Oracle Hospitality OPERA Cloud Gaming Integration

User Guide

Release 25.4
G39073-01
July 2025

ORACLE

Oracle Hospitality OPERA Cloud Gaming Integration User Guide, Release 25.4

G39073-01

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7 Gaming Integration Configurations

Preface

Oracle Hospitality OPERA Cloud Gaming Integration users are authorized to access the following modules and features:

- Oracle Hospitality OPERA Cloud Gaming Integration

Purpose

This guide describes the required prerequisites and configurations that enable OPERA Cloud to communicate with your PTS.

Audience

This guide is intended for customers and partners who use Oracle Hospitality OPERA Cloud Gaming Integration.

Customer Support

To contact Oracle Customer Support, access the Customer Support Portal at the following URL:

https://iccp.custhelp.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screenshots 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/.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc=docacc.

Revision History

Date	Description of Change
July 2025	Initial publication

1 Overview

The OPERA Cloud Service Casino and Gaming Management component or Gaming Integration is an add-on to OPERA Cloud Services to enable integration with your Patron Tracking System (PTS).

The supported operations depend on your Patron Tracking System (PTS), but generally there are two types of operations supported:

CRM Operations

Customer Relationship Management (CRM) enables you to query or push the available player information in your PTS directly from OPERA Cloud and consists of the following operations:

- Player Lookup to search for a player in the PTS. This can be done using the first and/or last name.
- Player Download to save specific player information in OPERA Cloud.
- Player Statistics to see (in OPERA Cloud) the statistics of the player saved in the PTS.
- Player Enrollment to enroll the guest in the PTS system as a player.
- Player Offers to validate if an offer in the PTS is valid for that player for a specific reservation dates.
- Profile Updates to PTS, to update or create profile information on the PTS system
- Reservation Notifications, to notify the PTS system about reservation creation or changes

Cashier Operations

Cashier operations enables you to post comps to your PTS from OPERA Cloud and consists of the following:

- Comp Redemption — Enables you to send redemptions to one of the pre-configured buckets (or account types) in your PTS. The current balance of the pre-configured buckets will appear in OPERA Cloud. You can also reverse a redemption that has been redeemed.
- Comp Posting — Enables you to post discretionary comp transactions to the PTS from the guest's OPERA Cloud folio. You can reverse these postings if needed.
- Async Comp Posting, for bulk processing a list of comp posting transitions, normally used in the end-of-day process

This guide describes the required prerequisites and configurations you must follow to enable communication between OPERA Cloud and your PTS.

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Summary of the Operations

Table 2-1 Summary of Operations

Operation	IGT ADI	Aristocrat Oasis	Aristocrat Loyalty	Light & Wonder CMP
Player Enrollment				
Player Lookup				
Player Download				
Player Statistics				
Player Offers				
Profile Update to PTS				
Reservation Notifications				

Table 2-1 (Cont.) Summary of Operations

Operation	IGT ADI	Aristocrat Oasis	Aristocrat Loyalty	Light & Wonder CMP
Comp Posting (with reverse)	✓	✓	✓	✓
Comp Posting (with reverse and generates)	✓	✓	✓	✓
Async Comp Posting	✓	✓	✓	✓
Comp Redemption (with reverse)	✓	✓	✗	✗

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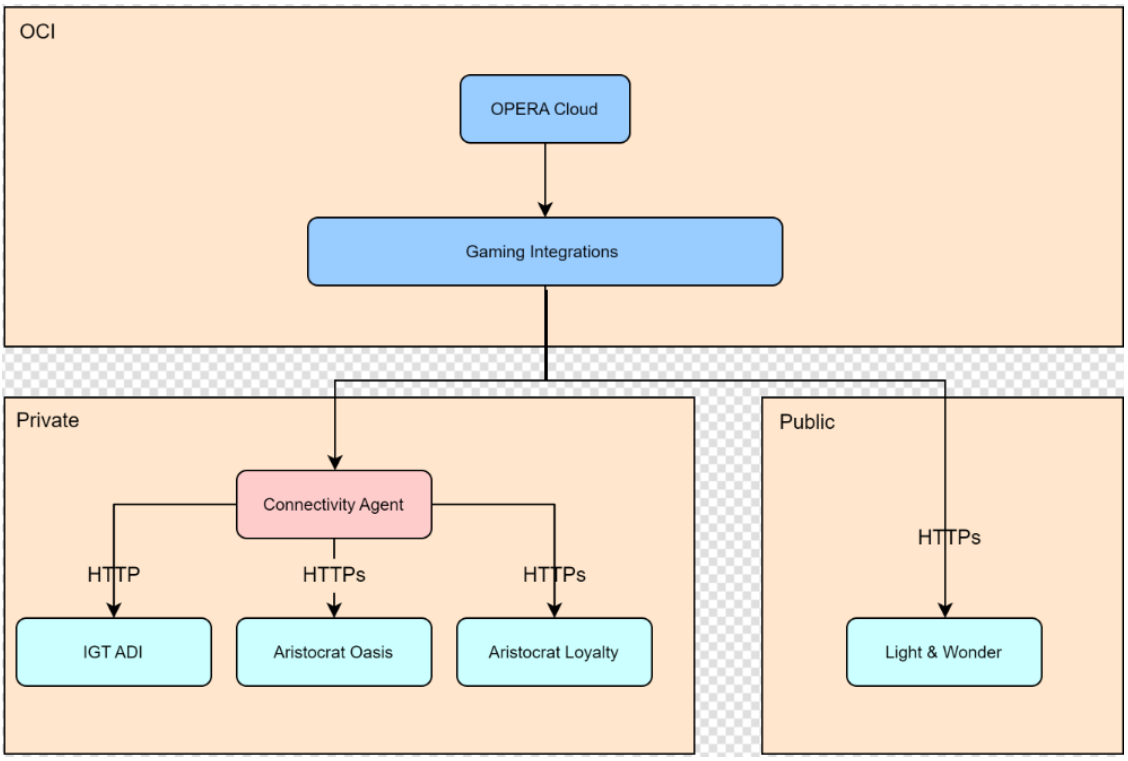
High Level Architecture

This diagram depicts the integration between OPERA Cloud Services and on-premise Patron Tracking Systems (PTS) that are connected by the OPERA Connectivity Agent.



4 Prerequisites

Application Versions

To use the Gaming Integration component, you must comply with the minimum required versions indicated in the table below:

Table 4-1 Application Versions

Application	Minimum Version	Comments
OPERA Cloud	23.5	This is the minimum version supported for gaming integration.
nConnect	1.8.4	Only applicable if your PTS is provided by Aristocrat.
ADI	8.X	Only applicable if your PTS is provided by IGT.
Light & Wonder CMP	13.0.11.5	Only applicable if your PTS is provided by Light & Wonder CMP

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OPERA Cloud Connectivity Agent

The Oracle Hospitality Connectivity Agent for Gaming Integration is software developed by Oracle to run on your infrastructure. It is responsible for the integration between OPERA Cloud and your on-premise Gaming PTS.

If your gaming vendor APIs do not have a publicly available endpoint, you must install the OPERA Cloud Connectivity Agent on an environment with access to these APIs to make a connection between OPERA Cloud and your gaming vendor. Considering the supported gaming vendors, if your gaming vendor is IGT, Aristocrat Oasis, Aristocrat Loyalty, or Konami, you must install this agent.

System Requirements

When integrating two different applications where one runs in the cloud and another runs on-premise, there are some infrastructure and networking requirements that must be met to run a software component that will allow this Cloud to On-Premise integration to happen.

Because OPERA Cloud runs in OCI (Oracle Cloud Infrastructure) and, predominantly, your PTS is running in your datacenter (whether directly or via a hosting agreement), you will need to have some configuration done within your datacenter in order to allow OPERA Cloud to invoke APIs from your PTS that are not available through the internet.

The Oracle Hospitality Connectivity Agent for Gaming Integration is software developed by Oracle to run on your infrastructure. It is responsible for the integration between OPERA Cloud and your on-premise Gaming PTS. This Connectivity Agent for Gaming Integration is software developed by Oracle to run on your infrastructure.

JDK Version, Operation System, and Heap Size Requirements

Install and use JDK version 17. To install this version, go to the JDK Development Kit 17.0.14 downloads page.

The JDK installation can be shared with other products installed on the same host. However, ensure the JDK installation is not modified for use with these other products. Also, to avoid having JDK v17 updated to another version, ensure your host does not have automatic updates for JDK.

Use one of the following operating systems:

- Oracle Linux 6.x
- Oracle Linux 7.x
- Oracle Linux 8.x
- Red Hat Enterprise Linux 6.6
- Red Hat Enterprise Linux 7.x
- Red Hat Enterprise Linux 8.x
- Suse Linux Enterprise Edition 12 SP2
- Microsoft Windows Standard Edition 2016

- Microsoft Windows 2019

> **Note**
>
> IBM or Open JDK are not supported.

Provide a minimum of 8 GB memory with 4 GB of heap size dedicated for the agent JVM. If you want to include any additional processes on that host besides the on-premises agent, it is strongly recommended that you increase physical memory to a value greater than 8 GB.

Networking Requirements

Since this agent is (from a networking perspective) connected to both your on-premise Gaming PTS and OPERA Cloud, the machine on which this agent is deployed must have internet outbound connectivity and connectivity to your Gaming PTS. There is no need for internet inbound connection as all interactions between this agent and OPERA Cloud are always from the agent to Oracle's cloud. Never the other way around.

In regards to the on-premise Gaming PTS system, there must be network connectivity between this agent and the PTS system. This does not mean both must reside on the same subnet, but only requires network connectivity between the two.

This connectivity agent should not be deployed on your DMZ.

Depending on your Gaming PTS vendor, the agent either uses port 80 or port 443 and all traffic is done using HTTPS protocol. Contact your Oracle team for further information.

Backup and Antivirus Information

Oracle does not provide support for customer backups or antivirus. If this agent must be included as part of a backup strategy, the entire agent folder must be considered for that purpose. It is not required for agent folders to be excluded from antivirus configurations.

Patching and Updates

There is no need for you to do any patching or updates for this agent. OPERA Cloud installs patches and updates for the agent in a fully automated manner.

High Availability Mode

To ensure that connectivity between OPERA Cloud and your PTS is not disrupted, it is highly recommended that you install the agent in 'High Availability' mode. High Availability mode means having two agents with the same configuration on two different (virtual) machines.

Installation Steps

You must have the connectivity agent file (this is normally named oic_connectivity_agent.zip) and install it in your on-premise environment. The connectivity agent is also associated with what is called “agent group identifier” and OIC URL. The connectivity agent must also authenticate itself, which requires you to have the agent’s credentials. Reach out to your Oracle contact to get the connectivity agent file, your agent group identifier, your OIC URL, and

your agent's respective credentials. You can install the agent on up to two separate environments for redundancy. To do this, repeat the same steps in both environments.

1. Create a directory for the connectivity agent installation on your on-premises host. Consider this folder as the %AGENT_ROOT%.
2. Unzip the connectivity agent file (that is, oic_connectivity_agent.zip) in this folder.
3. Modify InstallerProfile.cfg to include the following information:

```
# Required Parameters
# oic_URL format should be https://<runtimehostname>
oic_URL=https://my-intance.integration.us-phoenix-1.ocp.oraclecloud.com
agent_GROUP_IDENTIFIER=MYGAMINGAGENTGROUP
oic_IDCS_URL=https://idcs-123456789.identity.oraclecloud.com:443
oic_SCOPE=https://QWERTY.integration.us-phoenix-1.ocp.oraclecloud.com:443urn:opc:resource:consumer::all
oic_CLIENT_ID=123456789QWERTY
oic_CLIENT_SECRET=QWERTY123456789



#Proxy Parameters
proxy_HOST=
proxy_PORT=
proxy_USER=
proxy_PASSWORD=
proxy_NON_PROXY_HOSTS=
```

   a. **oic_URL**: This parameter is required. This is the HTTPS URL for the Oracle Integration host. The port is 443.
   b. **agent_GROUP_IDENTIFIER**: This parameter is required. This is the identifier for the connectivity agent group created in Oracle Integration. The identifier name is case-sensitive.
   c. **oic_IDCS_URL**: This parameter is required. This is the HTTPS URL for the IDCS associated with the Oracle Integration host.
   d. **oic_SCOPE**: This parameter is required. This is the scope associated with the security application being authenticated.
   e. **oic_CLIENT_ID**: This is the encrypted value of the security application Client ID for secure persistence necessary for the OAuth authentication.
   f. **oic_CLIENT_SECRET**: This is the encrypted value of the security application Client Secret for secure persistence necessary for the OAuth authentication.
   g. **Proxy Parameters**: These parameters are only required if the connectivity agent is used behind a proxy in the on-premises environment. If you have multiple hosts that need configured in a nonproxy host environment, you must separate each IP address or host with a pipe symbol (|) in the proxy_NON_PROXY_HOSTS parameter. For example: proxy_NON_PROXY_HOSTS=localhost|127.0.0.1|*.myorg.com.

      If your proxy user is part of a domain, the user name must include the MS domain name in front of the user name, along with double backslashes before the user name (for example, MS_domain\\username). If you do not specify the double backslashes, you receive a 407 Proxy Authentication Required error.

      Note that if you need to add, change, or bypass the non-proxy host configuration after agent installation, do not edit the InstallerConfing.cfg file. Proxy host changes made to that file after agent installation do not take effect. Instead, update the host with the

proxy_nonProxyHosts parameter in the%AGENT_ROOT%./agenthome/agent/config/CpiAgent.properties file for your changes to take effect. After editing this file, restart the agent.

4. Open a command line and run the following command to confirm that your default active Java version is 17.

> **Note**
>
> To comply with Oracle security standards, JDK 8 and JDK 11 are being deprecated for use with the on-premises connectivity agent. You must upgrade to JDK 17 as soon as possible following the instructions in this guide.

```
java --version
```

If you cannot set Java 17 as your default active version because you have legacy applications running old Java versions, please navigate to the bin folder under the JDK 17 installation folder before running the following commands.

```
# The standdar folder in Windows
cd "C:\Program Files\Java\jdk-17\bin"
# The standard folder in Linux
cd "/usr/java/jdk-17.*"
```

5. Run the connectivity agent installer from the command prompt. Ensure that it does not have any special characters.

```
java –jar connectivityagent.jar
```

6. Wait for a successful installation message to appear. For example:

   “Done with Agent installation & configuration... Starting agent for message processing. Agent started successfully... listening for new messages...”

Run the Agent as a Service

You can now run the agent as a service. This is the preferable way of running the agent because if you run it as a normal process, every time the environment is restarted, the command prompt window is closed or the process is terminated. If this occurs, you must repeat steps 4 and 5 of the Installation Steps.

Linux Installation

This step explains how to run the connectivity agent as a Linux service using systemd.

1. After you followed successfully the Installation Steps, make sure you stop the running agent by pressing **Ctrl+C** in the command line. Consider that the agent root folder is named <AGENT_ROOT>.
2. Create a Linux script named agentstartup.sh that triggers the agent startup (see script below). Place this script in <AGENT_ROOT>.

```
#!/bin/bash
```

```
java -version

cd <AGENT_ROOT>

java -jar connectivityagent.jar
```

3. Replace <AGENT_ROOT> with your path. For example, /home/myuser/connectivity_agent.
4. After saving the above script, make sure to add the execution permission:

```
sudo chmod +x agentstartup.sh
```

5. Create a new .service file (connectivity_agent.service) under **/etc/systemd/system/** to associate the script created with the Linux startup daemon process. You must have root access to create this file

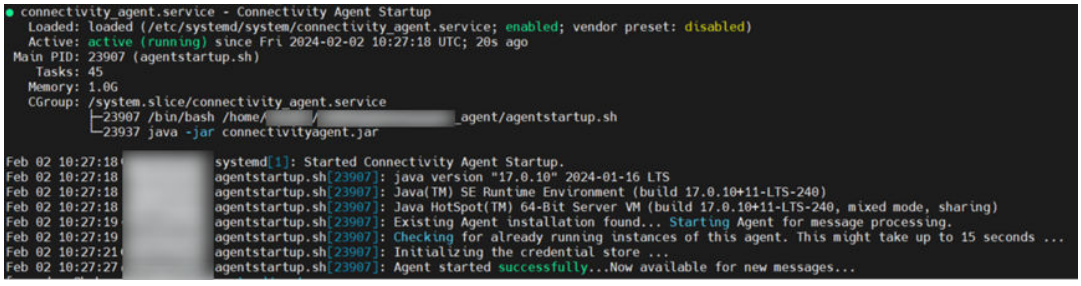
```
[Unit]
Description=Connectivity Agent
After=network.target

[Service]
Type=simple
ExecStart=<AGENT_ROOT>/agentstartup.sh
User=<myUser>
Group=<myGroup>

[Install]
WantedBy=multi-user.target
```

6. Replace **<AGENT_ROOT>** with your path (for example, /home/myuser/connectivity_agent), <myUser> and <myGroup> with your user and user group.
7. Execute the below commands to enable/start the connectivity_agent.service process:

```
sudo systemctl daemon-reload
sudo systemctl enable connectivity_agent.service
sudo systemctl start connectivity_agent.service
```

8. To check the status of execution for the connectivity_agent.service, execute the below command. Make sure the status is **active (running)**, and the last msg log is "Agent started successfully... Now available for new messages..."

```
sudo systemctl status connectivity_agent.service
```



Microsoft Windows Installation

This series of steps explains how to run the connectivity agent as a Microsoft Windows service using the Apache Commons Daemon. If you need more information on Apache Commons Daemon/ Procrun, visit the Apache Commons website at: https://commons.apache.org/proper/commons-daemon/procrun.html.

1. Download Procrun
   a. Go to the download page for Microsoft Windows at https://downloads.apache.org/commons/daemon/binaries/windows/.

      Download the latest version of the zip file. For example: commons-daemon-1.3.4-bin-windows.zip.

   b. Unzip the zip content into a dedicated folder, such as "C:\Apache Commons Daemon."
2. Install the service.
   a. Open a command prompt in the **C:\Apache Commons Daemon** folder with Administrator privileges. You can do that by opening the "Command Prompt" and then typing the following:

      ```
      cd "C:\Apache Commons Daemon"
      ```

   b. To make it easier later, create a local variable named ‘AGENT_ROOT’ with the folder path where you installed your OIC Agent. This is the folder containing the file "connectivityagent.jar." For example: C:\oic_agent. Note that this is set without quotation marks.

      ```
      set AGENT_ROOT=C:\oic_agent
      ```

   c. Create the folder ‘serviceLogFiles’ under AGENT_ROOT.

      ```
      mkdir "%AGENT_ROOT%\serviceLogs"
      ```

   d. Make sure that you have the Java executable in the correct place by querying its version.

      ```
      "C:\Progra~1\Common Files\Oracle\Java\javapath\java.exe" --version
      ```

      This should return something like the following:

      ```
      C:\Apache Commons Daemon>"C:\Progra~1\Common Files\Oracle\Java\javapath\java.exe" --version
      java 17.0.9 2023-10-17 LTS
      Java(TM) SE Runtime Environment (build 17.0.9+11-LTS-201)
      Java HotSpot(TM) 64-Bit Server VM (build 17.0.9+11-LTS-201, mixed mode, sharing)
      ```

   e. Run the command to install the service.

