



Manual Configuration – Nor1 OXI V5.1

\*This document is intended to provide OXI installer with manual configuration of the Nor1 OXI interface in cases where script installation is not possible.

Additionally it can serve as a guide to confirm configuration success when using the Nor1 OXI install script.

# **Change Control**

Date	Revision	Page(s)	Change	Author
Sept 18 <sup>th</sup> , 2013	1.0	NA	Created initial document	Scott McGraw
Sept 23 <sup>rd</sup> , 2013	1.0	17	NLS_LANG pg added	Scott McGraw
Nov 13, 2014	2.0	5	Added Installation Confirmation steps	Scott McGraw
Dec 1, 2014	3.0	5	Added Installation Confirmation steps	Scott McGraw
June 6, 2015	4.0	8	If stay records module not active skip set	Torsten Leiss
			ир	
June 6, 2015	4.0	16	OXI Alerts only necessary with Email	Torsten Leiss
			delivery active	
June 15, 2015	5.0	7	Add condition for UPDATE PROFILE	Torsten Leiss
June 28, 2019	5.1	N/A	Added the separate legacy and strict	Kirby Bosch
			endpoints and the set of IP addresses.	

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# **Prerequisites**

Please confirm the following prerequisites for the installation of the NOR1 OXI:

- Confirm you have the NOR1 OXI license code (OPX\_NOR1).
- Confirm you have the OXI schema user login credentials.
- Confirm you have the Windows Administrator login credentials to the Opera Application Server or OXI server where the NOR1 interface will be installed.
- Confirm web access with property if OXI machine is firewall controlled and traffic is open and ready for Nor1.
- Confirm web access for Nor1 by pointing to the below URLs in Internet Explorer on the Opera Application Server or where the OXI services will be installed, and you should see a blank page.
  - o <a href="https://integration.nor1solutions.com/opera/get&propertyName=ABCDEF">https://integration.nor1solutions.com/opera/get&propertyName=ABCDEF</a>
  - o <a href="https://oxi.integration.nor1.com/opera/get&propertyName=ABCDEF">https://oxi.integration.nor1.com/opera/get&propertyName=ABCDEF</a>
  - \*\*replace ABCDEF with property code\*\*
- In the event that the script cannot be run, please reference the project email containing the installation script for the External System Property code and the UDF conversion information.

## **Manual Installation Steps**

The following are the manual installation steps:

- Run the OXI Processor Shell located at D:\MICROS\opera\Tools\OXI\INTERFACE (Ensure the 'Run the interface initialization scripts is selected)
  - Verify the OXI Interface for NOR1 services is installed and set to Automatic startup type (starting the services will be one of the last step).
  - Log into OXI, insert and activate the OPX\_NOR1 license code.
  - Select **NO** when prompted to "Activate External System NOR1 now?"
- (if the configuration is being executed via the Nor1 OXI Install script you would select YES as the script will only be 100% successful due to active Nor1 external system being required in order for the script to configure the Business Events and Publisher/ Subscriber For manual configuration of Nor1 OXI you will indicate NO to avoid unnecessary BE message generation)
  - Manually configure all indicated areas below
  - Activate External System
  - Start the Nor1 OXI service
  - Confirm 'outbound' message flow is successful ie; Reservation message from External to Nor1 status READY to PROCESSED. No message will be sent to Opera until Nor1 activates the integration once interface is confirmed installed.

### **Installation Confirmation**

Please send a zip file to <a href="mailto:nor1-integrations">nor1-integrations</a> <a href="mailto:grp@oracle.com">grp@oracle.com</a> with the following items:

- Message Status screen capture of 'Message to External Systems' with message traffic Filter search criteria only with Opera Property = Property and Interface ID = NOR1.
  - Send the NOR1 OXI log; a copy of the log can be found at C:\Program Files\Micros-Fidelio\OXChange\OXA\Logs.

