- The arrival date (GAD) is in the past or too close to the current date. Try using an arrival date 30 days from today.
- The arrival date (GAD) or departure date (GDD) have the wrong formats. Only YYYYMMDD or YYYY-MM-DD is supported.
- The booked room code (RCC) does not have any available upgrades.
- The query string is not URL encoded.
- The hotel has business rules to filter guest segments from being eligible for an upgrade.

SFTP

If you are unable to get the SFTP prompt, check the following:

1. Ensure you are initiating the SFTP command on the server with the correct public IP address (the one you provided to Nor1).
2. Ensure you are using the correct Private Key file.
   - Default location of the file is ~<user>/.ssh/id_rsa.
   - If the Private Key file exists in a different location, you can specify:
     - sftp -i <key location dir> <customer1>@extracts.nor1.com

     If the public IP address or the key changes, inform Nor1.

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Appendix B – Generating SSH Keys

To generate the Secure Shell (SSH) keys, use the following steps according to your operating system:

1. On Linux:

   a. On the user system that will be transferring the file: ssh<user>@<ftpclient.customer.com>.

   b. Generate the SSH key for the user if one does not already exist:

      - ssh-keygen-t rsa.

      - Select the default option for the key filename.

      - You can skip the passphrase or enter a new one if you want increased security. If you enter a passphrase, you are prompted for it every time you log into SFTP.

      - After the process is complete, the following files should generate in the user home directory:

      - – ~ <user>/.ssh/id_rsa Private Key

      - – ~ <user>/.ssh/id_rsa.pub Public Key

   c. Send only the public key file to Nor1 (~ <user>/.ssh/id_rsa.pub).

2. On Windows:

   There are many Microsoft Windows-based SFTP clients on the market; some of them are free and some are not. Nor1 does not endorse, recommend, or support any particular Microsoft Windows-based SFTP client. The following example demonstrates a Windows-based SFTP using PuTTy:

   a. Download PuTTy from here.

   b. Run the installer.exe on your machine.

   c. Open PuTTyGen and select Generate (wiggle your cursor around during generation). From this Key Generator, you must copy/paste the OpenSSH key into Notepad and then copy/paste the OpenSSH key from Notepad into an email to Nor1.

3. Select the **Save public key** button and the **Save private key** button to save these to a folder on your computer.

4. In PuTTyGen, select menu option **Conversions -> Export OpenSSH key** and save OpenSSH format of the private key to a folder on your computer. This OpenSSH Format will be used in OPERA configuration. (Save both PuttyGen and OpenSSH formats of Private key).

5. Send the public key file to Nor1.