      ```
      prunsrv.exe //IS//oic_agent --DisplayName "Oracle OIC Agent" --Startup "auto" ^
       --StartMode "exe" --StartImage "C:\Progra~1\Common Files\Oracle\Java\javapath\java.exe" --StartPath
      "%AGENT_ROOT%" --StartParams "-jar#%AGENT_ROOT%\connectivityagent.jar" ^
       --StopMode "exe" --StopImage "cmd.exe" --StopParams "/c#FOR /F %A IN ('type "%AGENT_ROOT%
      \pid"') DO (taskkill /F /PID %~A && del "%AGENT_ROOT%\pid")" --StopTimeout 10 ^
      ```

```
 --LogPath "%AGENT_ROOT%\serviceLogs" --LogPrefix "commons-daemon" --LogLevel "Info" --
StdError "auto" --StdOutput "auto"
```

This should return something like the following:

```
C:\Apache Commons Daemon>prunsrv.exe //IS//oic_agent --DisplayName "Oracle OIC Agent" ^
More?  --StartMode "exe" --StartImage "C:\Progra~1\Common Files\Oracle\Java\javapath\java.exe" --
StartPath "%AGENT_ROOT%" --StartParams "-jar#%AGENT_ROOT%\connectivityagent.jar" ^
More?  --StopMode "exe" --StopImage "cmd.exe" --StopParams "/c#FOR /F %A IN ('type
"%AGENT_ROOT%\pid"') DO (taskkill /F /PID %~A && del "%AGENT_ROOT%\pid")" --StopTimeout
10 ^
More?  --LogPath "%AGENT_ROOT%\serviceLogs" --LogPrefix "commons-daemon" --LogLevel "Info"
--StdError "auto" --StdOutput "auto"
[2023-12-22 01:53:14] [info]  [ 9080] Apache Commons Daemon procrun (1.3.4.0 32-bit) started.
[2023-12-22 01:53:14] [info]  [ 9080] Installing service 'oic_agent_qa' name 'Oracle OIC Agent QA'.
[2023-12-22 01:53:14] [info]  [ 9080] Service 'oic_agent_qa' installed.
[2023-12-22 01:53:14] [info]  [ 9080] Apache Commons Daemon procrun finished.
```

3. Start the service.
   a. Open the command prompt where the connectivity agent is being run and stop it by pressing **Ctrl+C**. If you cannot find that command prompt, run the command where <agentPid> is the agent process ID. You can find that in the %AGENT_ROOT%\pid file.

      ```
      taskkill /F /PID <agentPid>
      ```

   b. Delete all the content under %AGENT_ROOT%\agenthome\logs. Since the service will run as LocalService and the log files were created by another user, you will see "access denied" errors and the agent og will not be properly produced.

      The same will also happen with the PID file, so also remove this file to avoid issues.

      ```
      del "%AGENT_ROOT%\agenthome\logs\*"
      del "%AGENT_ROOT%\pid"
      ```

   c. Run the following command to run the service:

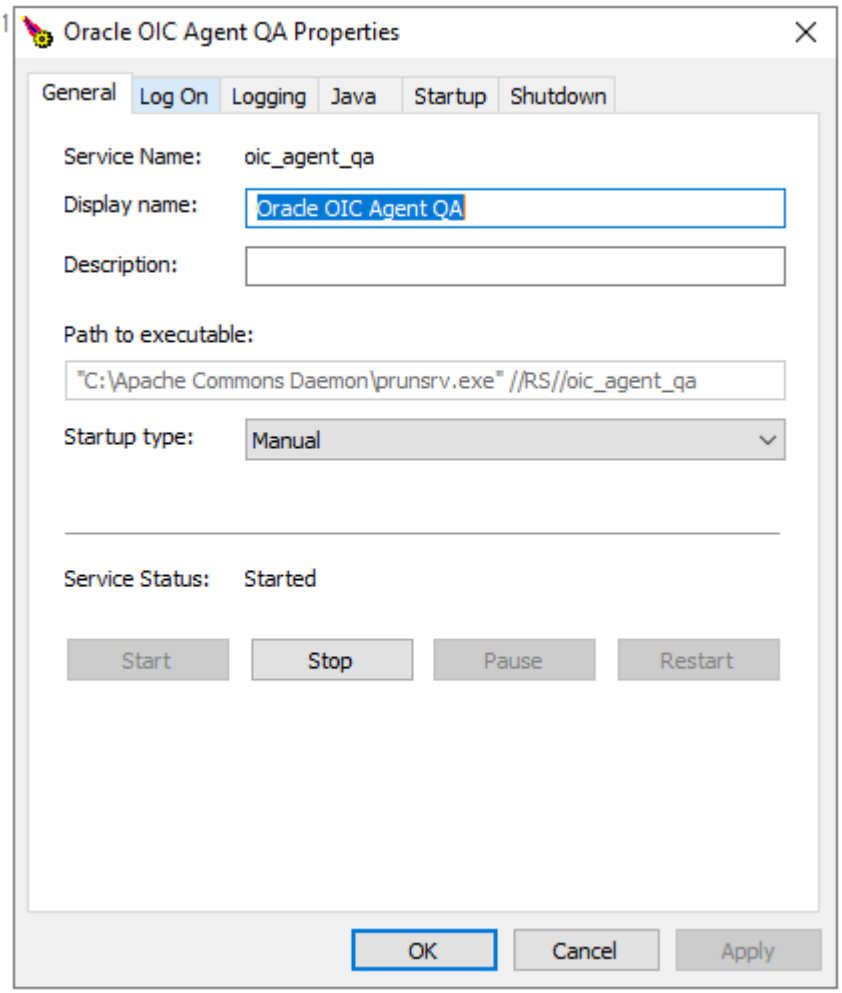
      ```
      prunmgr //MR//oic_agent
      ```

   d. Open the latest file %AGENT_ROOT%\serviceLogs\oic_agent-stdout.YYYY-MM-dd.log and make sure you have the last log "Agent started successfully... Now available for new messages...". It should look like the following:

      ```
      2023-12-22 02:17:23 Apache Commons Daemon procrun stdout initialized.
      Existing Agent installation found... Starting Agent for message processing.

      Checking for already running instances of this agent. This might take up to 15 seconds ...

      Initializing the credential store ...

      Agent started successfully...Now available for new messages...
      ```

e. You will also find it on the system tray with this  icon. There you can manage the service (that is, start, stop, and configure the service).

f. In the service logs folder %AGENT_ROOT%\serviceLogs, you will find these files.



- commons-daemon.YYYY-MM-dd.log - The Procrun logs.
- oic_agent_qa-stderr.YYYY-MM-dd.log - The standard error of the java connectivity agent.
- oic_agent_qa-stdout.YYYY-MM-dd.log - The standard out of the java connectivity agent.

Troubleshooting Tips

This section provides some tips on how to troubleshoot the common problems you might find when using an agent such as a Microsoft Windows service.

Start by looking at the service logs to understand what is the main cause of the problem:

- Go to **%AGENT_ROOT%\serviceLogs** where you will see several files. Take the most recent ones:

  - oic_agent_dev-stdout.*.log - The standard out of the agent. You will find the generic progression of the status of the agent.
  - commons-daemon.2024-01-23.log - The logs of the agent service. You will find the start/stop commands.
  - oic_agent_dev-stderr.2024-01-23.log - The standard error of the agent. You will find exceptions trace logs and specific information about any issue about the agent.
- Before solving this issue, you may want to stop the service and agent (see the next tip on how to do this). Some common issues can be wrong/experienced credentials or locked/ access denied on log files (see below).

To force the service and agent to stop, you can do the following:

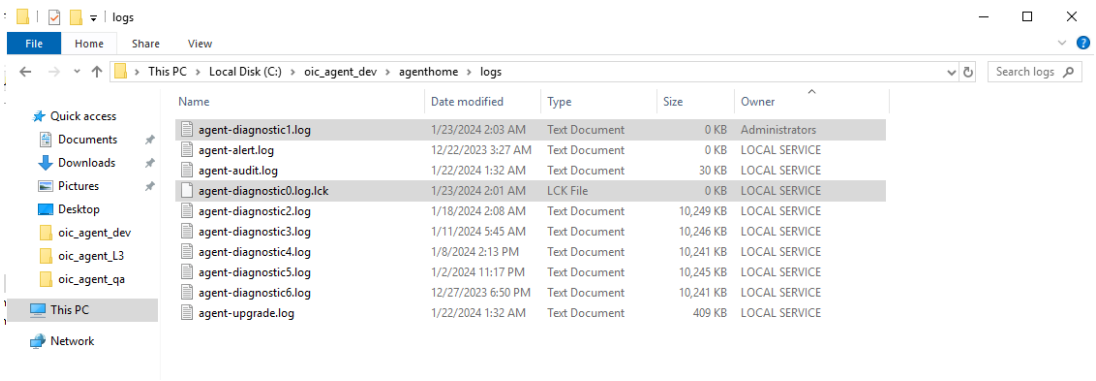
- Open the file %AGENT_ROOT%\pid and make note of the PID number.
- Run the command as "Run as administrator" on a command line console. This terminates the Java process running the agent.

```
taskkill /F /PID <agentPid>
```

- Run the Task Manager app as "Run as administrator":
  1. Open the **Services** tab.
  2. Select the service of your agent.
  3. Right click and select **Stop**.

One common issue is the locked/access denied on the log files of the agent. **You will get this issue if you try to run the agent from the command line with a user different than the user used by the service.**

1. Stop the service and agent as before.
2. Open Microsoft Windows File Explorer on the folder **%AGENT_ROOT%\agenthome\logs**.
3. Delete all files that end in .lck and that are not owned by LOCAL SERVICE. For example, see the files in the below image:



Start the service:

- Run the Task Manager app as "Run as administrator":
  1. Open the **Services** tab.
  2. Select the service of your agent.

3. Right click and select **Start**.

Install/Update Certificates on the Agent

Installing dedicated certificates enables you to access hosts with self-signed certificates. You would normally need to import the certificate in the agent keystore in the following two scenarios:

- The connectivity agent is used with an SSL proxy.
- The connectivity agent is used to invoke secure (SSL) on-premises endpoints.

> **Note**
>
> These tasks require you to briefly stop and restart the connectivity agent, so choose a time when the connectivity agent is not being used.

1. If you need to add a certificate on the agent keystore, use the keytool command to import the certificate into the keystore.p12. Make sure it is installed.
2. Stop the connectivity agent (if it is already running). The agent can be stopped in the two following ways:
   - If the agent is running as a normal process, press **Ctrl+C** on the command terminal window on which the agent is running, or search for the connectivity agent process and terminate it.
   - If the agent is running as an OS service, open the task manager and stop the oic_agent service.
3. Open a command line and navigate to the **%AGENT_ROOT%/agent/cert/ directory**. (The keystore.p12 file is available there.)
4. Run the following command:

   keytool -importcert -keystore keystore.p12 -storepass <agent_keystore_password> -alias <alias_name> -noprompt -file <certificate_file_path>

   Where:

   - **storepass password**: The default, initial password for the agent keystore. Refer to your keytool documentation for the default storepass password. For more information, see the keytool Command.
   - **alias alias_name**: Any name to uniquely identify the imported certificate in the keystore.
   - **file certificate_file**: Absolute path of the certificate file.
5. Restart the connectivity agent following Step 3 in Restart.

Restart

You can restart the connectivity agent if required.

1. Stop the agent in either of the following ways:

- If the agent is running as a normal process, press **Ctrl+C** on the command terminal window on which the agent is running, or search for the connectivity agent process and terminate it.
- If the agent is running as an OS service, open the task manager and stop the oic_agent service.

2. Wait at least 45 seconds before restarting the agent. This is because the agent monitoring framework waits for 45 seconds before marking the agent status as being down. If you start the agent before 45 seconds have completed, the agent restart fails with the following error message:

   Agent is already running for this particular instance.

3. Restart the agent based on your environment and production load size.

Environment	Enter the Following Command
Production environments	To troubleshoot issues, it is recommended that you restart the agent with the -XX:+HeapDumpOnOutOfMemoryError parameter: java -XX:+HeapDumpOnOutOfMemoryError -jar connectivityagent.jar If the connectivity agent runs out of memory, this parameter by default ensures that the heap dump is stored in a java_pidpid.hprof file in the directory where the agent application is run. Based on production loads, it may sometimes be necessary to allocate a larger amount of heap size for the agent process. If you determine that the process must be allocated a larger heap size, tune the -Xms and-Xmx parameters accordingly. • Xms<Heap_minimum_size>G • Xmx<Heap_maximum_size>G For example, assume you want to assign a minimum of 2 GB and a maximum of 8 GB to the agent JVM. java -Xms2G -Xmx8G -jar connectivityagent.jar The -XX, -Xms, and -Xmxparameters can all be specified at the same time if needed.
Nonproduction environments	java -jar connectivityagent.jar

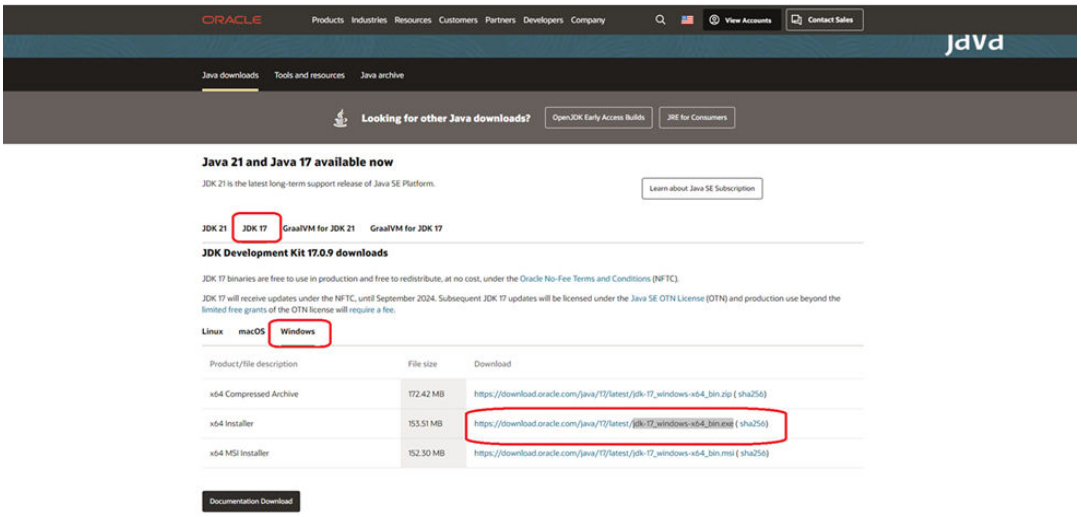
JDK Upgrade and Keystore Migration

To use the agent, you must have JDK version 17. If you are using an older version, follow the steps below to upgrade the JDK version and keystore. For the official JDK installation for

Microsoft Windows with executable, see JDK Installation Instructions for Microsoft Windows in the JDK Installation Guide.

Download JDK17 for Microsoft Windows

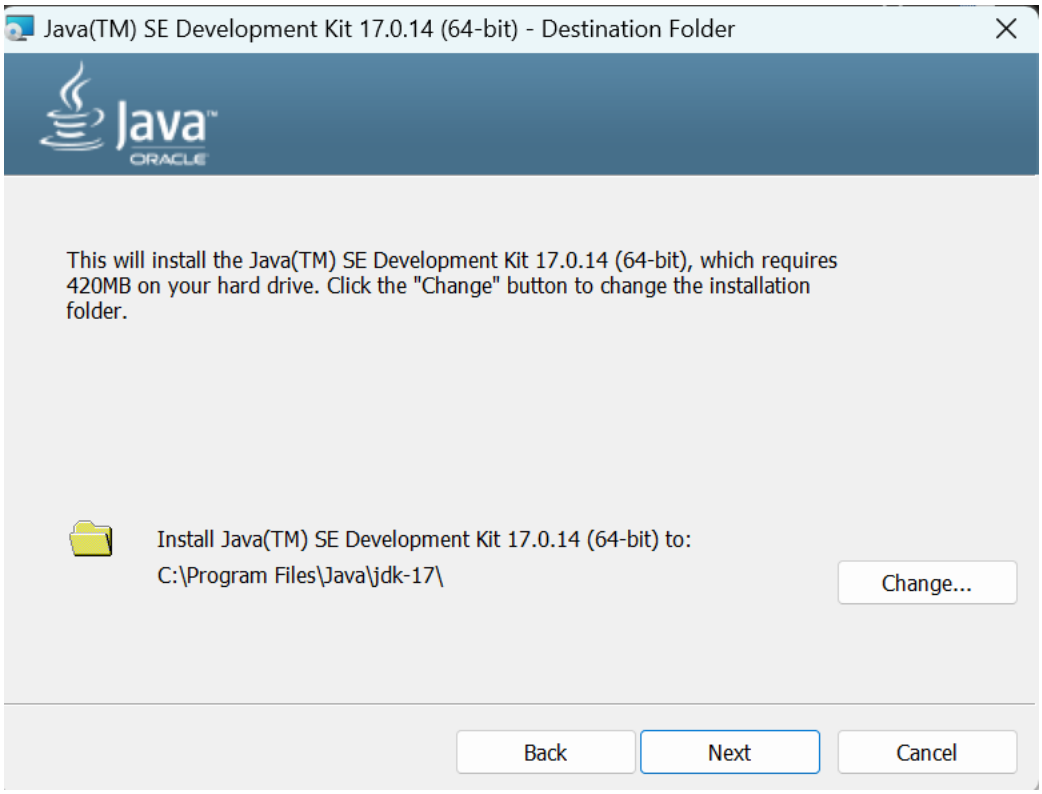
1. Go to JDK Development Kit 17.0.14 downloads.
2. Select **JDK17** and **Windows** tabs.
3. Click the **x64 Installer** link to download the jdk-17_windows-x64_bin.exe.



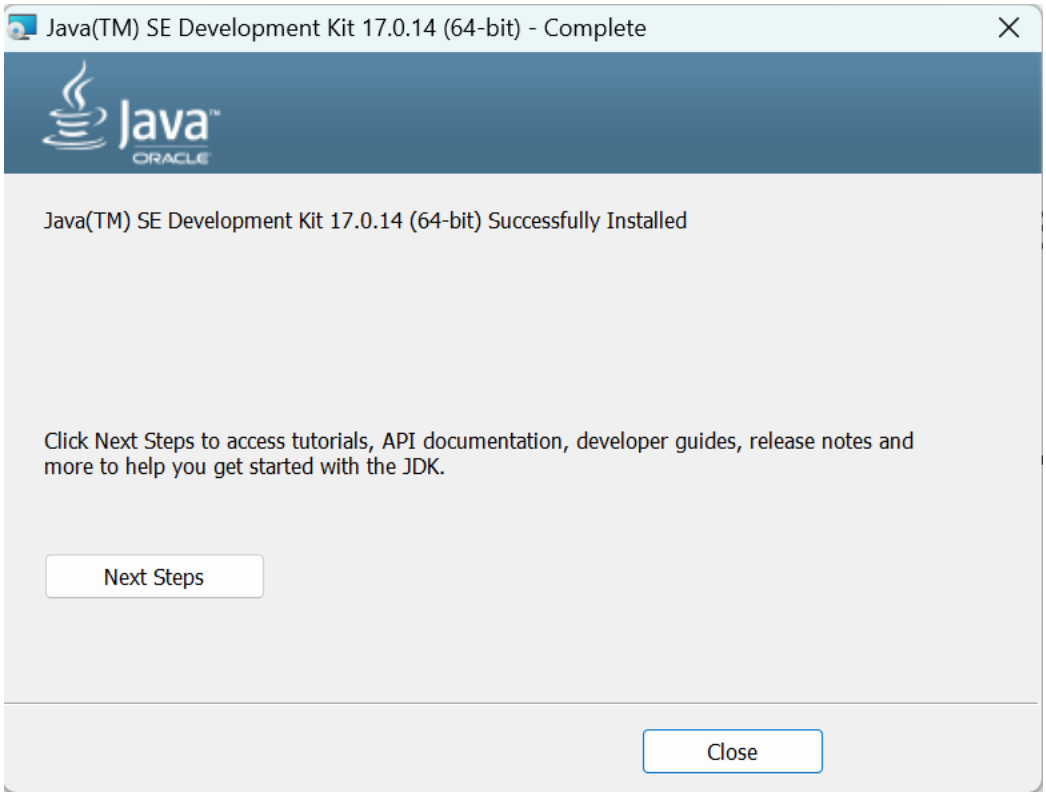
Install Java for Microsoft Windows

1. Click the downloaded **jdk-17_windows-x64_bin.exe** to start the installation.
2. If prompted, click **Yes** to allow Java to make changes in your system.
3. Click **Next** to start the installation.