Log Naming Convention: NOR1YYYYMMDD.log.xml

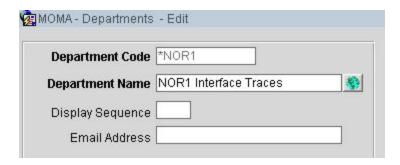
- A screenshot of the configured ATS (Automatic Transmission Schedule).
- A screenshot of the external systems and the NOR1 subscription to all external systems.
- A screenshot of the NOR1 OXI processors with the processors 'running'.
- A screenshot of any conversion codes entered into OXI (conversion codes will be determined on a property by property basis as needed).
- A screenshot of the OXI XML version for RESERVATIONS.
- A screenshot of the OXI registry setting to use UTF8 for NLS\_LANG.

Upon receipt of the above items NOR1 will confirm via email if all settings are correct.

# **PMS Configuration**

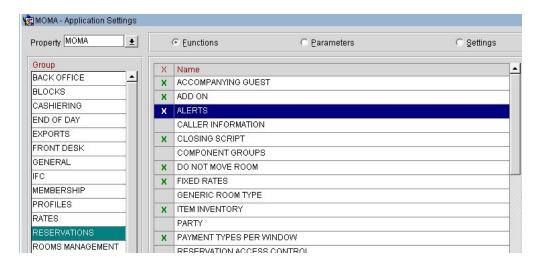
### **Nor1 Department Code**

Confirm Department \*NOR1 exists in the PMS, if not add the department via Setup > User Configuration > Department.



# **Alerts Configuration**

Confirm the application setting for alerts is active. (Setup > Application Settings > Reservation > Alerts.



# **Configuring Alerts**

Reservations > Codes > Alert Definition > Alert Message



### **Configuring Business Events**

Configure the business events via Setup > Business Events > Configuration.

Set the EXTERNAL SYSTEM to NOR1

#### Add the business events for the following Modules:

AVAILABILITY - Add business event:

SUMMARY TOTALS - add ALL data elements.

**HOUSEKEEPING - Add business events:** 

NEW OUT OF ORDER - add **ALL** data elements. ROOM TYPE OUT OF ORDER - add **ALL** data elements. UPDATE OUT OF ORDER - add **ALL** data elements.

NIGHT AUDIT - Add business event:

ROLL BUSINESS DATE - add ALL data elements.

#### PROFILE – Add business event:

**UPDATE PROFILE** 

Please add the following data elements:

ADDRESS PRIMARY YN, ADDRESS TYPE, ADDRESS1, ADDRESS2, ADDRESS3, ADDRESS4, BUSINESS TITLE, CITY, COMMENTS, COMPANY NUMBER, COMPANY TYPE, COUNTRY, EMAIL, EMAIL LANGUAGE, EMAIL YN, FAX NUMBER, FIRST NAME, GENDER, GUEST PRIVACY YN, IATA NUMBER, IATA TYPE, LANGUAGE, MAILING LIST YN, MARKET RESEARCH YN, MEMBERSHIP EXPIRATION DATE, MEMBERSHIP LEVEL, MEMBERSHIP NUMBER, MEMBERSHIP TYPE, MIDDLE, NAME, NAME TYPE, NATIONALITY, PHONE NUMBER, PHONE PRIMARY YN, PHONE TYPE, POSTAL CODES, PREFERENCE GROUP, PREFERENCE TYPE, STATE, STATUS, THIRD PARTY YN, TITLE, VIP STATUS, WEBPAGE

Please add the following condition for UPDATE PROFILE:

EXISTS (SELECT 'X' FROM DATA\_ELEMENT\_TEMP WHERE ((NVL(UPPER(NEW\_VALUE),'@#\$%')) = ('D')) AND (ELEMENT = 'NAME TYPE'))

#### RESERVATION – Add business events:

CANCEL - add ALL data elements.

CHECKIN - add ALL data elements.

CHECK OUT - add ALL data elements.