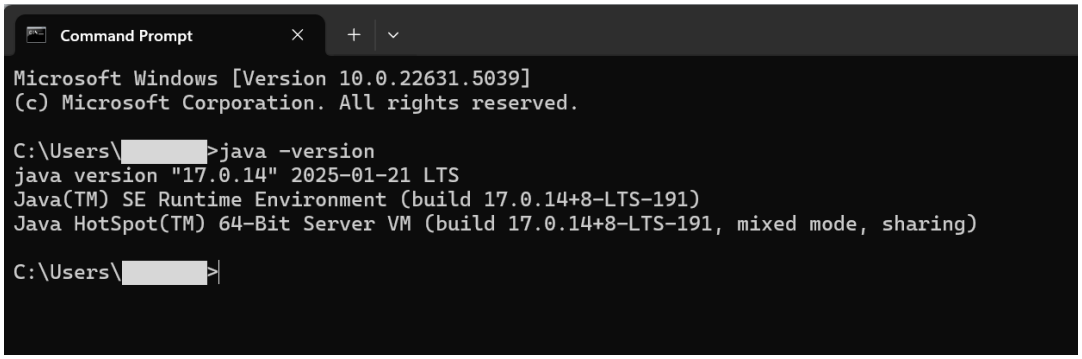
4. Accept the default install location and click **Next**.



5. Verify the installation completed successfully and click **Close** to finish the installation process.



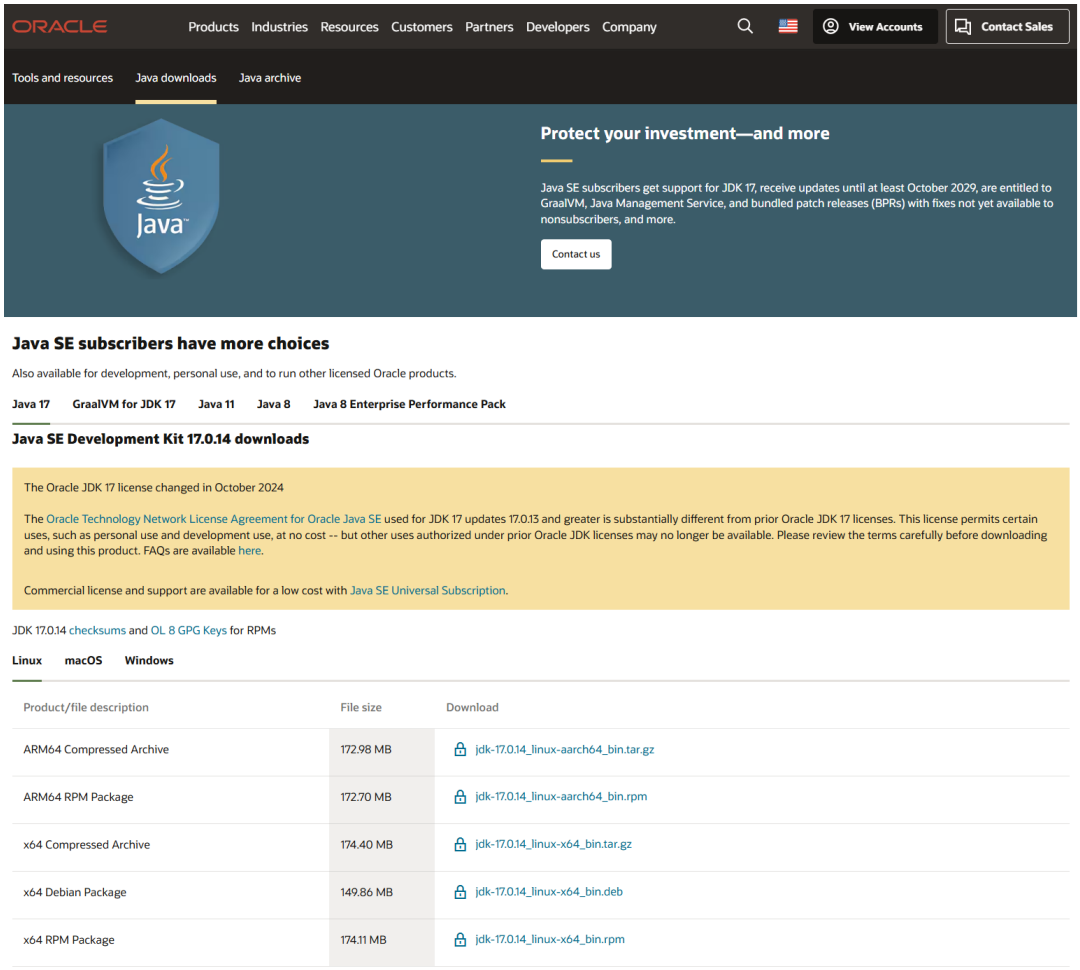
6. Open a command prompt and verify that you have JDK17 installed as the default version for Java.



Download JDK17 for Linux

There are three ways to install JDK on Linux. This guide describes the installation on RPM Based Linux. For more information, see Installation of the JDK on Linux Platforms in the JDK Installation Guide.

1. Go to JDK Development Kit 17.0.14 downloads.
2. Select **JDK17** and then select the **Linux** tab.
3. Click the **x64 RPM Package** link to download **jdk-17_linux-x64_bin.rpm**.



Install Java for Linux

Ensure you have the root user access. You can do this by running the command “su” and entering the **superuser password**.

1. Switch to the root user.
2. From a command prompt, navigate to the directory from which you downloaded the RPM file.
3. Install the required package using the following command:

   rpm -ivh jdk-17_linux-x64_bin.rpm

```
[root@wfivm03546 java]# rpm -ivh jdk-17_linux-x64_bin.rpm
warning: jdk-17_linux-x64_bin.rpm: Header V3 RSA/SHA256 Signature, key ID ad986da3: NOKEY
Preparing...                          ################################# [100%]
Updating / installing...
   1:jdk-17-2000:17.0.14-11           ################################# [100%]
[root@wfivm03546 java]#
[root@wfivm03546 java]#
```

4. Verify you have JDK17 as the default version for Java.

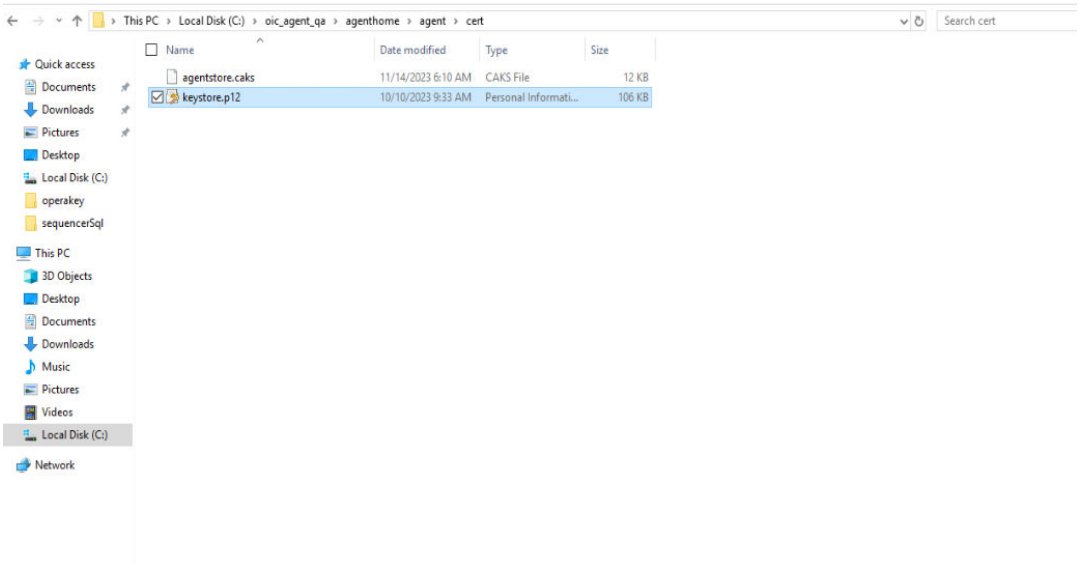
```
[root@wfivm03546 java]# java -version
java version "17.0.14" 2024-01-16 LTS
Java(TM) SE Runtime Environment (build 17.0.14+11-LTS-240)
Java HotSpot(TM) 64-Bit Server VM (build 17.0.14+11-LTS-240, mixed mode, sharing)
[root@wfivm03546 java]#
```

5. Delete the .rpm file if you need to save disk space.

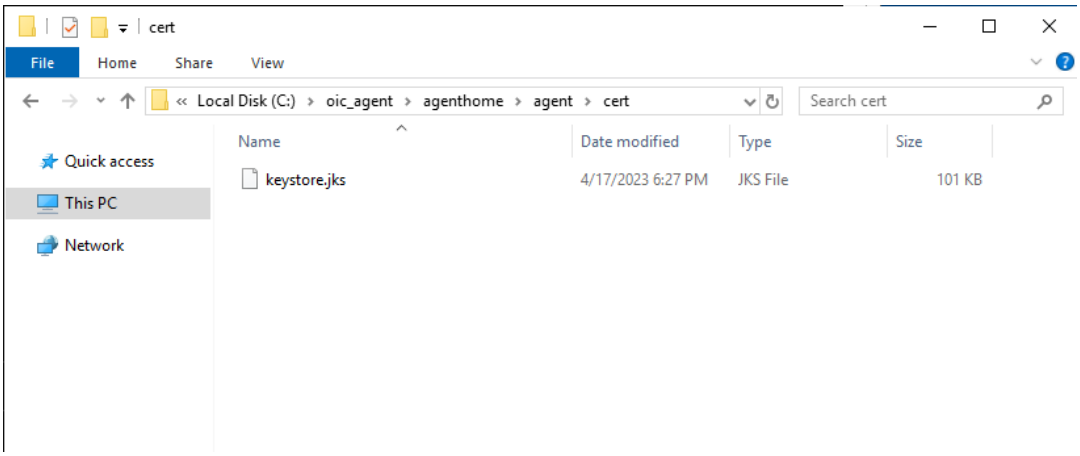
Convert the JKS KeyStore and Restart the Agent

1. Go to your agent installation directory and navigate to **Agent_Install_Location>/agenthome/agent/cert**.

> **Note**
>
> If you already have the PKCS12 KeyStore (as shown in the image below), you do not need to complete these steps. You can restart the agent with steps 4 and 6 .



If you still have the JKS KeyStore on the "keystore.jks" file (as shown in the image below), complete the following steps. These tasks require you to briefly stop and then restart the connectivity agent, so choose a time when the connectivity agent is not being used.



2. On the server that hosts the connectivity agent, create a backup of the keystore.jks file for safety by copy-pasting and naming it "keystore_backup.jks." Move this backup file to a safe folder.
3. Convert the JKS KeyStore to the PKCS12 KeyStore by running the following commands from the command line where <Agent_Install_Location> is your agent root folder location.

   cd <Agent_Install_Location> /agenthome/agent/cert

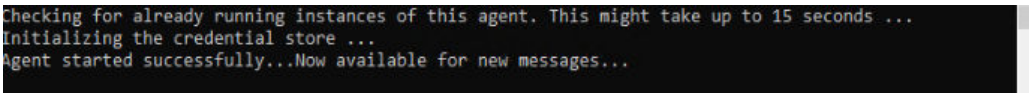
   keytool -importkeystore -srckeystore keystore.jks -destkeystore keystore.p12 -srcstoretype JKS -deststoretype PKCS12 -deststorepass changeit -srcstorepass changeit

   The below image shows an example of these commands:

4. Stop the agent by sending a **CTRL+C signal** or closing the command prompt window that runs the agent.
5. Delete the keystore.jks file if you just converted to the PKCS12 KeyStore.
6. Start the agent by doing the following:
   a. Go to the installation directory.
   b. Run the following command on a command line prompt:

      java –jar connectivityagent.jar

   c. Verify the agent is running successfully.



7. If everything is working correctly, delete the backup **keystore_backup.jks**. If not, you can roll back using the JKS keystore backup.

6

OPERA Cloud Flex Fields

This integration solution makes use of some flex fields for specific use cases. If you also use flex fields as part of you OPERA Cloud configuration, review these flex fields to ensure there are no conflicts between them.

- **Profile Preferred Name**: Flex field UDFC40 is used to store the guest preferred name and this information is being integrated to IGT.
- **Player Credit Account**: Flex field UDFN40 is used to store the player credit account flag from IGT. This information is received from IGT to indicate if the guest has a credit account in IGT.

7

Gaming Integration Configurations

Complete these configurations to enable gaming operations between OPERA Cloud and your PTS.

OPERA Cloud Controls

For gaming system operations to work with the external PTS system, the following OPERA Cloud modules must be active:

OPERA Membership

- Function Enrollment with system **GAMING** added to it (other systems can also exist).
- Setting **Default Membership Type** to the membership type you created as described in Membership Management.

OPERA Comp Accounting

- Function **Comp Request** must be active.
- Function **Comp Types** must be active.
- Parameter **Comp Accounting Integration Service** must be active.
- Parameter **Comp Redemption** must be active (only if using Aristocrat Oasis).
- Parameter **Generic Comp Membership Number** must be active.
- Parameter **PTS Membership Type based Comp Routing** must be active.
- Parameter **Player Statistics** must be active.
- Setting **Default PTS Membership Type** to the membership type you created as described in Membership Management.

OPERA Profile

- Functions **Profile Lookup → Default External System for Lookup** set to **External System** with the same name as the Outbound Configuration you created as described in the OPERA Cloud Outbound Configuration topics. For more information, see Outbound Configuration for Aristocrat Oasis and Outbound Configuration for IGT. This External System must be flagged for Loyalty.
- Functions **Profile Lookup → External Lookup Behavior** set to **FORCE**.
- Functions **Profile Lookup → Profile Types for Lookup** set to **Company**, **Individual**, **Group**, **Source**, and **Travel Agent**.

For details on how to access and configure OPERA Controls, refer to OPERA Controls in the OPERA Cloud Services documentation.

Membership Management

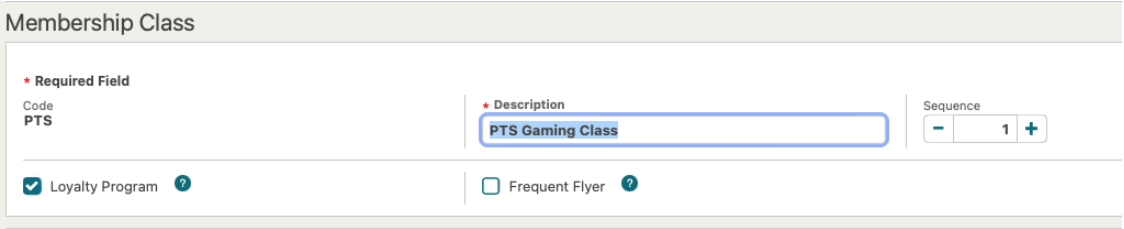
For details on completing the following configurations, refer to Guest Loyalty Programs in the OPERA Cloud Services documentation.

Membership Class

To properly use these gaming operations, you must have a membership class flagged as "Loyalty Program." For details on creating membership classes, refer to Configuring Membership Classes in the OPERA Cloud Services documentation.

> **Note**
>
> Only one membership class can be flagged as “Loyalty Program.”

Figure 7-1 Membership Class Screen



Membership Type

To execute gaming operations with the IGT system, you must create a PTS membership type with the name "PTS."

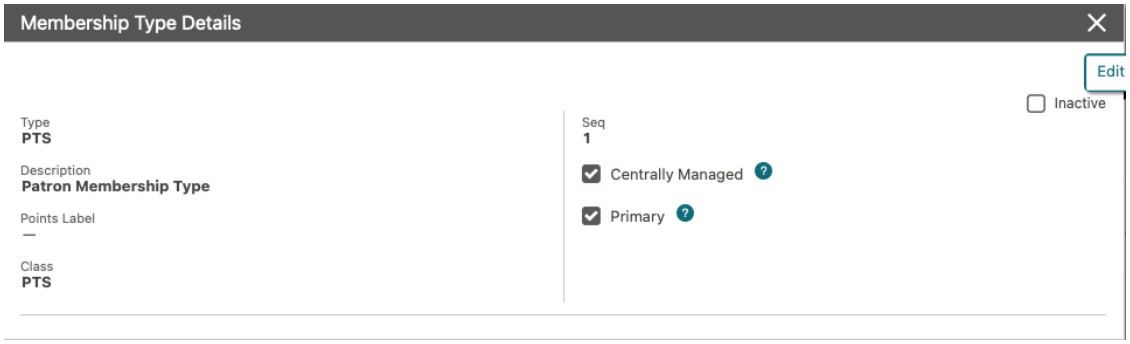
> **Note**
>
> The name of this Membership Type must be entered exactly as "PTS."

For details on how to create a membership type, refer to Configuring Membership Types in the OPERA Cloud Services documentation.

For the membership type details:

1. Mark the membership as **Primary**.
2. Mark the membership as **Centrally Managed**. Only one membership type can be centrally managed.
3. Select the membership class you previously created.

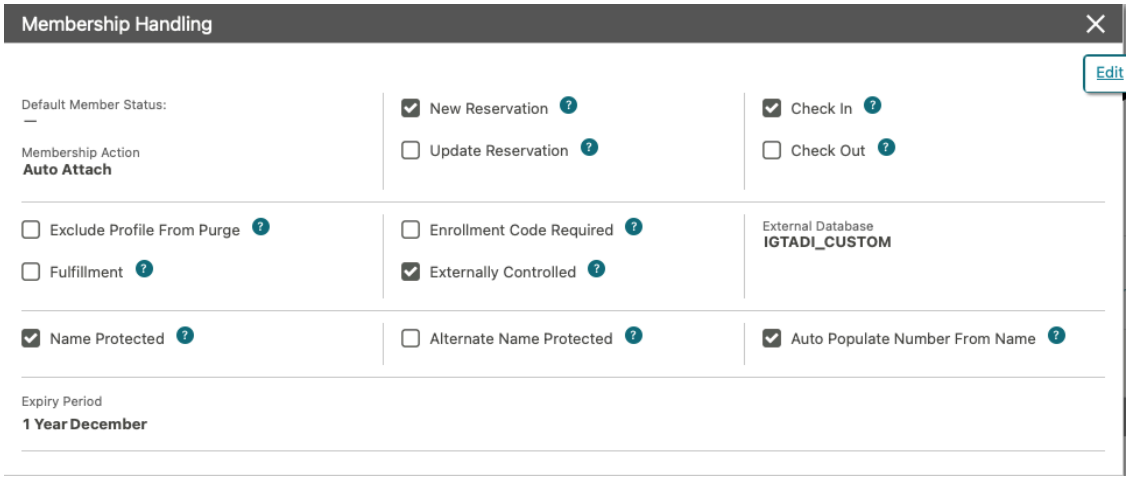
Figure 7-2 Membership Type Details Screen



For the Membership Handling:

1. Set the External Database to the one with the same name as the outbound configuration that you previously created.
2. Set Membership Action to **Auto Attach** and select **New Reservation**.

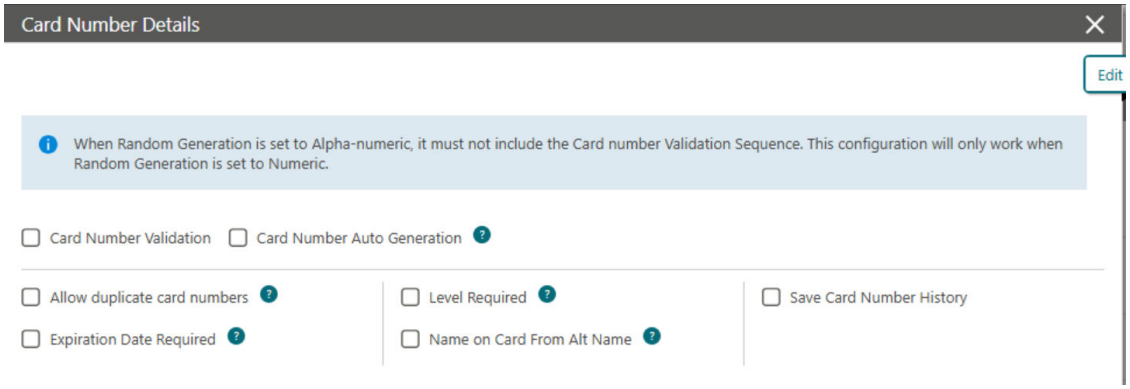
Figure 7-3 Membership Handling Screen



For Card Number Details:

- Deselect **Expiration Date Required**.
- Deselect **Allow duplicate card numbers**.

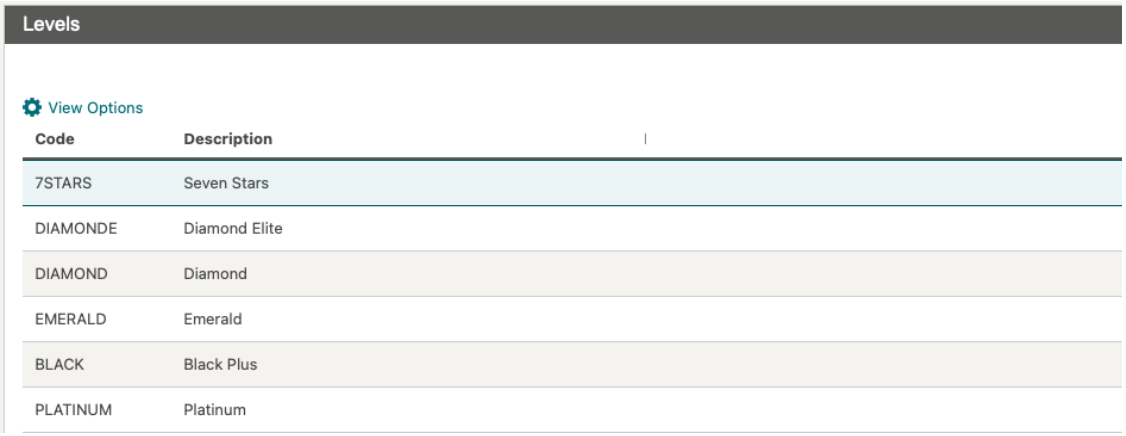
Figure 7-4 Card Number Details Screen



Membership Levels

Once the membership type is configured, add your Membership Levels to this Membership Type. The values on the below image is just for illustration purposes. Your Hotel/Casino will have its own Membership Levels already defined by the business.

Figure 7-5 Membership Levels Screen



Rate Management

Promotion Codes

To fetch offers from a PTS system while creating reservations, you must create promotion codes in OPERA Cloud. These promotions must have the same information (code, start and end dates) as the existing offers in the corresponding gaming system.

These promotions will later be redeemed in your PTS system at guest check-out via the Comp Posting operation. The promotion will automatically route from the guest's folio to a comp window when the reservation is created.

For details on creating promotion codes in OPERA Cloud, refer to Configuring Promotion Codes in the OPERA Cloud Services documentation.

Gaming Vendor Specific Configurations

Aristocrat Oasis

The following operations are supported as part of this gaming integration product. Only the operations listed below are currently supported.

Table 7-1 APIs

Function	How it works	Direction
Player Enrollment	• OPERA Cloud sends the name and address information for a new player profile or an existing OPERA Cloud profile to OASIS 360. • OASIS 360 creates a player profile and responds to OPERA Cloud with the player ID.	OPERA Cloud–> OASIS 360
Profile Lookup	• OPERA Cloud users can search OASIS 360 for profile(s) based on Player ID or Last and/or First Name. • OASIS 360 returns a list of profiles matching the criteria requested, which the OPERA Cloud user views on-screen.	OPERA Cloud –> OASIS 360
Profile Fetch	• The OPERA Cloud user selects a profile from a list provided during the Lookup operation. • OASIS 360 returns the patron's name, addresses, birth date, and email address; OPERA Cloud will either insert a new profile record or merge the data into an existing record.	OPERA Cloud –> OASIS 360
Profile Update	• OPERA Cloud notifies OASIS 360 of any changes made to the name and/or address, telephone, and email on any OPERA Cloud profile that has an associated OASIS 360 player id.	OPERA Cloud –> OASIS 360

Table 7-1 (Cont.) APIs

Function	How it works	Direction
Comp Postings	• OPERA Cloud sends a comp request to OASIS 360 when a charge is posted to a comp window (101-108). A comp posting is any charge that was moved to a comp window, regardless of whether it was originally posted manually, through the End of Day sequence, or by POS interface to OPERA Cloud. • To void a comp transaction, you must move back to a cash window (1-8). A Void is then sent to OASIS 360. • OASIS 360 will either approve or decline the comp posting. Approval status appears on the OPERA Cloud Comp Journal screen. • OPERA Cloud sends comp postings to OASIS 360 in monetary value / amount only. • OPERA Cloud sends comps monetary value / amount to only **one default bucket in** OASIS 360. **Note** Do not move transactions between comp windows (101-108).	OPERA Cloud –> OASIS 360
Comp Redemption (payment for window 1-8)	• The ability in OPERA Cloud to obtain a players earned bucket values from the gaming system to use as a credit/payment towards their hotel folio balance (cash windows 1-8) • OPERA Cloud sends comp redemption to OASIS 360 in monetary value / amount only.	OPERA Cloud –> OASIS 360
Player Snapshot/ PTS Inquiry (view only)	• OPERA Cloud users can view basic, real-time balances and account information by sending a Player Statistics request from OPERA Cloud to OASIS 360. This information is never stored in OPERA Cloud. • OASIS 360 responds with details that appear on Players Statistics screen in OPERA Cloud. For example, comp dollar or points balance. • The scope of data sent is not configurable in OPERA Cloud.	OPERA Cloud –> OASIS 360
Player Promotions/ Offers (view only)	• Promotion/Offer codes must be created for both OPERA Cloud and OASIS 360. • OPERA Cloud users can click **Fetch Offer** from the Look to Book screen to view promotions/offers available for the player.	OPERA Cloud –> OASIS 360

Required Information

To invoke the nConnect APIs from OPERA Cloud, you must provide the following nConnect OAuth credentials:

- URL for Identity Server
- Client ID
- Client Secret
- URL for nConnect Server
- Username and Password
- Scope

The integration between OPERA Cloud and nConnect uses the following APIs with their required permissions. nConnect requires these permissions to successfully execute the operations (see list of operations above).

Table 7-2 APIs

API	Method	Permission
/api/v1/PlayerInfo/	POST	AddPlayerPermission
/api/v1/PlayerInfo/	GET	GetPlayerPermission
/api/v1/PlayerInfo/{PlayerID}/Statistics	GET	GetPlayerStatisticsPermission
/api/v1/PlayerInfo/{playerId}/MarketingCouponsWithPlayerID	GET	GetPlayerMarketingCouponsPermission
/api/v1/PlayerInfo/{playerId}/Accounts/AccountType/{accountType}	GET	GetPlayerAccountBalanceByAccountTypeIdPermission
/api/v1/PlayerInfo/{playerId}/Transactions	POST	AddPlayerTransactionPermission
/api/v1/PlayerInfo/{{playerId}}/Accounts	GET	GetPlayerAccountBalancePermission
/api/v1/PlayerInfo/{playerId}	PUT	UpdatePlayerProfilePermission
/api/v1/PlayerInfo/{playerId}	GET	GetPlayerPermission
/api/v1/PlayerInfo/{playerId}/Address	POST	AddPlayerAddressPermission
/api/v1/PlayerInfo/{playerId}/Address/{addressId}	PUT	UpdatePlayerAddressPermission
/api/v1/PlayerInfo/{playerId}/Email	POST	AddPlayerEmailPermission
/api/v1/PlayerInfo/{playerId}/Email/{emailId}	PUT	UpdatePlayerEmailPermission
/api/v1/PlayerInfo/{playerId}/PersonalID	POST	AddPlayerPersonalIDPermission
/api/v1/PlayerInfo/{playerId}/PersonalID/{ID}	PUT	UpdatePlayerPersonalIDPermission

For further details on nConnect (or Aristocrat Oasis) configurations, email your Aristocrat point of contact or your Oracle Hospitality point of contact.

Comp Accounting

Comp Redemption Codes

Comp Redemption Codes are required to execute the cashier operations in Comp Redemption. These codes correspond 1:1 to the Account Types in Aristocrat Oasis.

Create the following codes in OPERA Cloud to redeem transactions in all available account types in Oasis. In OPERA Cloud, each Comp Redemption Code has an associated transition code.

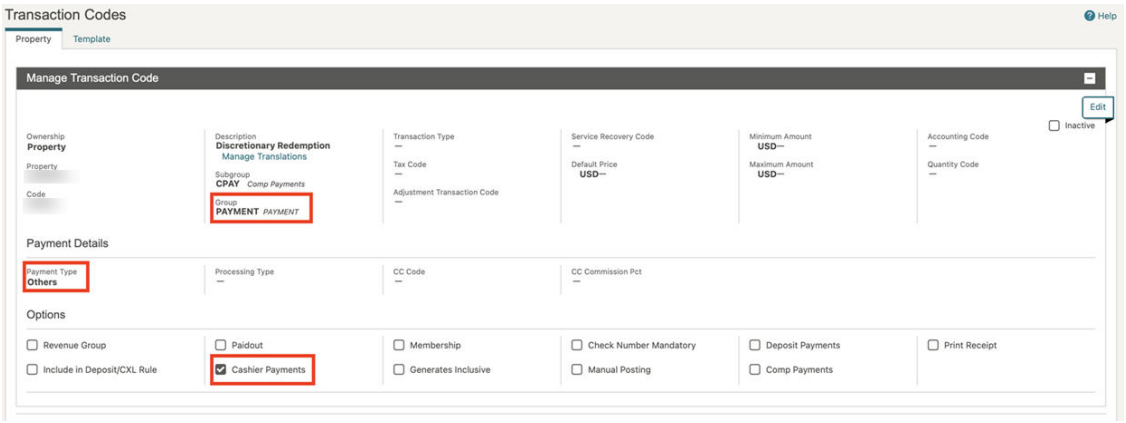
Table 7-3 Comp Redemption Codes

Oasis Account Type	OPERA Cloud Comp Redemption Code	Description	OPERA Cloud Transaction Code
2	2	Comps	55903
3	3	Cash	55904
4	4	Promo	99500
5	5	Discretionary	99502

You can configure any transaction codes in OPERA Cloud and associate them to these Comp Redemption Codes if the following conditions are met:

- Transaction Code group is ‘PAYMENT’
- Transaction Code payment type is ‘Others’
- Transaction Code is marked for ‘Cashier Payments’

Figure 7-6 Manage Transaction Code Screen

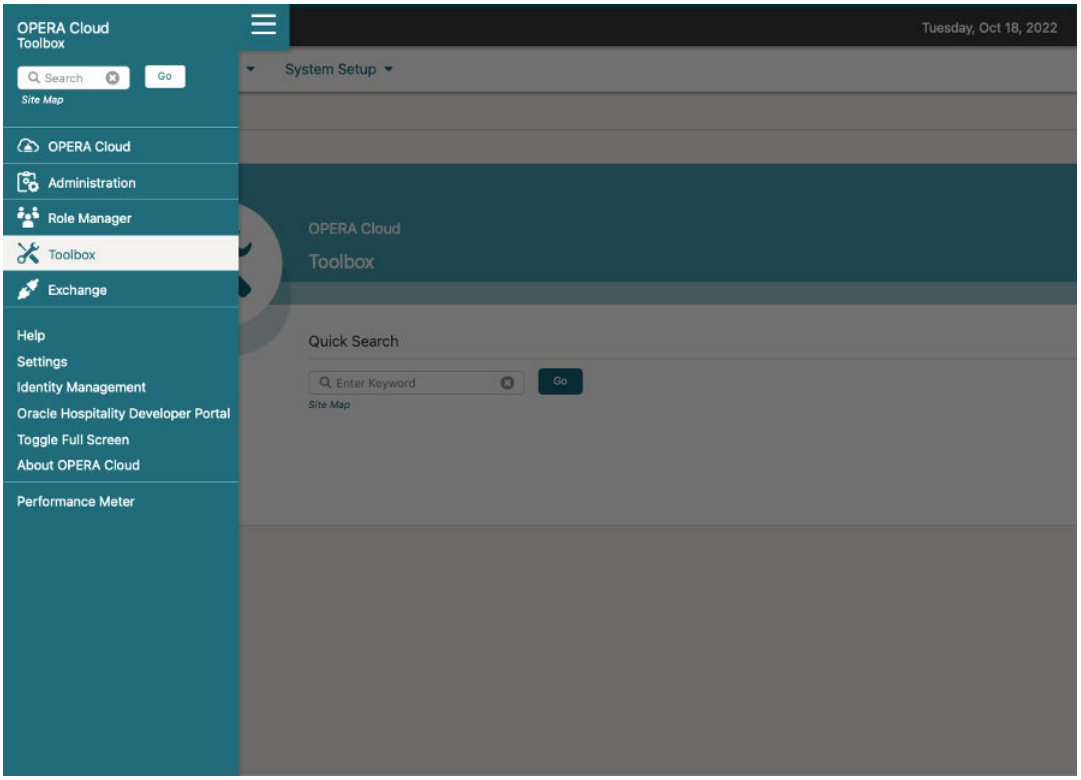


OPERA Cloud Outbound Configuration for Aristocrat Oasis

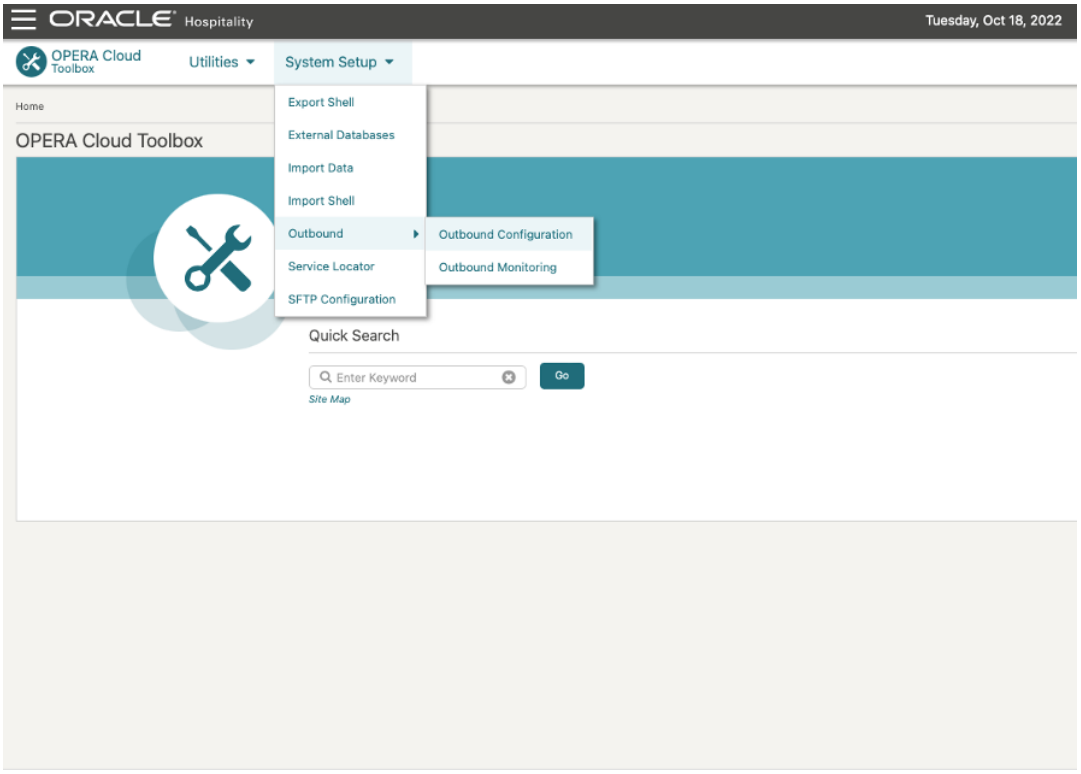
A new outbound system configuration is required for OPERA Cloud to connect to nConnect.

Follow the below steps to set up the Outbound Configuration in OPERA Cloud. For additional details on creating an outbound configuration, refer to Configuring Outbound Systems in the OPERA Cloud Services documentation.

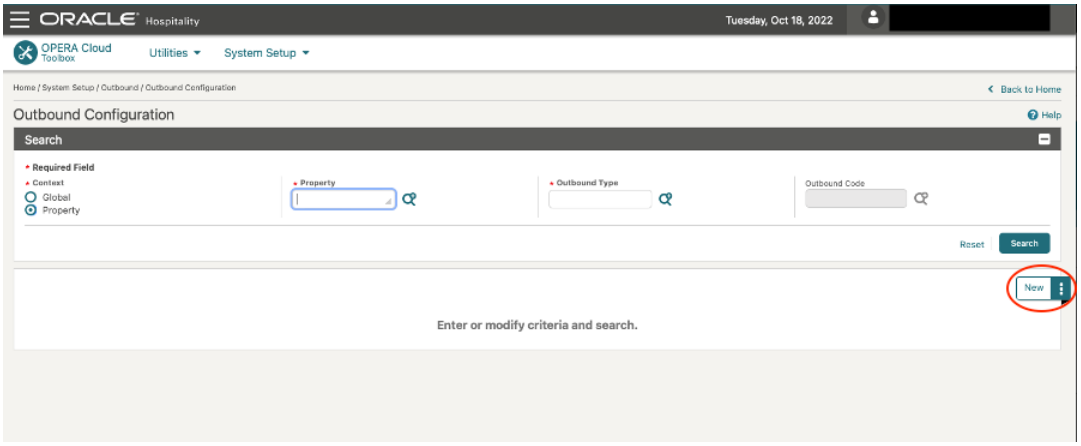
1. Log in to OPERA Cloud and click the **vertical ellipsis** and select **Toolbox**.