DELETE RESERVATION – add all data elements from ACCOMPANYING GUEST to TRAVEL AGENT NAME ID and UDF CHAR 38, VIDEO CHECKOUT, YIELD MARKET TYPE, YIELD STATUS.

DELETE TRACE - add ALL data elements.

JOIN GUEST - add ALL data elements.

NEW RESERVATION - - add **ALL** data elements from ACCOMPANYING GUEST to TRAVEL AGENT NAME ID and UDF CHAR 38, VIDEO CHECKOUT, WAITLIST PRIORITY. WAITLIST REASON CODE, WAITLIST REASON DESCRIPTION, WALK IN, YIELD MARKET TYPE, YIELD STATUS.

NEW TRACE - add **ALL** data elements.

NO SHOW - add **ALL** data elements.

REACTIVATE NO SHOW - add ALL data elements.

REACTIVATE WAITLIST - add **ALL** data elements.

REVERSE CHECK IN - add ALL data elements.

REVERSE CHECK OUT - add **ALL** data elements.

ROLLBACK CANCEL - add ALL data elements.

SEPARATE GUEST FROM SHARE - add ALL data elements.

TURNAWAYS - add **ALL** data elements.

UPDATE RESERVATION - add **ALL** data elements from ACCOMPANYING GUEST to TRAVEL AGENT NAME ID and UDF CHAR 38, VIDEO CHECKOUT, WAITLIST PRIORITY. WAITLIST REASON CODE, WAITLIST REASON DESCRIPTION, YIELD MARKET TYPE, YIELD STATUS.

UPDATE TRACE - add ALL data elements.

STAY RECORDS – Add business events:

INSERT STAY RECORDS – add data element GUEST\_NAME\_ID

UPDATE STAY RECORDS – add date element GUEST\_NAME\_ID

(If the module STAY RECORDS does not exist at the customers Opera version skip this set up)

### **External Systems Cross-Subscriptions**

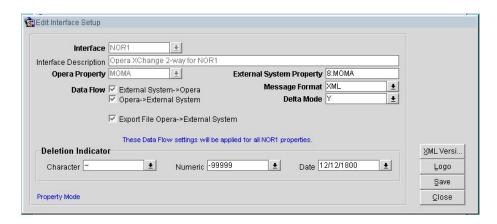
Ensure Nor1 is cross-subscribed to other external systems via Setup > Business Events > External Systems (check then uncheck the Show Inactive checkbox), highlight NOR1, click on Publisher. Ensure that NOR1 is subscribed to ALL external systems.

# **OXI Configuration**

# **OXI Interface Setup**

Configure the interface with the following values:

**Note**: the External System Property value **example** of 8:MOMA, where 8 = **VNor1Chain** value indicated within the declaration section of the Nor1 install script, and MOMA = the PMS resort code.



OXI XML Versions (Set the XML setting as follows, if not available set to the highest value):

ACTIVITY	V4	NADAILYSTAT	V1
ALLOTMENT	V5	OWNERCONTRACT	V4
BLKSTAT	V1	PACKAGES	V3
CALENDAR	V1	PROFILE	V5
CATERINGREVENUE	V1	RATE	V1
CATEVENT	V4	RATESTRATEGY	V2
COMMENT	V1	RAVL	V1
CONFIGURATION	V3	RAVR	V1
DAILYTARGET	V1	RELATIONSHIP	V3
DATAMART	V1	RESERVATION	V5
ECERTIFICATE	V1	RESERVATIONREGRET	V1
FINDAILYSTAT	V1	RESTRICTION	V4
FINTRX	V4	RESULT	V3
HURDLE	V1	RESVDAILYSTAT	V1
HURDLEC	V3	RESVSUMMARY	V1
INVENTORY	V1	ROOMSNAPSHOT	V1
INVENTORYQUERY	V1	RTAV	V4
INVENTORYSUMMARY	V1	SALESCEILING	V1
ITTEMAVAILABILITY	V1	SCBOOKPROD	V1
LISTRESPONSE	V3	SCHEMAVERSION	V2
MANAGERSREPORT	V1	STAY	V2
MEMBERAWARD	V1	UDF	V1
MEMBERSHIP	V1	UDFDEFINITION	V1
MESSAGEREQUEST	V3		

#### **Conversion Codes**

Conversions are not required as Nor1 returns reservation codes as received by Opera PMS. There may be a unique circumstance where a property requires a conversion code. In this instance the conversion codes required will be listed in the project email.