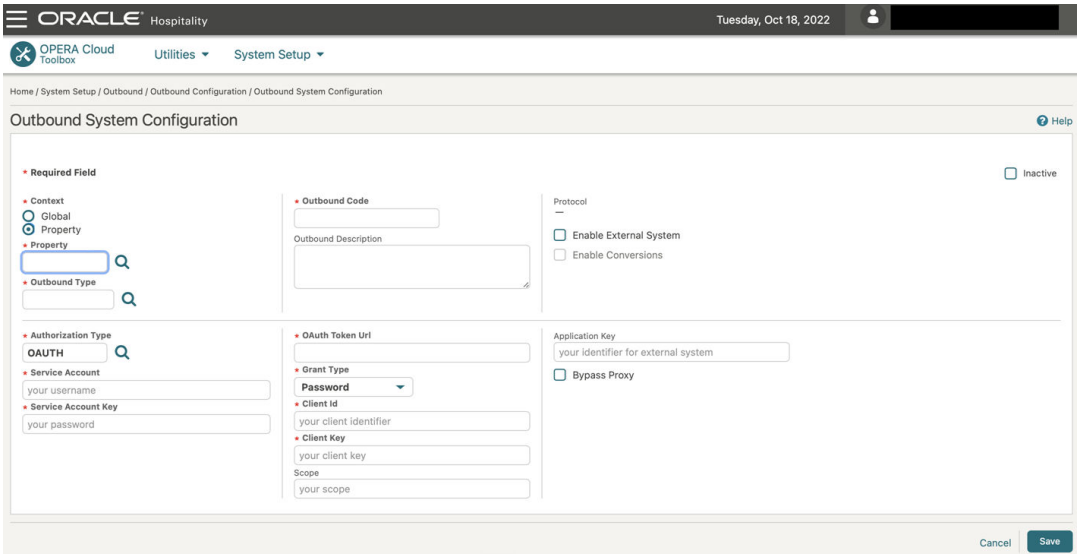


2. Select **System Setup**, select **Outbound**, and then select **Outbound Configuration**.



3. Select the **Property** and then click **New** to set up the new Outbound Configuration.





4. Complete the following fields and click **Save**. For the specific details on each field and how to create an Outbound Configuration, see Managing Outbound System Configuration in the OPERA Cloud Services documentation.

   a. **Context**: Select the **Property** option.

   b. **Property**: Select the property for which this configuration is being set up.

   c. **Outbound Type**: Select **GAMING_CUSTOM** from the list of options.

   d. **Outbound Code**: Provide the unique identifier (for example: ATI_{Property_Name}).

   e. **Outbound Description**: Provide the description (optional).

   f. **Authorization Type**: Select **OAUTH** from the list of options. When you select OAUTH, all related Authorization fields appear.

   g. **Service Account**: Enter your **Client ID**.

   h. **Service Account Key**: Enter your **Client Secret**.

   i. **OAuth Token URL**: Type the URL of the identity provider from where the token will be fetched.

j. **Grant Type**: Select **Password** from the drop down list.

k. **Client Id**: Enter your **Username**.

l. **Client Key**: Enter your **Password**.

m. **Scope**: Enter your **Scope**.

n. **Enable External System**: Select this option.

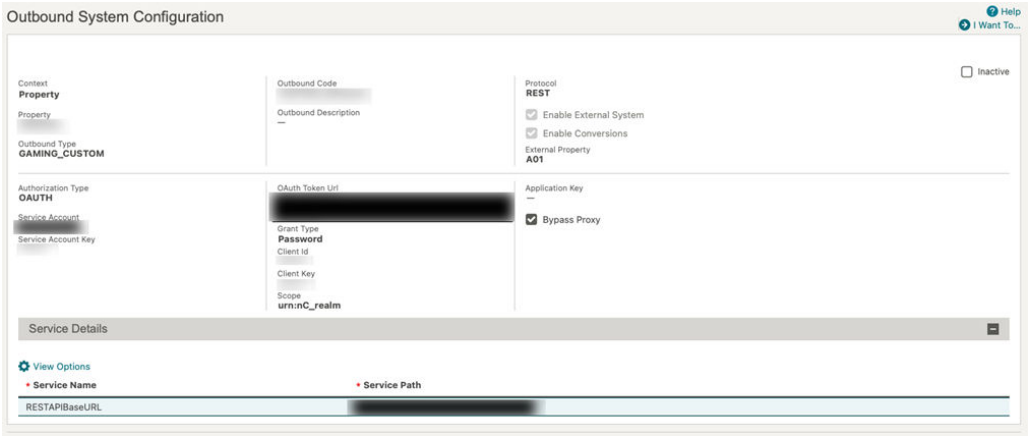
o. **Enable Conversions**: Select this option.

p. **External Property**: Enter the **Site ID** or **Hotel Code** provided by ATI.

q. **Bypass Proxy**: Select this option.

r. **RESTAPIBaseURL**: Enter the base URL of the nConnect server where the APIs are running. This URL can be something like the following: https://<hostname or ip address>:<port>

Once the configuration is saved, the final configuration should look like the page below:



Once the above fields are completed, save the outbound configuration and proceed to Data Value Mappings (DVM). No Custom Headers are required.

DVMs for Aristocrat Oasis

The following Data Value Mappings (DVMs) must be set up for the Aristocrat Oasis system. For details on how to create DVMs within OPERA Cloud, see Data Value Mappings in the OPERA Cloud Services documentation.

The below DVM values are for reference only and can vary by property.

Country Codes

This DVM will convert the Country Code used in OPERA Cloud with the Country Code used in Aristocrat Oasis for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

> **Note**
>
> This list follows the ISO 3166.

- **OPERA Cloud Code**: This is the Country Code used in OPERA Cloud.
- **External Value**: This is the Country Code in Aristocrat Oasis that corresponds to the OPERA Cloud Country Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-4 Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Afghanistan	AF	✓	✓
Albania	AL	✓	✓
Algeria	DZ	✓	✓
American Samoa	AS	✓	✓
Andorra	AD	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Angola	AO		
Anguilla	AI		
Antarctica	AQ		
Antigua and Barbuda	AG		
Argentina	AR		
Armenia	AM		
Aruba	AW		

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Australia	AU		
Austria	AT		
Azerbaijan	AZ		
Bahamas (the)	BS		
Bahrain	BH		
Bangladesh	BD		
Barbados	BB		

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Belarus	BY	✓	✓
Belgium	BE	✓	✓
Belize	BZ	✓	✓
Benin	BJ	✓	✓
Bermuda	BM	✓	✓
Bhutan	BT	✓	✓
Bolivia (Plurinational State of)	BO	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Bonaire, Sint Eustatius and Saba	BQ		
Bosnia and Herzegovina	BA		
Botswana	BW		
Bouvet Island	BV		
Brazil	BR		
British Indian Ocean Territory (the)	IO		
Brunei Darussalam	BN		

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Bulgaria	BG	✓	✓
Burkina Faso	BF	✓	✓
Burundi	BI	✓	✓
Cabo Verde	CV	✓	✓
Cambodia	KH	✓	✓
Cameroon	CM	✓	✓
Canada	CA	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Cayman Islands (the)	KY	✓	✓
Central African Republic (the)	CF	✓	✓
Chad	TD	✓	✓
Chile	CL	✓	✓
China	CN	✓	✓
Christmas Island	CX	✓	✓
Cocos (Keeling) Islands (the)	CC	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Colombia	CO	✓	✓
Comoros (the)	KM	✓	✓
Congo (the Democratic Republic of the)	CD	✓	✓
Congo (the)	CG	✓	✓
Cook Islands (the)	CK	✓	✓
Costa Rica	CR	✓	✓
Croatia	HR	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Cuba	CU	✓	✓
Curaao	CW	✓	✓
Cyprus	CY	✓	✓
Czechia	CZ	✓	✓
Cte d'Ivoire	CI	✓	✓
Denmark	DK	✓	✓
Djibouti	DJ	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Dominica	DM	✓	✓
Dominican Republic (the)	DO	✓	✓
Ecuador	EC	✓	✓
Egypt	EG	✓	✓
El Salvador	SV	✓	✓
Equatorial Guinea	GQ	✓	✓
Eritrea	ER	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Estonia	EE	✓	✓
Eswatini	SZ	✓	✓
Ethiopia	ET	✓	✓
Falkland Islands (the) [Malvinas]	FK	✓	✓
Faroe Islands (the)	FO	✓	✓
Fiji	FJ	✓	✓
Finland	FI	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
France	FR	✓	✓
French Guiana	GF	✓	✓
French Polynesia	PF	✓	✓
French Southern Territories (the)	TF	✓	✓
Gabon	GA	✓	✓
Gambia (the)	GM	✓	✓
Georgia	GE	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Germany	DE	✓	✓
Ghana	GH	✓	✓
Gibraltar	GI	✓	✓
Greece	GR	✓	✓
Greenland	GL	✓	✓
Grenada	GD	✓	✓
Guadeloupe	GP	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Guam	GU	✓	✓
Guatemala	GT	✓	✓
Guernsey	GG	✓	✓
Guinea	GN	✓	✓
Guinea-Bissau	GW	✓	✓
Guyana	GY	✓	✓
Haiti	HT	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Heard Island and McDonald Islands	HM	✓	✓
Holy See (the)	VA	✓	✓
Honduras	HN	✓	✓
Hong Kong	HK	✓	✓
Hungary	HU	✓	✓
Iceland	IS	✓	✓
India	IN	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Indonesia	ID	✓	✓
Iran (Islamic Republic of)	IR	✓	✓
Iraq	IQ	✓	✓
Ireland	IE	✓	✓
Isle of Man	IM	✓	✓
Israel	IL	✓	✓
Italy	IT	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Jamaica	JM	✓	✓
Japan	JP	✓	✓
Jersey	JE	✓	✓
Jordan	JO	✓	✓
Kazakhstan	KZ	✓	✓
Kenya	KE	✓	✓
Kiribati	KI	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Korea (the Democratic People's Republic of)	KP	✓	✓
Korea (the Republic of)	KR	✓	✓
Kuwait	KW	✓	✓
Kyrgyzstan	KG	✓	✓
Lao People's Democratic Republic (the)	LA	✓	✓
Latvia	LV	✓	✓
Lebanon	LB	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Lesotho	LS	✓	✓
Liberia	LR	✓	✓
Libya	LY	✓	✓
Liechtenstein	LI	✓	✓
Lithuania	LT	✓	✓
Luxembourg	LU	✓	✓
Macao	MO	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Madagascar	MG	✓	✓
Malawi	MW	✓	✓
Malaysia	MY	✓	✓
Maldives	MV	✓	✓
Mali	ML	✓	✓
Malta	MT	✓	✓
Marshall Islands (the)	MH	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Martinique	MQ	✓	✓
Mauritania	MR	✓	✓
Mauritius	MU	✓	✓
Mayotte	YT	✓	✓
Mexico	MX	✓	✓
Micronesia (Federated States of)	FM	✓	✓
Moldova (the Republic of)	MD	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Monaco	MC	✓	✓
Mongolia	MN	✓	✓
Montenegro	ME	✓	✓
Montserrat	MS	✓	✓
Morocco	MA	✓	✓
Mozambique	MZ	✓	✓
Myanmar	MM	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Namibia	NA	✓	✓
Nauru	NR	✓	✓
Nepal	NP	✓	✓
Netherlands (the)	NL	✓	✓
New Caledonia	NC	✓	✓
New Zealand	NZ	✓	✓
Nicaragua	NI	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Niger (the)	NE	✓	✓
Nigeria	NG	✓	✓
Niue	NU	✓	✓
Norfolk Island	NF	✓	✓
North Macedonia	MK	✓	✓
Northern Mariana Islands (the)	MP	✓	✓
Norway	NO	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Oman	OM	✓	✓
Pakistan	PK	✓	✓
Palau	PW	✓	✓
Palestine, State of	PS	✓	✓
Panama	PA	✓	✓
Papua New Guinea	PG	✓	✓
Paraguay	PY	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Peru	PE	✓	✓
Philippines (the)	PH	✓	✓
Pitcairn	PN	✓	✓
Poland	PL	✓	✓
Portugal	PT	✓	✓
Puerto Rico	PR	✓	✓
Qatar	QA	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Romania	RO	✓	✓
Russian Federation (the)	RU	✓	✓
Rwanda	RW	✓	✓
Runion	RE	✓	✓
Saint Barthlemy	BL	✓	✓
Saint Helena, Ascension and Tristan da Cunha	SH	✓	✓
Saint Kitts and Nevis	KN	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Saint Lucia	LC	✓	✓
Saint Martin (French part)	MF	✓	✓
Saint Pierre and Miquelon	PM	✓	✓
Saint Vincent and the Grenadines	VC	✓	✓
Samoa	WS	✓	✓
San Marino	SM	✓	✓
Sao Tome and Principe	ST	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Saudi Arabia	SA	✓	✓
Senegal	SN	✓	✓
Serbia	RS	✓	✓
Seychelles	SC	✓	✓
Sierra Leone	SL	✓	✓
Singapore	SG	✓	✓
Sint Maarten (Dutch part)	SX	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Slovakia	SK	✓	✓
Slovenia	SI	✓	✓
Solomon Islands	SB	✓	✓
Somalia	SO	✓	✓
South Africa	ZA	✓	✓
South Georgia and the South Sandwich Islands	GS	✓	✓
South Sudan	SS	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Spain	ES	✓	✓
Sri Lanka	LK	✓	✓
Sudan (the)	SD	✓	✓
Suriname	SR	✓	✓
Svalbard and Jan Mayen	SJ	✓	✓
Sweden	SE	✓	✓
Switzerland	CH	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Syrian Arab Republic (the)	SY	✓	✓
Taiwan (Province of China)	TW	✓	✓
Tajikistan	TJ	✓	✓
Tanzania, the United Republic of	TZ	✓	✓
Thailand	TH	✓	✓
Timor-Leste	TL	✓	✓
Togo	TG	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Tokelau	TK	✓	✓
Tonga	TO	✓	✓
Trinidad and Tobago	TT	✓	✓
Tunisia	TN	✓	✓
Turkey	TM	✓	✓
Turkmenistan	TC	✓	✓
Turks and Caicos Islands (the)	TV	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Tuvalu	TR	✓	✓
Uganda	UG	✓	✓
Ukraine	UA	✓	✓
United Arab Emirates (the)	AE	✓	✓
United Kingdom of Great Britain and Northern Ireland (the)	GB	✓	✓
United States Minor Outlying Islands (the)	UM	✓	✓
United States of America (the)	US	✓	✓

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Uruguay	UY		
Uzbekistan	UZ		
Vanuatu	VU		
Venezuela (Bolivarian Republic of)	VE		
Viet Nam	VN		
Virgin Islands (British)	VG		
Virgin Islands (U.S.)	VI		

Table 7-4 (Cont.) Country Codes

OPERA Cloud Value	External Value	External > OPERA Cloud	OPERA Cloud > External
Wallis and Futuna	WF	✓	✓
Western Sahara*	EH	✓	✓
Yemen	YE	✓	✓
Zambia	ZM	✓	✓
Zimbabwe	ZW	✓	✓
land Islands	AX	✓	✓

Membership Level

This DVM will convert the Membership Levels codes previously created into the Aristocrat Oasis Player Ranking Levels (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Level code that you previously created.
- **External Value**: This is the Player Ranking in Aristocrat Oasis that corresponds to the OPERA Cloud Membership Level code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-5 Membership Level

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
BRONZE	0	✓	✓
DIAMOND	1	✓	✓
PLATINUM	2	✓	✓

Membership Type

This DVM will convert the Membership Type used in OPERA Cloud to the Membership type used within Aristocrat Oasis(and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Type code that you previously created.
- **External Value**: This is the Aristocrat Oasis membership type that corresponds to the OPERA Cloud Membership Type.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-6 Membership Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
PTS	PTS		

Address Type

This DVM will convert the Address Type used in OPERA Cloud with the Address Type used in Aristocrat Oasis for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Address Type that exists in OPERA Cloud.
- **External Value**: This is the Address Type in Aristocrat Oasis that corresponds to the OPERA Cloud Address Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-7 Address Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
HOME	1		
BUSINESS	2		

Table 7-7 (Cont.) Address Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
MAILING	4	✓	✓

Document Type

This DVM will convert the Document Type used in OPERA Cloud with the Identification Type used in Aristocrat Oasis for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Document Type that exists in OPERA Cloud.
- **External Value**: This is the Identification Type in Aristocrat Oasis that corresponds to the OPERA Cloud Document Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-8 Document Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External Cloud
Drivers License	D	✓	✓
SSN Card	N	✓	✓

Table 7-8 (Cont.) Document Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External Cloud
Passport	P	✓	✓
Alien Registration	A	✓	✓
Military ID	M	✓	✓
State ID	S	✓	✓
Voter ID	V	✓	✓
Other	O	✓	✓

Phone Type

This DVM converts the Phone Type used in OPERA Cloud with the Phone Type used in Aristocrat Oasis for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Phone Type that exists in OPERA Cloud.
- **External Value**: This is the Phone Type in Aristocrat Oasis that corresponds to the OPERA Cloud Phone Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Aristocrat Oasis uses the following nomenclature for phone types and e-mail types:

- Phone Type 1 is for Home.
- Phone Type 2 is for Work.
- Phone Type 3 is for Cell.
- E-mail Type 1 is for Home.
- E-mail Type 2 is for Work.

OPERA Cloud uses the Phone Type DVM to translate all profile communication types (home, e-mail, mobile, fax, and so on), which means some logic must exist in the background to match. For example, a Home e-mail type in OPERA Cloud to that same Home e-mail type in Aristocrat Oasis. You are unable to configure OPERA Cloud to translate Oasis type 1 to HOME (phone) and (home) EMAIL at the same time for the inbound messages. Therefore, the Home Email should be configured to translate to '1' on the OPERACloud > External direction and should be configured to translate to 'E_1' on the External > OPERA Cloud directions. The system translates '1' to 'E_1' from the Aristocrat response to do this logic on the OPERA Cloud DVM. This also applies to the Home Phone as well, you need to add a 'P_' prefix for phone communication channel.

Table 7-9 Phone Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External Cloud
HOME PHONE	1		
HOME PHONE	P_1		
MOBILE PHONE	3		

Table 7-9 (Cont.) Phone Type

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External Cloud
MOBILE PHONE	P_3	✓	
HOME EMAIL	1		✓
HOME EMAIL	E_1	✓	
BUSINESS EMAIL	2		✓
BUSINESS EMAIL	E_2	✓	

State Codes

This DVM will convert the State Code used in OPERA Cloud with the State Province Code used in Aristocrat Oasis for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the State Code that exists in OPERA Cloud.
- **External Value**: This is the State Province Code in Aristocrat Oasis that corresponds to the OPERA Cloud State Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.

- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-10 States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
AB	AB		
BC	BC		
MB	MB		
NB	NB		
NL	NL		
NS	NS		

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
NT	NT	✓	✓
NU	NU	✓	✓
ON	ON	✓	✓
PE	PE	✓	✓
QC	QC	✓	✓
SK	SK	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
YT	YT	✓	✓
AK	AK	✓	✓
AL	AL	✓	✓
AR	AR	✓	✓
AZ	AZ	✓	✓
CA	CA	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
CO	CO	✓	✓
CT	CT	✓	✓
DC	DC	✓	✓
DE	DE	✓	✓
FL	FL	✓	✓
GA	GA	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
HI	HI	✓	✓
IA	IA	✓	✓
ID	ID	✓	✓
IL	IL	✓	✓
IN	IN	✓	✓
KS	KS	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
KY	KY	✓	✓
LA	LA	✓	✓
MA	MA	✓	✓
MD	MD	✓	✓
ME	ME	✓	✓
MI	MI	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
MN	MN		
MO	MO		
MS	MS		
MT	MT		
NC	NC		
ND	ND		

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
NE	NE	✓	✓
NH	NH	✓	✓
NJ	NJ	✓	✓
NM	NM	✓	✓
NV	NV	✓	✓
NY	NY	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
OH	OH	✓	✓
OK	OK	✓	✓
OR	OR	✓	✓
PA	PA	✓	✓
RI	RI	✓	✓
SC	SC	✓	✓

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
SD	SD		
TN	TN		
TX	TX		
UT	UT		
VA	VA		
VT	VT		

Table 7-10 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
WA	WA		
WI	WI		
WV	WV		
WY	WY		

Business Events

In the context of Gaming Integration with Aristocrat Oasis, business events are used to send both profile updates to Aristocrat Oasis.

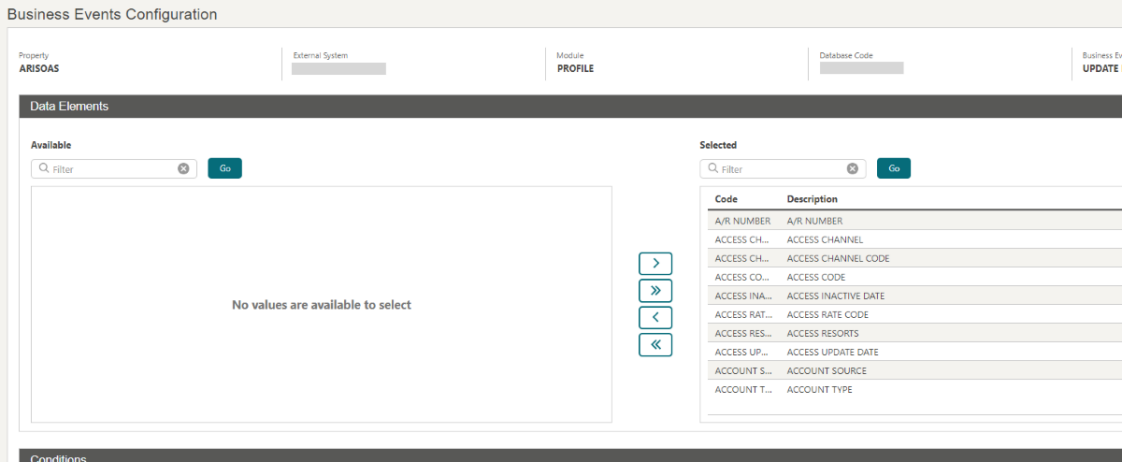
Please configure the below business events in OPERA Cloud in order to have these operations working. For details on configuring business events, refer to Configuring Business Events in the OPERA Cloud services documentation.

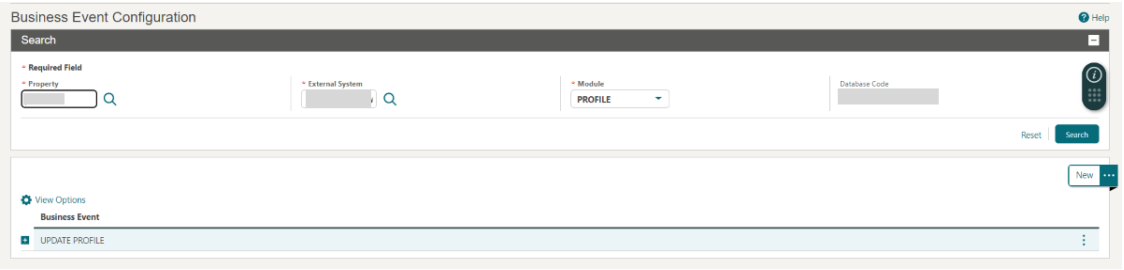
Profiles

Use the below details to create business events for OPERA Cloud Profiles.

- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select PROFILE.
- **Business Event**: Select UPDATE PROFILE.

- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS'
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)





IGT

The following operations are supported as part of this gaming integration product. Only the operations listed below are currently supported.

Table 7-11 Operations

Operation	How Does it Work?	Direction
Player Enrollment	• OPERA Cloud sends the name and address information for a new player profile or an existing OPERA Cloud profile to IGT. • IGT creates a player profile and responds to OPERA Cloud with the player ID.	OPERA Cloud –> IGT-Acres

Table 7-11 (Cont.) Operations

Operation	How Does it Work?	Direction
Profile Lookup (by first and last name and membership ID)	• OPERA Cloud users can search IGT-Acres for profile(s) based on Player ID or Last and/or First Name. • IGT-Acres returns a list of profiles matching the criteria requested, which the OPERA Cloud user views on-screen.	OPERA Cloud –> IGT-Acres
Profile Fetch (Profile Download)	• The OPERA Cloud user selects a profile from a list provided during the Lookup operation. • IGT-Acres returns the patron's name, addresses, birth date, and email address; OPERA Cloud will either insert a new profile record or merge the data into an existing record.	OPERA Cloud –> IGT-Acres
Profile Update	• OPERA Cloud notifies IGT of any changes made to the name and/or address, telephone, and email on any OPERA Cloud profile that has an associated IGT player ID.	OPERA Cloud –> IGT-Acres
Reservation Notification	• When a reservation is created/changed or cancelled, OPERA Cloud sends a notification message (including reservation status) to IGT for the associated player.	OPERA Cloud –> IGT-Acres

Table 7-11 (Cont.) Operations

Operation	How Does it Work?	Direction
Comp Postings (including reverse)	• OPERA Cloud sends a comp request to IGT-Acres when a charge is posted to a comp window (101-108). A comp posting is any charge that was moved to a comp window, regardless of whether it was originally posted manually, through the End of Day sequence, or by POS interface to OPERA Cloud. • To void a comp transaction, you must move back to a cash window (1-8). A Void is then sent to IGT-Acres. • IGT-Acres will either approve or decline the comp posting. Approval status appears on the OPERA Cloud Comp Journal screen. • OPERA Cloud sends comp postings to IGT-Acres in monetary value / amount only. **Note** Do not move transactions between comp windows (101-108).	OPERA Cloud –> IGT-Acres

Table 7-11 (Cont.) Operations

Operation	How Does it Work?	Direction
Player Snapshot/ PTS Inquiry (Player Statistics) (view only)	• OPERA Cloud users can view basic, real-time balances and account information by sending a Player Statistics request from OPERA Cloud to IGT. This information is never stored in OPERA Cloud. • IGT responds with values that appear on the screen with OPERA Cloud. For example, comp dollar or points balance. • The scope of data sent is not configured in OPERA Cloud.	OPERA Cloud –> IGT-Acres
Player Promotions/Offers (view only)	• Promotion/Offer codes must be created for both OPERA Cloud and IGT. • OPERA Cloud users can click **Fetch Offer** from the Look to Book screen to view promotions/offers available for the player.	OPERA Cloud –> IGT-Acres
Comp Redemption (payment for window 1-8)	• Ability in OPERA Cloud to obtain a players earned bucket values from the gaming system in order to use as a credit/payment towards their hotel folio balance (cash windows 1-8) • OPERA Cloud sends comp redemption to IGT Acres in monetary value / amount only.	OPERA Cloud –> IGT-Acres

The following Bucket Types are supported in this product:

Table 7-12 Bucket Types

Folio Numbers	Bucket Type
101	Other
102	Point
103	Primary Comp
104	Rewards
105	Secondary Comp
106	Non-Gaming
107	Coupon
108	Promotional

Required Information

The integration with your IGT system is done using ADI. For OPERA Cloud to connect to ADI, the following information is required:

- ADI CRM HTTP server endpoints

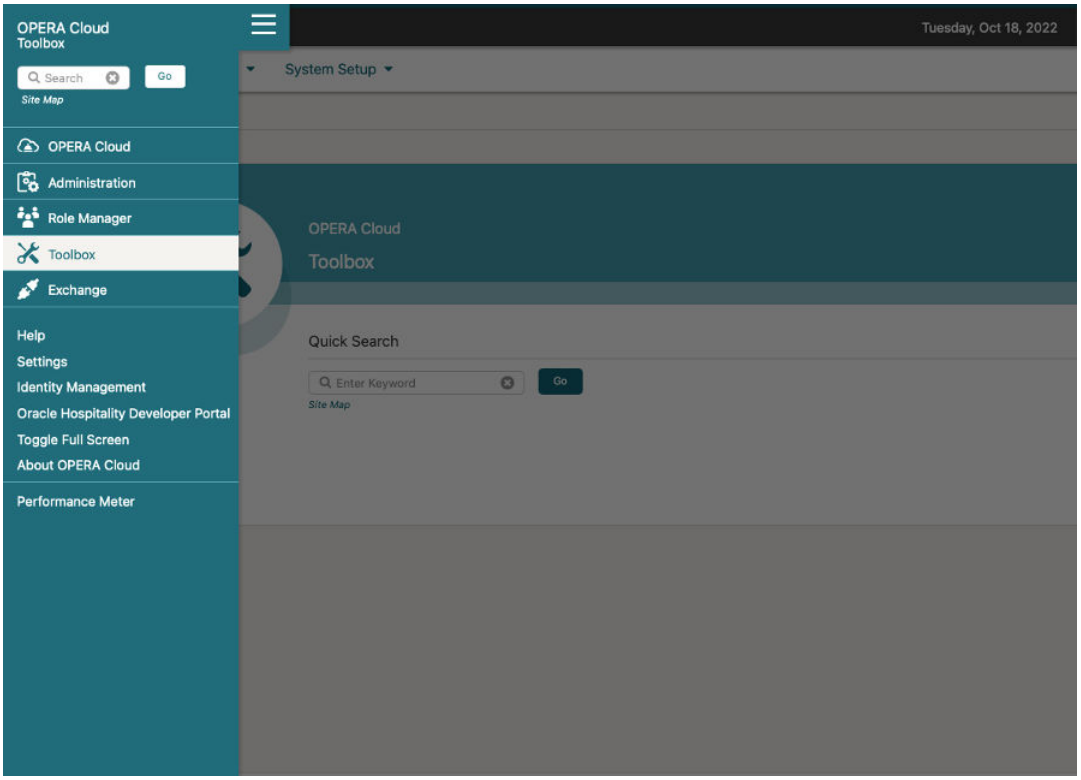
  If your postings run on a different server or port, the following details are also required
- ORACLEUSER: This is a generic user created to perform postings.
- Generic user id and authorizer for redemption
- Site ID for CRM operations
- Site ID for Comp Posting operations

OPERA Cloud Outbound Configuration for IGT

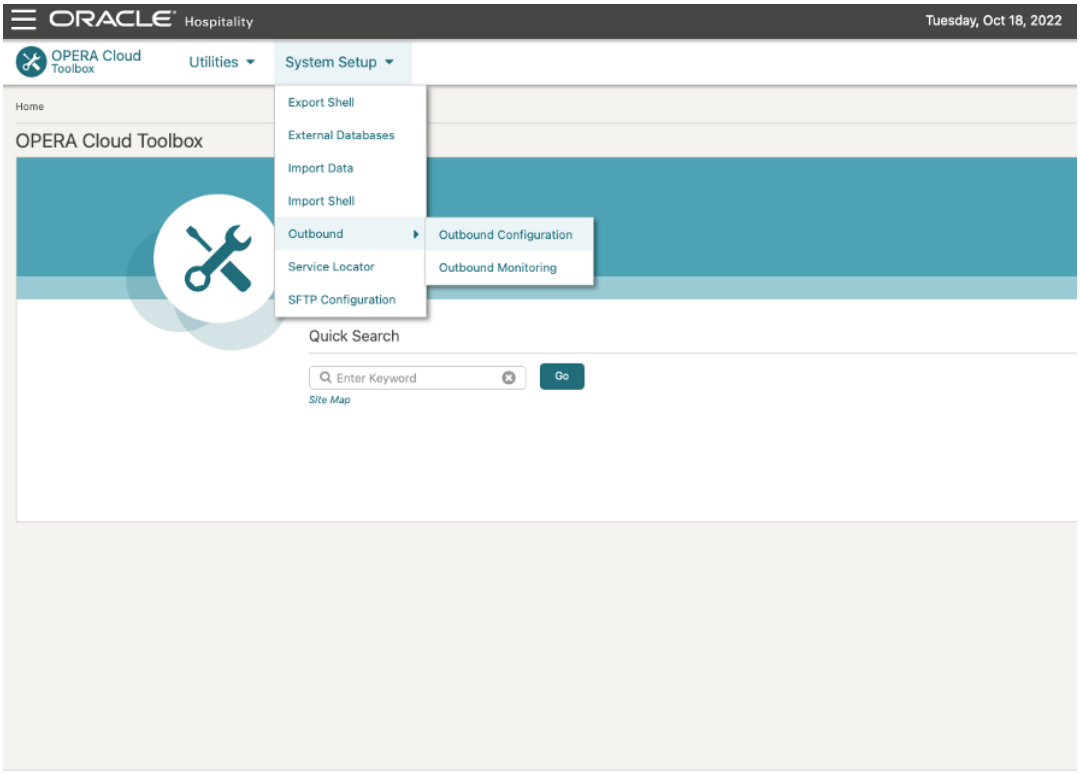
A new outbound system configuration is required for OPERA Cloud to connect to IGT.

For additional details on creating an outbound configuration, refer to Configuring Outbound Systems in the OPERA Cloud Services documentation.

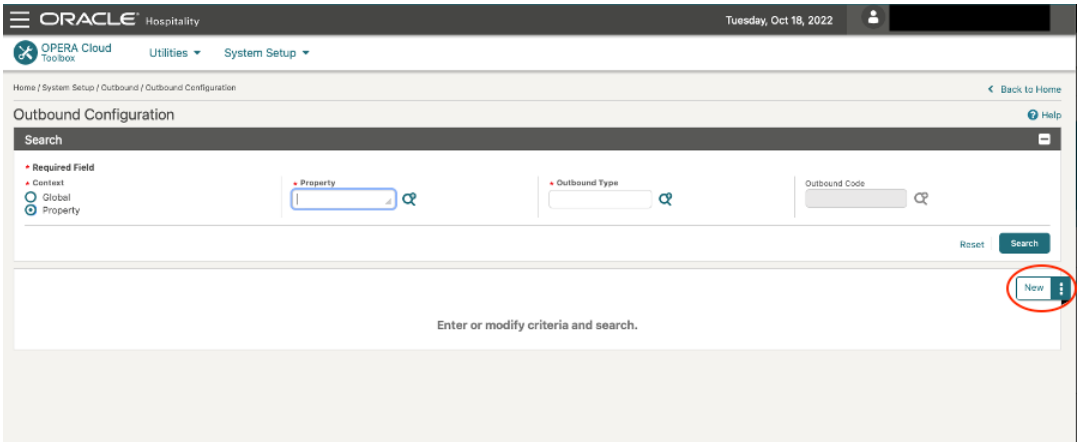
1. Log in to OPERA Cloud and click the **vertical ellipsis** and select **Toolbox**.

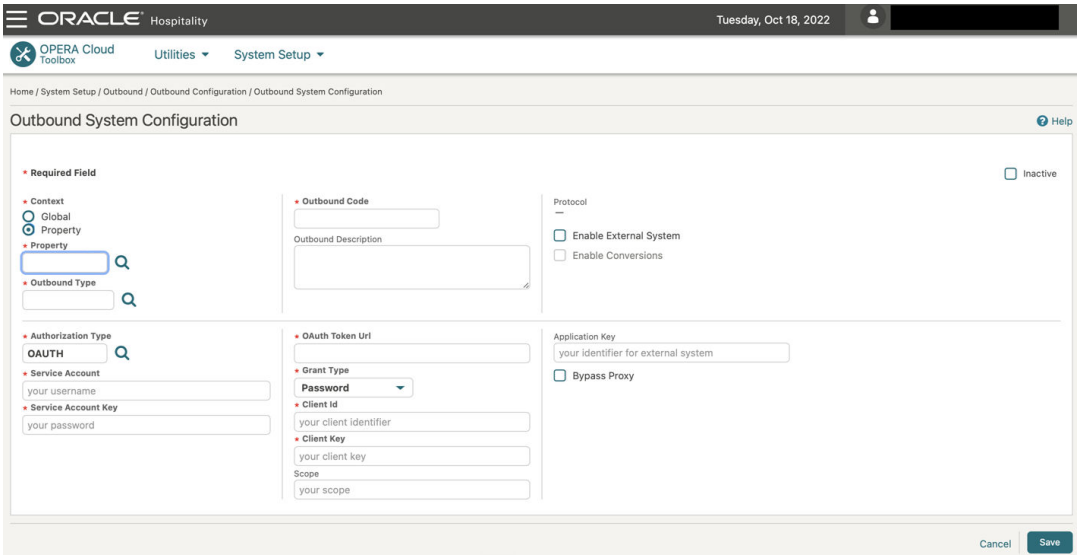


2. Select **System Setup**, select **Outbound**, and then select **Outbound Configuration**.



3. Select the **Property** and then click **New** to set up the new Outbound Configuration.





4. Complete the following fields and click **Save**. For the specific details on each field and how to create an Outbound Configuration, see Managing Outbound System Configuration in the OPERA Cloud Services documentation.

   a. **Context**: Select the **Property** option.

   b. **Property**: Select the property for which this configuration is being set up.

   c. **Outbound Type**: Select **GAMING_CUSTOM** from the list of options.

   d. **Outbound Code**: Provide the unique identifier (for example: IGT_{Property_Name}).

   e. **Outbound Description**: Provide the description (optional).

   f. **Authorization Type**: Select **NONE** from the list of options. By selecting this option, all other Authorization related fields no longer appear.

   g. **Application Key**: Leave this field blank.

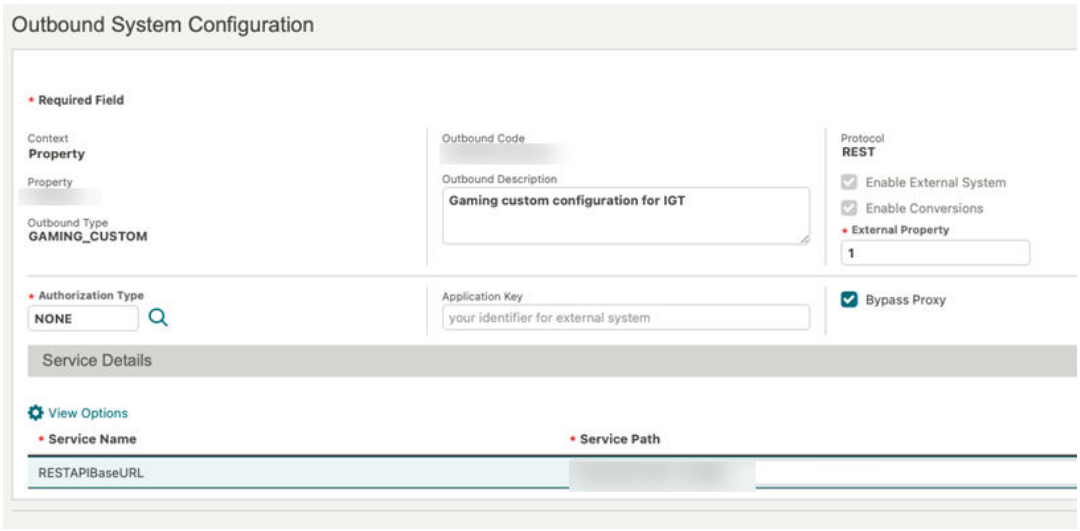
   h. **Enable External System**: Select this option.

   i. **Enable Conversions**: Select this option.

   j. **External Property**: Enter the **Site ID** provided by IGT.

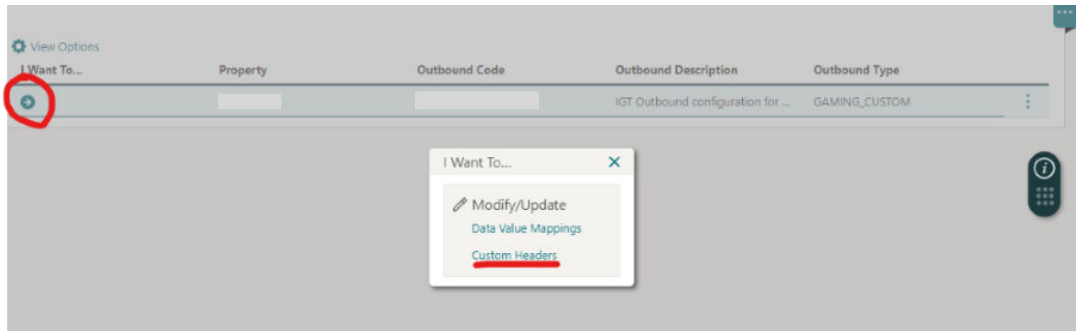
   k. **Bypass Proxy**: Select this option.