#### **OXI Interface Parameters**

#### OXI\_BLOCKS:

ALLOW UPDATES TO BLOCKS WITH SELL LIMITS Ν ALLOW UPDATES TO OPERA PROTECTED BLOCKS Ν **BLOCK CODE SEARCH** (BLANK) **EXT SYS BLOCK GENERATES INVENTORY** Ν **EXTERNAL LOCKED YN** HANDLE BLOCK SOLD OPERA->EXT\_SYS HANDLE MASTER BLOCKS SPECIFIC BLOCK EXCHANGE Ν **SPLIT INV DETAILS** Ν **UPL CATERING BLOCKS** Ν **UPL DED ONLY** Ν **UPL OPEN ONLY** Ν WAIT FOR BLOCK EXT REF Ν

#### **OXI GENERIC:**

AUTO RESYNC ON ROLL BUSINESS DATE B,R CREDIT CARD SUPPRESS BOTH **DEFAULT PRINTER** (BLANK) GENERATE XML HANDLE PSUEDO ROOMTYPES Ν LANGUAGE HANDLING ALL MULTI ROOMTYPE CONV Ν 7 **PURGE NO DAYS** SEND COMMENT WITH CONVERSION Ν SEND IFC CREATED ONLY Ν WARNINGS AS TRACES Υ

#### **OXI\_INVENTORY:**

#### **OXI MESSAGES:**

MAX SIZE BLOCKS 512 **MAX SIZE PROFILES** 200

MAX SIZE RATES 512

MAX SIZE RESERVATIONS 512

#### **OXI\_PROFILES:**

**CHANGE TO PROFILE GENERATES** RESERVATION

**CORP EXT SYS OVER** Ν DISCARD DUPLICATE MEMBERSHIPS Ν **GLOBAL PROFILE** Υ **GROUP EXT SYS OVER** Ν

HANDLE RESORT AR NUMBERS **IGNORE** HANDLE RESORT PAYMENT METHOD **IGNORE** 

IND EXT SYS OVER Ν **INTEREST EXT SYS OVER** Ν MAX PROFILE MATCHES 200 **NEGRATES EXT SYS OVER** Ν PHONE/ADDR CRS OVER Ν PREF CRS OVER Ν PROF COMMENTS CRS OVER Ν

Υ PROF CREATION

PROF MATCHING Υ **SOURCE EXT SYS OVER** Ν TA EXT SYS OVER Ν **UPDATE SALUTATION** Ν

#### OXI\_RATES:

**CONFIDENTIAL RATES** (BLANK) **EXT SYS DEPENDENT RATES** Ν HANDLE RATES POSTING RHYTHM **KEEP KEEP RATE DETAILS** (BLANK) KEEP RATE HEADER PKG Υ

NO RATE HEADER UPDATE (BLANK) RATE HANDLING DELTA

RATE DETAIL MESSAGE HANDLING **REMOVE** 

RATE EXTERNAL LOCKED YN

**RESTRICTION CODES** (BLANK) SUPPORTED CHANNELS (BLANK)

#### **OXI\_RESERVATIONS:**

ADDITIONAL REFERENCE EXCHANGE (BLANK) **AUTO POPULATE MEMBERSHIP YN** Ν EXT SYS MARKET/SOURCE CONTROL **EBRD** EXT SYS PRICE CONTROL YC EXT SYS RESERVATION GENERATES INV Υ EXT SYS HANDLES DAY USE Ν EXT SYS PACKAGE PRICE CONTROL