   Once the configuration is saved, the final configuration is shown below:



5. Add the following Custom Headers for this outbound configuration. Click the **I Want To...** from the search results row where you want to define Custom Headers.

   Once the configuration is saved, the final configuration is shown below:



Header Name	Header Value
CompPostingURL	This is the URL that is going to be used for the Comp Posting operations.
HotelID	The Site ID from IGT.
UserID	The UserID used in CRM operations.
CompPostingUserID	The MicrosUserId.
CompRedemptionUserID	The user id for Comp redemption. User should be mapped in IGTAuthorizers DVM.

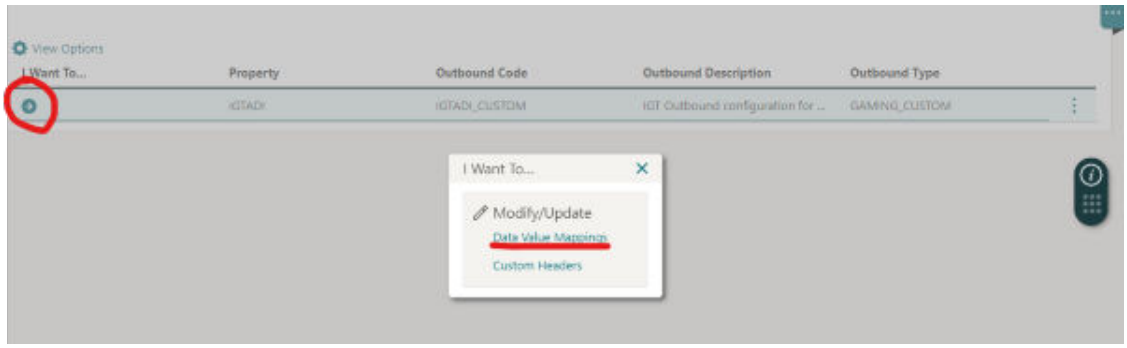
Once the above fields are completed, save the outbound configuration and proceed to Data Value Mappings (DVM).

DVMs for IGT

The following Data Value Mappings (DVMs) must be set up for the IGT system to correctly integrate with OPERA Cloud. For details on how to create DVMs within OPERA Cloud, see Data Value Mappings in the OPERA Cloud Services documentation.

The below DVM values are for reference only and can vary by property.

Click **I Want To . . .** and select **Data Value Mapping** to edit the Data Value Mappings accordingly.



Country Codes

This DVM will convert the Country Code used in OPERA Cloud with the Country Code used in IGT for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

> **Note**
>
> This list follows the ISO 3166.

- **OPERA Cloud Code**: This is the Country Code used in OPERA Cloud.
- **External Value**: This is the Country Code in IGT that corresponds to the OPERA Cloud Country Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-13 Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Afghanistan	4	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Albania	8	✓	✓
Algeria	12	✓	✓
American Samoa	16	✓	✓
Andorra	20	✓	✓
Angola	24	✓	✓
Anguilla	660	✓	✓
Antarctica	10	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Antigua and Barbuda	28	✓	✓
Argentina	32	✓	✓
Armenia	51	✓	✓
Aruba	533	✓	✓
Australia	36	✓	✓
Austria	40	✓	✓
Azerbaijan	31	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Bahamas (the)	44	✓	✓
Bahrain	48	✓	✓
Bangladesh	50	✓	✓
Barbados	52	✓	✓
Belarus	112	✓	✓
Belgium	56	✓	✓
Belize	84	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Benin	204	✓	✓
Bermuda	60	✓	✓
Bhutan	64	✓	✓
Bolivia (Plurinational State of)	68	✓	✓
Bonaire, Sint Eustatius and Saba	535	✓	✓
Bosnia and Herzegovina	70	✓	✓
Botswana	72	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Bouvet Island	74	✓	✓
Brazil	76	✓	✓
British Indian Ocean Territory (the)	86	✓	✓
Brunei Darussalam	96	✓	✓
Bulgaria	100	✓	✓
Burkina Faso	854	✓	✓
Burundi	108	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Cabo Verde	132	✓	✓
Cambodia	116	✓	✓
Cameroon	120	✓	✓
Canada	124	✓	✓
Cayman Islands (the)	136	✓	✓
Central African Republic (the)	140	✓	✓
Chad	148	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Chile	152	✓	✓
China	156	✓	✓
Christmas Island	162	✓	✓
Cocos (Keeling) Islands (the)	166	✓	✓
Colombia	170	✓	✓
Comoros (the)	174	✓	✓
Congo (the Democratic Republic of the)	180	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Congo (the)	178	✓	✓
Cook Islands (the)	184	✓	✓
Costa Rica	188	✓	✓
Croatia	191	✓	✓
Cuba	192	✓	✓
Curaao	531	✓	✓
Cyprus	196	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Czechia	203	✓	✓
Cte d'Ivoire	384	✓	✓
Denmark	208	✓	✓
Djibouti	262	✓	✓
Dominica	212	✓	✓
Dominican Republic (the)	214	✓	✓
Ecuador	218	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Egypt	818	✓	✓
El Salvador	222	✓	✓
Equatorial Guinea	226	✓	✓
Eritrea	232	✓	✓
Estonia	233	✓	✓
Eswatini	748	✓	✓
Ethiopia	231	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Falkland Islands (the) [Malvinas]	238	✓	✓
Faroe Islands (the)	234	✓	✓
Fiji	242	✓	✓
Finland	246	✓	✓
France	250	✓	✓
French Guiana	254	✓	✓
French Polynesia	258	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
French Southern Territories (the)	260	✓	✓
Gabon	266	✓	✓
Gambia (the)	270	✓	✓
Georgia	268	✓	✓
Germany	276	✓	✓
Ghana	288	✓	✓
Gibraltar	292	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Greece	300	✓	✓
Greenland	304	✓	✓
Grenada	308	✓	✓
Guadeloupe	312	✓	✓
Guam	316	✓	✓
Guatemala	320	✓	✓
Guernsey	831	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Guinea	324	✓	✓
Guinea-Bissau	624	✓	✓
Guyana	328	✓	✓
Haiti	332	✓	✓
Heard Island and McDonald Islands	334	✓	✓
Holy See (the)	336	✓	✓
Honduras	340	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Hong Kong	344	✓	✓
Hungary	348	✓	✓
Iceland	352	✓	✓
India	356	✓	✓
Indonesia	360	✓	✓
Iran (Islamic Republic of)	364	✓	✓
Iraq	368	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Ireland	372	✓	✓
Isle of Man	833	✓	✓
Israel	376	✓	✓
Italy	380	✓	✓
Jamaica	388	✓	✓
Japan	392	✓	✓
Jersey	832	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Jordan	400	✓	✓
Kazakhstan	398	✓	✓
Kenya	404	✓	✓
Kiribati	296	✓	✓
Korea (the Democratic People's Republic of)	408	✓	✓
Korea (the Republic of)	410	✓	✓
Kuwait	414	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Kyrgyzstan	417	✓	✓
Lao People's Democratic Republic (the)	418	✓	✓
Latvia	428	✓	✓
Lebanon	422	✓	✓
Lesotho	426	✓	✓
Liberia	430	✓	✓
Libya	434	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Liechtenstein	438	✓	✓
Lithuania	440	✓	✓
Luxembourg	442	✓	✓
Macao	446	✓	✓
Madagascar	450	✓	✓
Malawi	454	✓	✓
Malaysia	458	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Maldives	462	✓	✓
Mali	466	✓	✓
Malta	470	✓	✓
Marshall Islands (the)	584	✓	✓
Martinique	474	✓	✓
Mauritania	478	✓	✓
Mauritius	480	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Mayotte	175	✓	✓
Mexico	484	✓	✓
Micronesia (Federated States of)	583	✓	✓
Moldova (the Republic of)	498	✓	✓
Monaco	492	✓	✓
Mongolia	496	✓	✓
Montenegro	499	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Montserrat	500	✓	✓
Morocco	504	✓	✓
Mozambique	508	✓	✓
Myanmar	104	✓	✓
Namibia	516	✓	✓
Nauru	520	✓	✓
Nepal	524	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Netherlands (the)	528	✓	✓
New Caledonia	540	✓	✓
New Zealand	554	✓	✓
Nicaragua	558	✓	✓
Niger (the)	562	✓	✓
Nigeria	566	✓	✓
Niue	570	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Norfolk Island	574	✓	✓
North Macedonia	807	✓	✓
Northern Mariana Islands (the)	580	✓	✓
Norway	578	✓	✓
Oman	512	✓	✓
Pakistan	586	✓	✓
Palau	585	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Palestine, State of	275	✓	✓
Panama	591	✓	✓
Papua New Guinea	598	✓	✓
Paraguay	600	✓	✓
Peru	604	✓	✓
Philippines (the)	608	✓	✓
Pitcairn	612	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Poland	616	✓	✓
Portugal	620	✓	✓
Puerto Rico	630	✓	✓
Qatar	634	✓	✓
Romania	642	✓	✓
Russian Federation (the)	643	✓	✓
Rwanda	646	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Runion	638	✓	✓
Saint Barthlemy	652	✓	✓
Saint Helena, Ascension and Tristan da Cunha	654	✓	✓
Saint Kitts and Nevis	659	✓	✓
Saint Lucia	662	✓	✓
Saint Martin (French part)	663	✓	✓
Saint Pierre and Miquelon	666	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Saint Vincent and the Grenadines	670	✓	✓
Samoa	882	✓	✓
San Marino	674	✓	✓
Sao Tome and Principe	678	✓	✓
Saudi Arabia	682	✓	✓
Senegal	686	✓	✓
Serbia	688	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Seychelles	690	✓	✓
Sierra Leone	694	✓	✓
Singapore	702	✓	✓
Sint Maarten (Dutch part)	534	✓	✓
Slovakia	703	✓	✓
Slovenia	705	✓	✓
Solomon Islands	90	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Somalia	706	✓	✓
South Africa	710	✓	✓
South Georgia and the South Sandwich Islands	239	✓	✓
South Sudan	728	✓	✓
Spain	724	✓	✓
Sri Lanka	144	✓	✓
Sudan (the)	729	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Suriname	740	✓	✓
Svalbard and Jan Mayen	744	✓	✓
Sweden	752	✓	✓
Switzerland	756	✓	✓
Syrian Arab Republic (the)	760	✓	✓
Taiwan (Province of China)	158	✓	✓
Tajikistan	762	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Tanzania, the United Republic of	834	✓	✓
Thailand	764	✓	✓
Timor-Leste	626	✓	✓
Togo	768	✓	✓
Tokelau	772	✓	✓
Tonga	776	✓	✓
Trinidad and Tobago	780	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Tunisia	788	✓	✓
Turkey	792	✓	✓
Turkmenistan	795	✓	✓
Turks and Caicos Islands (the)	796	✓	✓
Tuvalu	798	✓	✓
Uganda	800	✓	✓
Ukraine	804	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
United Arab Emirates (the)	784	✓	✓
United Kingdom of Great Britain and Northern Ireland (the)	826	✓	✓
United States Minor Outlying Islands (the)	581	✓	✓
United States of America (the)	840	✓	✓
Uruguay	858	✓	✓
Uzbekistan	860	✓	✓
Vanuatu	548	✓	✓

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Venezuela (Bolivarian Republic of)	862		
Viet Nam	704		
Virgin Islands (British)	92		
Virgin Islands (U.S.)	850		
Wallis and Futuna	876		
Western Sahara*	732		
Yemen	887		

Table 7-13 (Cont.) Country Codes

OPERA Cloud Value	External Code (aka IGT)	External > OPERA Cloud	OPERA Cloud > External
Zambia	894	✓	✓
Zimbabwe	716	✓	✓
land Islands	248	✓	✓

Nationality Code

This DVM will convert the Nationality identification code used in OPERA Cloud to the numeric code used within IGT (and vice-versa).

The values are just for illustration purposes and not exhaustive. To fill in this DVM you need the following:

- **OPERA Cloud Code**: These are the nationalities configured in OPERA Cloud.
- **External Value**: These are the IGT nationality numeric IDs that correspond to the OPERA Cloud nationalities.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-14 Nationality Code

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External
CA	124		
AS	16		
AD	20		
AU	36		
JP	392		
AF	4		
NL	528		

Table 7-14 (Cont.) Nationality Code

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External
PH	608	✓	✓
AI	660	✓	✓
GB	826	✓	✓
US	840	✓	✓

Membership Level

This DVM will convert the Membership Levels codes previously created into the IGT Ranking Levels (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Level code that you previously created.
- **External Value**: This is the Ranking Code in IGT that corresponds to the OPERA Cloud Membership Level code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-15 Membership Level

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External
BRONZE	1		
DIAMOND	2		
PLATINUM	3		

Membership Type

This DVM will convert the Membership Type codes used in OPERA Cloud Membership Types into IGT codes (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Type code that you previously created.
- **External Code**: This is the IGT Membership Type code that corresponds to the OPERA Cloud Membership Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-16 Membership Type

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External
PTS	PTS		

Address Type

This DVM will convert the Address Type used in OPERA Cloud with the Location used in IGT for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Address Type that exists in OPERA Cloud.
- **External Value**: This is the Location in IGT that corresponds to the OPERA Cloud Address Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-17 Address Type

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External
HOME	Home		
WORK	Work		

Document Type

This DVM will convert the Document Type used in OPERA Cloud with the Identification Type used in IGT for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Document Type that exists in OPERA Cloud.
- **External Value**: This is the Identification Type in IGT that corresponds to the OPERA Cloud Document Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-18 Document Type

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External Cloud
DL	Drivers License	✓	✓
SC	SSN	✓	✓

Phone Type

This DVM converts the Phone Type used in OPERA Cloud with the Phone Location used in IGT for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Phone Type that exists in OPERA Cloud.
- **External Value**: This is the Phone Location in IGT that corresponds to the OPERA Phone Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-19 Phone Type

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External Cloud
HOME	Home		
MOBILE	Mobile		
EMAIL	Main Email		
BUSINESS	Business		

Transaction Codes

This DVM converts the Transaction Codes used in OPERA Cloud with the Comp Type Reference Code used in IGT for messages being sent from OPERA Cloud (mainly for the Comp Posting operation).

Table 7-20 Comp Type Reference Codes

Comp Name	Comp Type Code
Buffet Comp	BUF
Dollar Comp	DOL
Penny Comp_Auto	PEN
Gift Comp	GIF
Room Comp	ROM

The values in the table below are just for illustration purposes. All transactions (including generates transactions) comped with PTS must be included. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Transaction Code that exists in OPERA Cloud.
- **External Value**: This is the Comp Type Reference Code in IGT that corresponds to the OPERA Cloud Transaction code.
- **External > OPERA Cloud**: Deselect this option as inbound messages are not translated in OPERA Cloud for Transaction Codes.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA10001.

Table 7-21 Transaction Codes

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External Cloud
10001	ROM		
10002	DOL		
10009	DOL		
100123	BUF		
102511	DOL		

Table 7-21 (Cont.) Transaction Codes

OPERA Cloud Code	External Code	External > OPERA Cloud	OPERA Cloud > External Cloud
55904	PEN	✓	✓
99502	GIF	✓	✓

State Codes

This DVM will convert the State Code used in OPERA Cloud with the State Province Code used in IGT for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the State Code that exists in OPERA Cloud.
- **External Value**: This is the State Province Code in IGT that corresponds to the OPERA Cloud State Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-22 States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
AB	AB	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
BC	BC	✓	✓
MB	MB	✓	✓
NB	NB	✓	✓
NL	NL	✓	✓
NS	NS	✓	✓
NT	NT	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
NU	NU	✓	✓
ON	ON	✓	✓
PE	PE	✓	✓
QC	QC	✓	✓
SK	SK	✓	✓
YT	YT	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
AK	AK	✓	✓
AL	AL	✓	✓
AR	AR	✓	✓
AZ	AZ	✓	✓
CA	CA	✓	✓
CO	CO	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
CT	CT		
DC	DC		
DE	DE		
FL	FL		
GA	GA		
HI	HI		

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
IA	IA		
ID	ID		
IL	IL		
IN	IN		
KS	KS		
KY	KY		

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
LA	LA		
MA	MA		
MD	MD		
ME	ME		
MI	MI		
MN	MN		

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
MO	MO	✓	✓
MS	MS	✓	✓
MT	MT	✓	✓
NC	NC	✓	✓
ND	ND	✓	✓
NE	NE	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
NH	NH	✓	✓
NJ	NJ	✓	✓
NM	NM	✓	✓
NV	NV	✓	✓
NY	NY	✓	✓
OH	OH	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
OK	OK	✓	✓
OR	OR	✓	✓
PA	PA	✓	✓
RI	RI	✓	✓
SC	SC	✓	✓
SD	SD	✓	✓

Table 7-22 (Cont.) States Codes

OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
TN	TN	✓	✓
TX	TX	✓	✓
UT	UT	✓	✓
VA	VA	✓	✓
VT	VT	✓	✓
WA	WA	✓	✓

Table 7-22 (Cont.) States Codes

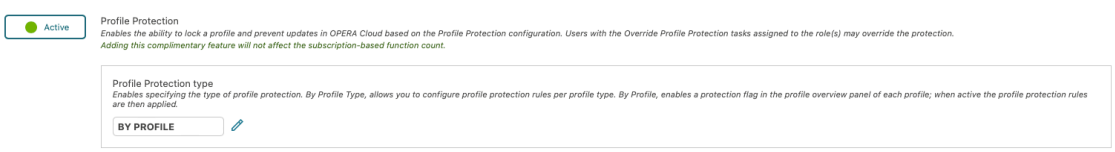
OPERA Cloud Code	External Value	External > OPERA Cloud	OPERA Cloud > External
WI	WI	✓	✓
WV	WV	✓	✓
WY	WY	✓	✓

Credit Account

The information regarding Player Credit Account is received from IGT to indicate if the guest has a credit account in IGT or not. If the profile has a credit account, OPERA user should not be able to change it using OPERA Cloud. To ensure that credit accounts are not changed, it is necessary to disable the **Override Profile Protection** option in the **Roles**. The below details can be used to deactivate it.

OPERA Cloud Control Profile Protection

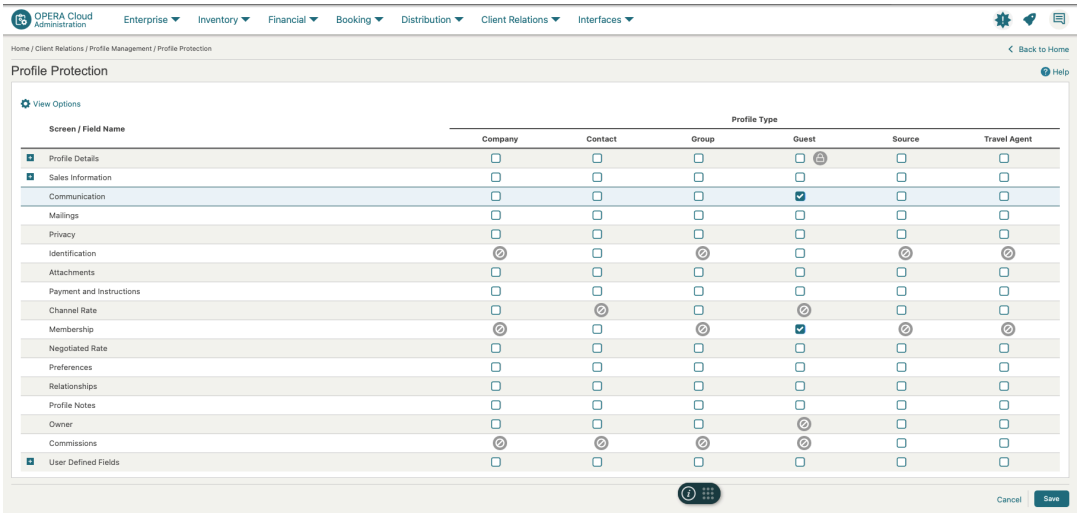
From the **OPERA Cloud Administration** menu, select **Enterprise** and then select **OPERA Controls** to activate the **Profile Protection** function, under the **Group Profile**, and set it with**BY PROFILE**:



OPERA Cloud Profile Protection Rules

1. From the **OPERA Cloud Administration** menu , select **Client Relations**, select **Profile Management**, and then select **Profile Protection** to set the protection rules.