#### **OXI RESERVATIONS (Continued):**

FULL OPERA SHARES

IGNORE RES FOR UPDATE OLDER THAN

INHERIT CONFIRMATION NUMBER

ITEM INVENTORY EXT SYS OVER

PACKAGE EXT SYS OVER

PROMOTION EXT SYS OVER

N

REMOVE EXT REF ON REINSTATE (BLANK)

RESCOMMENTS EXT SYS OVER N

SHARER REMOVAL MODE NEITHER SHARER RATE CALC METHOD INCATIVE

SPECIALS EXT SYS OVER N
STAY UPLOAD PROFILE TYPES D

TRACE DEPT FOR NON REVIEWED (BLANK)
TRACE DEPT FOR FAILURE IN EXT SYS (BLANK)
TRACE DEPT FOR DELIVERY FAILURE (BLANK)
TRACE ROOM ASSIGNMENT ALWAYS

UPDATE ACCOMPANY GUEST N
UPDATE FEATURES N
UPDATE FIXED CHARGES A
UPDATE INHOUSE RES Y
UPDATE PAYMENT TYPES PER WINDOW N
UPDATE ROUTING TO ROOM N
UPDATE ROUTING TO WINDOW N
UPDATE SHARE RES Y
UPL DED RES ONLY

#### Additionally there are three (3) parameters that will need to be updated via Opera SQL:

Note: update XXXXXX to Opera PMS resort code

#### **OXI Profiles: RELATIONSHIPS INCOMING -> NONE**

update oxi.int\_parameters set parameter\_value='NONE' where parameter\_name='RELATIONSHIPS\_INCOMING' and resort='XXXXXX' and interface\_id='NOR1'

#### **OXI Profiles: RELATIONSHIPS OUTGOING -> NONE**

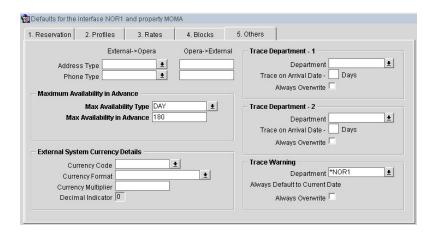
update oxi.int\_parameters set parameter\_value='NONE' where parameter\_name='RELATIONSHIPS\_OUTGOING' and resort='XXXXXX' and interface\_id='NOR1'

#### **OXI Reservations: ITINERARY FUNCTIONALITY -> Y**

update oxi.int\_parameters set parameter\_value='Y' where parameter\_name='ITINERARY\_FUNCTIONALITY' and resort='XXXXXX' and interface\_id='NOR1'

#### **OXI Interface Defaults**

Configuration of default only required on tab 5. Others as reservations are returned using the same codes as received from Opera PMS.



Max Availability Type: DAY
Max Availability in Advance: 180
Trace Warning: \*NOR1

\*NOR1 may need to be created as a DEPARTMENT, via Set Up, User Configuration, Departments, within the PMS.

#### **COMM Methods**

Nor1 supports two separate domains for the comm methods. The reason for this is to maintain backwards compatibility for servers that cannot support TLS 1.2 and up. The domains:

- https://integration.nor1solutions.com Legacy domain that supports less secure TLS protocols
- https://oxi.integration.nor1.com Strict domain that only supports TLS 1.2 and 1.3 protocols with secure ciphers

Nor1 recommends using the strict domain for the comm methods. Each domain has two endpoints, one for each comm method.

The legacy endpoints:

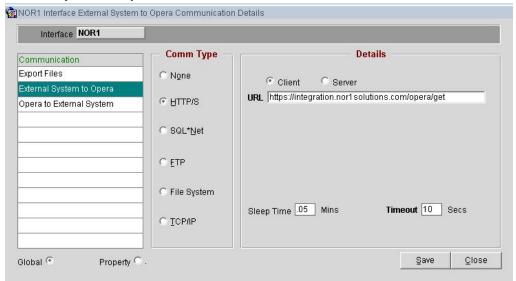
- External System to Opera: https://integration.nor1solutions.com/opera/get
- Opera to External System: https://integration.nor1solutions.com/opera/post

The strict endpoints:

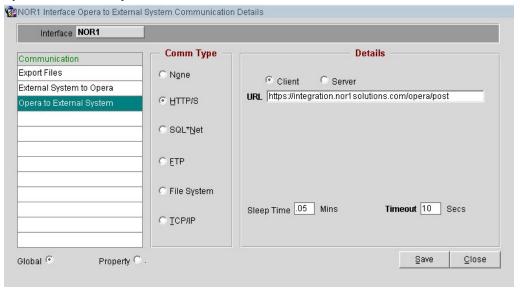
- External System to Opera: https://oxi.integration.nor1.com/opera/get
- Opera to External System: https://oxi.integration.nor1.com/opera/post

See the screenshots below for details regarding configuring the comm methods:

#### **External System to Opera:**



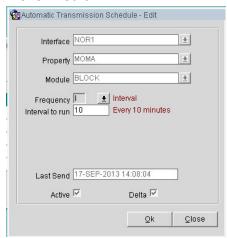
#### **Opera to External System:**



### **ATS - Automatic Transmission Schedule**

NOR1 requires the configuration of 4 different scheduled transmissions, one (1) for blocks; three (3) for inventory.

#### **ATS for Blocks:**

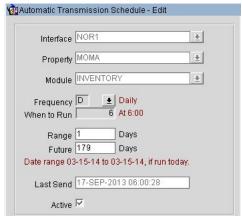


Interface: NOR1

Property: RESORT CODE

Module: BLOCK
Frequency: I
Interval to run: 10
Active and Delta: Checked.

### ATS for Inventory (at 6am):



Interface: NOR1

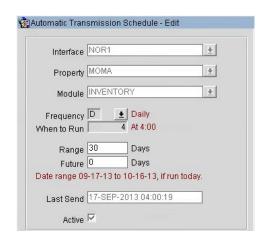
Property: RESORT CODE Module: INVENTORY

Frequency: D

When to Run: 6 (06:00)

Range: 1 Future: 179 Active: Checked

#### ATS for Inventory (at 4am)



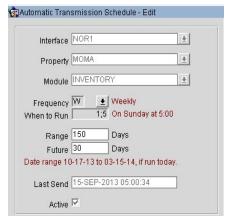
Interface: NOR1

Property: RESORT CODE Module: INVENTORY

Frequency: D

When to Run: 4 (04:00)
Range: 30
Future: 0
Active: Checked

### ATS for Inventory (Weekly):



Interface: NOR1

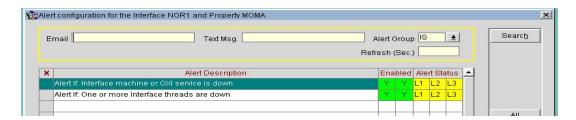
Property: RESORT CODE Module: INVENTORY

Frequency: W
When to Run: 1,5
Range: 150
Future: 30
Active: Checked

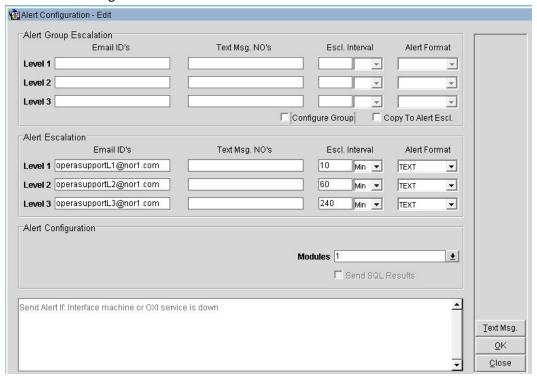
# **OXI Alert Configuration**

(Only necessary if customer has Email delivery is active at the customer)

Access OXI > Interface Status > Interface Alerts Configure 2 alerts as follows:



Below is the configuration for 'Alert If: Interface machine or OXI service is down'.



#### Below is the configuration for 'Alert if: One or more Interface threads are down': Alert Configuration - Edit Alert Group Escalation Alert Format Email ID's Text Msg. NO's Escl. Interval Level 1 Ŧ Level 2 + + Level 3 Copy To Alert Escl. Configure Group Alert Escalation Email ID's Alert Format Text Msg. NO's Escl. Interval Level 1 operasupportL1@nor1.com 10 Min 💌 TEXT -▾ Level 2 operasupportL2@nor1.com 60 Min ▼ TEXT Level 3 operasupportL3@nor1.com 240 •

Modules 1

☐ Send SQL Results

**±** 

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Text Msg. QΚ <u>C</u>lose

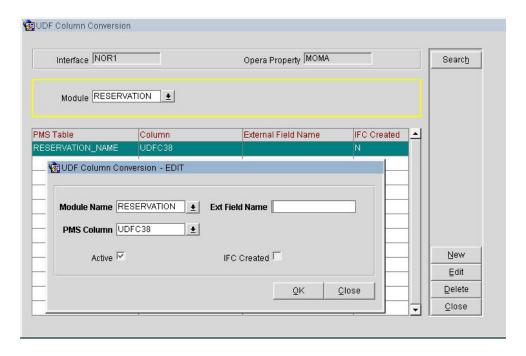
Alert Configuration

Send Alert If: One or more Interface threads are down

### **UDF Column Conversion**

The UDF column tracks the offers rendered and requested by the guest. Configure the UDF column conversion via OXI > Interface Configuration > UDF Conversion.

**Note**: Nor1 uses UDFC38 for tracking the offers. This UDF column might already be in use. Please reach out to <u>nor1-integrations</u> grp@oracle.com to use another UDF column.



### **NLS\_LANG**

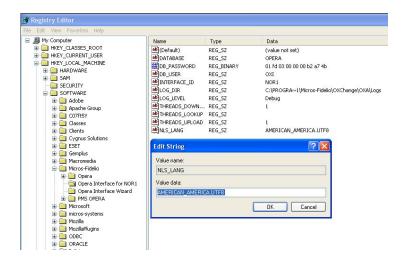
Set the NLS\_LANG registry value to prevent string encoding issues that can break Nor1 parsing of the OXI XML.

Start > Run > REGEDIT > (HKEY\_LOCAL\_MACHINE\SOFTWARE\Micros-Fidelio\Opera Interface for NOR1

Edit > New > String Value >

Value name: = NLS\_LANG

Value data: = AMERICAN\_AMERICA.UTF8



Re-start the OXI Services "Opera Interface for NOR1"

View the OXI log for NOR1 and confirm MESSAGE = Set NLS\_LANG to AMERICAN\_AMERICA.UTF8

09:13:07.947 MESSAGE Starting [Opera Interface for NOR1][C:\PROGRA~1\Micros-Fidelio\OXChange\OXA\oxamfxml.exe] 09:13:07.947 MESSAGE Set NLS\_LANG to AMERICAN\_AMERICA.UTF8 in the environment.

### **Reserved IP Addresses for OXI**

Nor1 does not recommend whitelisting IP addresses for outbound OXI communication to Nor1. However, Nor1 does recognize this policy is often required. If whitelisting is a hard requirement, bypassing the domain names for outbound OXI traffic is preferred over IP address whitelisting. The following table of IP addresses are Nor1's reserved set for OXI communication.

- 50.97.180.50
- 169.61.166.120
- 169.55.63.198
- 23.23.3.9
- 52.23.28.42
- 54.174.117.59
- 169.48.36.254