2. Search for IGT property and then click **Edit**.
3. Select the **Profile Type** as "Guest" and then select the **Screen** or **Field Name** that needs to be protected:

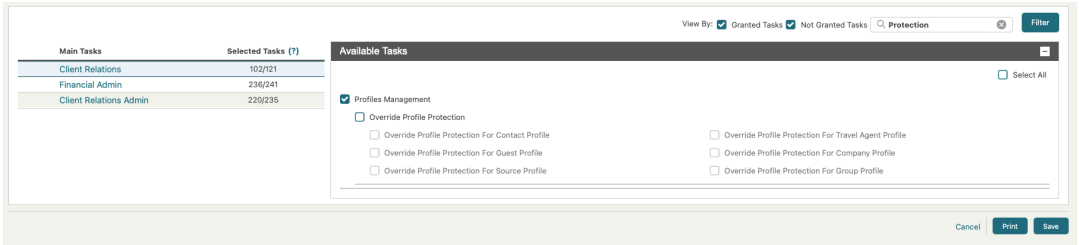


4. Click **Save** to save the changes.

OPERA Cloud Role Manager

1. From OPERA Cloud**Role Manager**, select **Manage Chain Roles**.
2. Enter search criteria for **Role ALLTask**, then click **Search**.
3. Select the role, then click the vertical ellipsis **Actions** menu and select **Edit**.

4. Filter by Protection and disable the **Override Profile Protection** option.



5. Click **Save** to save the changes.

Business Events

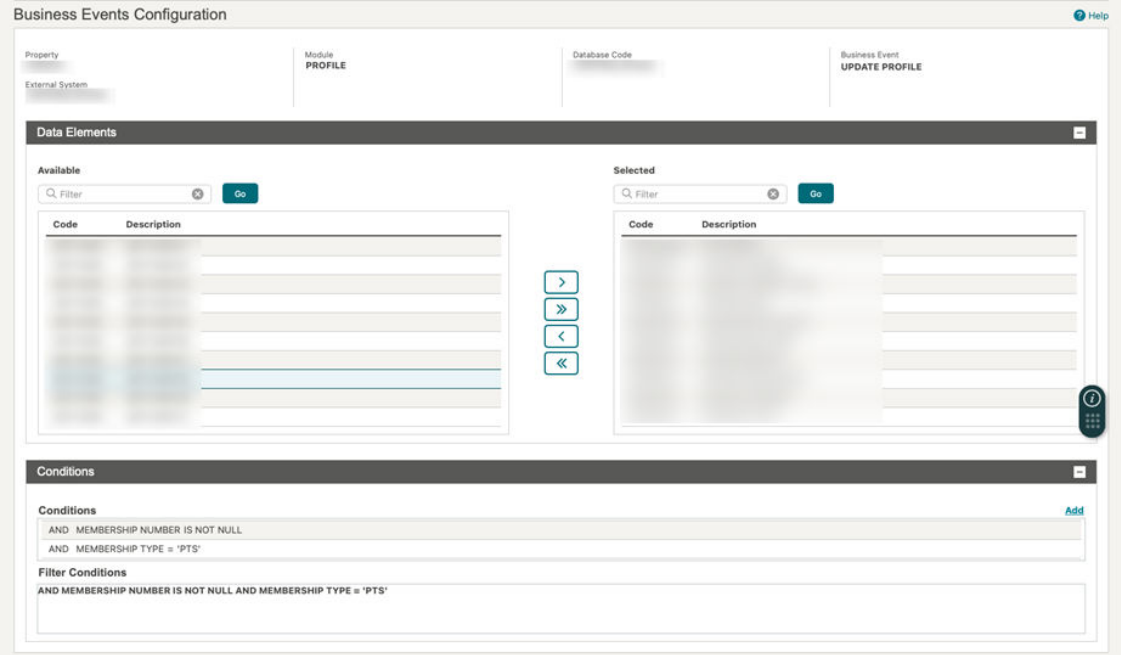
In the context of Gaming Integration with IGT, business events are used to send both profile updates and reservation notifications to IGT.

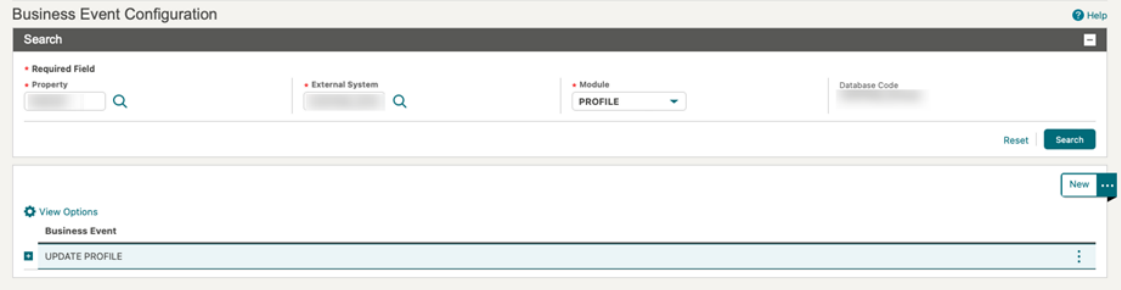
For these operations to work, you must configure the below business events in OPERA Cloud. For details on configuring business events, refer to Configuring Business Events in the OPERA Cloud services documentation.

Profiles

Use the below details to create business events for OPERA Cloud Profiles.

- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select PROFILE.
- **Business Event**: Select UPDATE PROFILE.
- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS'
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)





Reservations

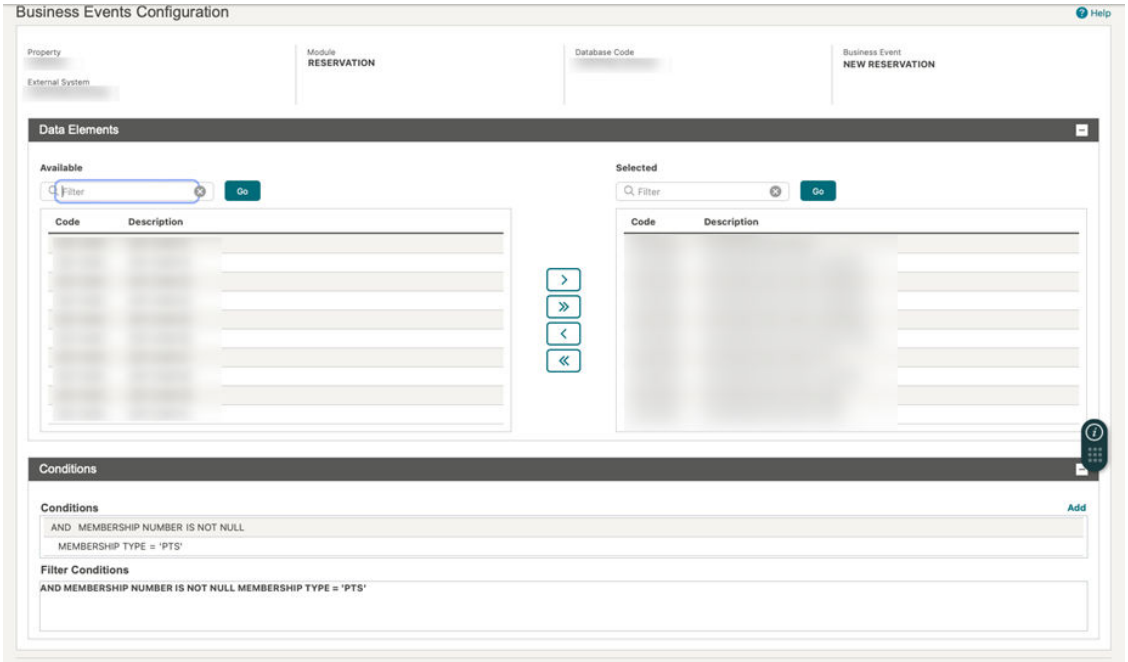
Shared Reservations

IGT supports shared reservations. Shared reservations can be used when you have two or more reservations occupying the same room. In order to use it, the following OPERA Control must be activated on OPERA Cloud Administration:

- OPERA Reservations
  - Function "Shares" active.

Use the below details to create business events for OPERA Cloud Reservations.

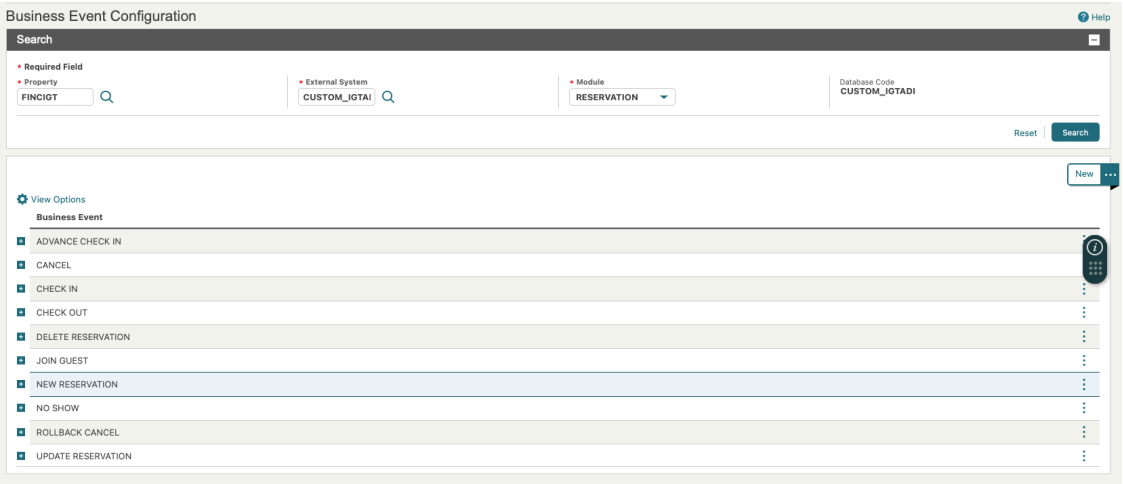
- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select RESERVATION.
- **Business Event**: Select NEW RESERVATION.
- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS'
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)



Repeat the above steps to create business events for the following Reservation Modules:

- ADVANCE CHECK IN
- CANCEL

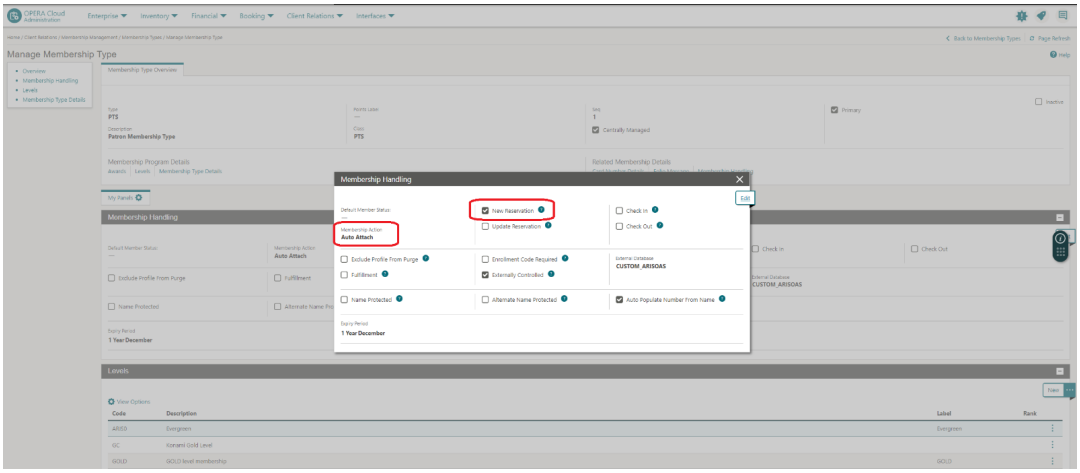
- CHECK IN
- CHECK OUT
- NEW RESERVATION
- NO SHOW
- ROLLBACK CANCEL
- UPDATE RESERVATION
- JOIN GUEST
- SEPARATE GUEST FROM SHARE



Membership Number automatically assigned to Reservations
For the updates of a new reservation to be integrated, the membership number of the profile should be attached to the reservation

For automatic update of membership number:

1. From the **Administration** menu, select **Client Relations**, **Membership Management**, and then **Membership Types**.
2. Search for **Membership Type** as ‘PTS’ and click **Search**.
3. Select the membership type and click the vertical ellipses **Actions** menu and select **Edit**.
4. Click **Membership Handling**.
5. Click **Edit** and complete the following:
6. Select the Membership Action as **Auto Attach** for attaching memberships to a reservation:
7. Next select the lifecycle of the reservation when you want the membership action to be taken:
    a. **New Reservation**: Select if the Membership Action should be taken when the reservation is created.
    b. **Update Reservation**: Select if the Membership Action should be taken when an existing reservation is accessed.
8. Click **Save**.



Aristocrat Loyalty

The following operations are supported as part of this gaming integration product. Only the operations listed below are currently supported.

Table 7-23 Aristocrat Loyalty

Function	How it works	Direction
Player Enrollment	• OPERA Cloud sends the name and address information for a new player profile to Loyalty. • Loyalty creates a player profile and responds to OPERA Cloud with the player ID.	OPERA Cloud–> LOYALTY
Profile Lookup	• OPERA Cloud users can search Loyalty for profile(s) based on Player ID or Last and/or First Name. • Loyalty returns a list of profiles matching the criteria requested, which the OPERA Cloud user views on-screen.	OPERA Cloud –> LOYALTY
Profile Fetch	• The OPERA Cloud user selects a profile from a list provided during the Lookup operation. • Loyalty returns the patron's name, addresses, birth date, and email address; OPERA Cloud will either insert a new profile record or merge the data into an existing record.	OPERA Cloud –> LOYALTY
Profile Update	• OPERA Cloud notifies Loyalty of any changes made to the name and/or address, telephone, and email on any OPERA Cloud profile that has an associated Loyalty Player Id.	OPERA Cloud –> LOYALTY
Reservation Notification	• When a reservation is created/changed or cancelled, OPERA Cloud sends a notification message (including reservation status) to Loyalty for the associated player.	OPERA Cloud –> LOYALTY

Table 7-23 (Cont.) Aristocrat Loyalty

Function	How it works	Direction
Comp Postings	• OPERA Cloud sends a comp request to Loyalty when a charge is posted to a comp window (101-108). A comp posting is any charge that was moved to a comp window, regardless of whether it was originally posted manually, through the End of Day sequence, or by POS interface to OPERA Cloud. • To void a comp transaction, you must move back to a cash window (1-8). A Void is then sent to Loyalty. • Loyalty will either approve or decline the comp posting. Approval status appears on the OPERA Cloud Comp Journal screen. • OPERA Cloud sends comp postings to Loyalty in monetary value / amount only. • OPERA Cloud sends comps monetary value / amount to only **one default bucket in** Loyalty. **Note** Do not move transactions between comp windows (101-108).	OPERA Cloud –> LOYALTY

Required Information

To invoke the loyalty webservices from OPERA Cloud, below are the required details that needs to be requested for configuration:

- Webservice URL for PartnerNameService [ex: http://{hostname}:{port}/PartnerNameService]
- Webservice URL for PartnerGamingService [ex: http://{hostname}:{port}/PartnerGamingService]
- Webservice URL for PartnerReservationService [ex: http://{hostname}:{port}/PartnerReservationService]

The integration between OPERA Cloud and Aristocrat Loyalty uses the following Webservice operations.

Table 7-24 Webservice operations

Webservice	Operation	Function
PartnerNameService	ProfileLookup	Profile Lookup
PartnerNameService	FetchProfile	Profile Fetch
PartnerGamingService, PartnerNameService	EnrollProfile, FetchProfile	Profile Enrollment
PartnerNameService	UpdateProfile	Profile Update

Table 7-24 (Cont.) Webservice operations

Webservice	Operation	Function
PartnerReservationService	ReservationNotification	Reservation Notification
PartnerGamingService	CompPost	Comp Postings

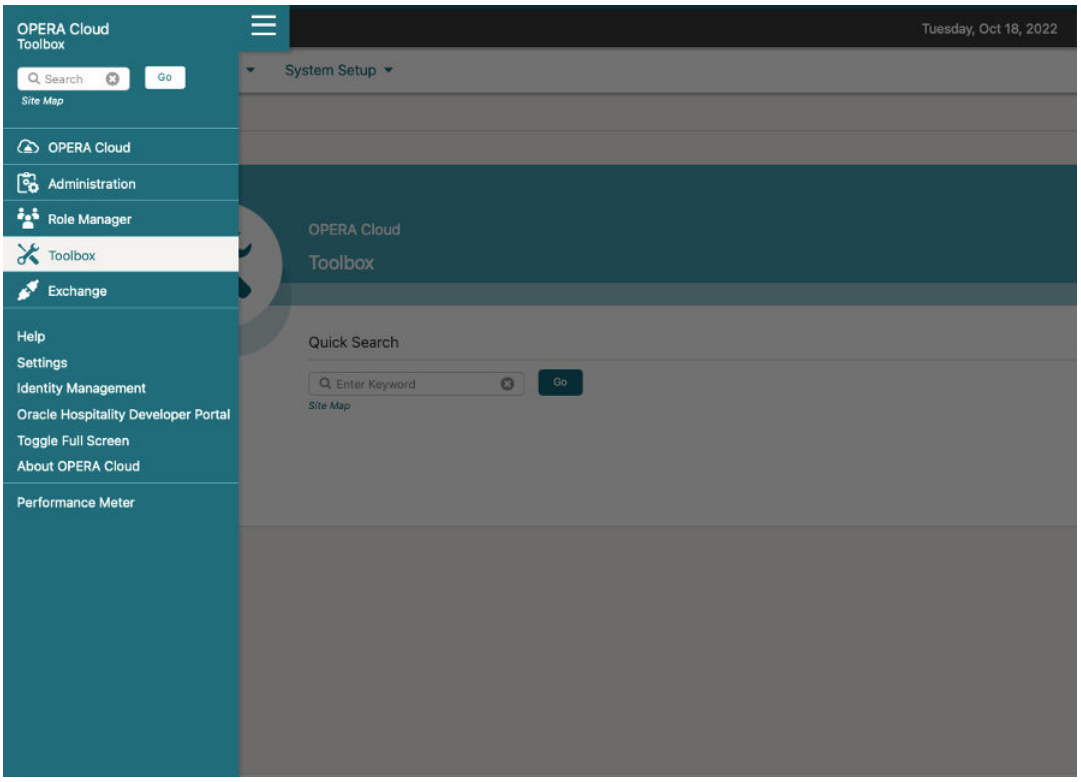
For further details on Loyalty configurations, please get in touch with your Aristocrat Loyalty point of contact or your Oracle Hospitality point of contact.

OPERA Cloud Outbound Configuration for Aristocrat Loyalty

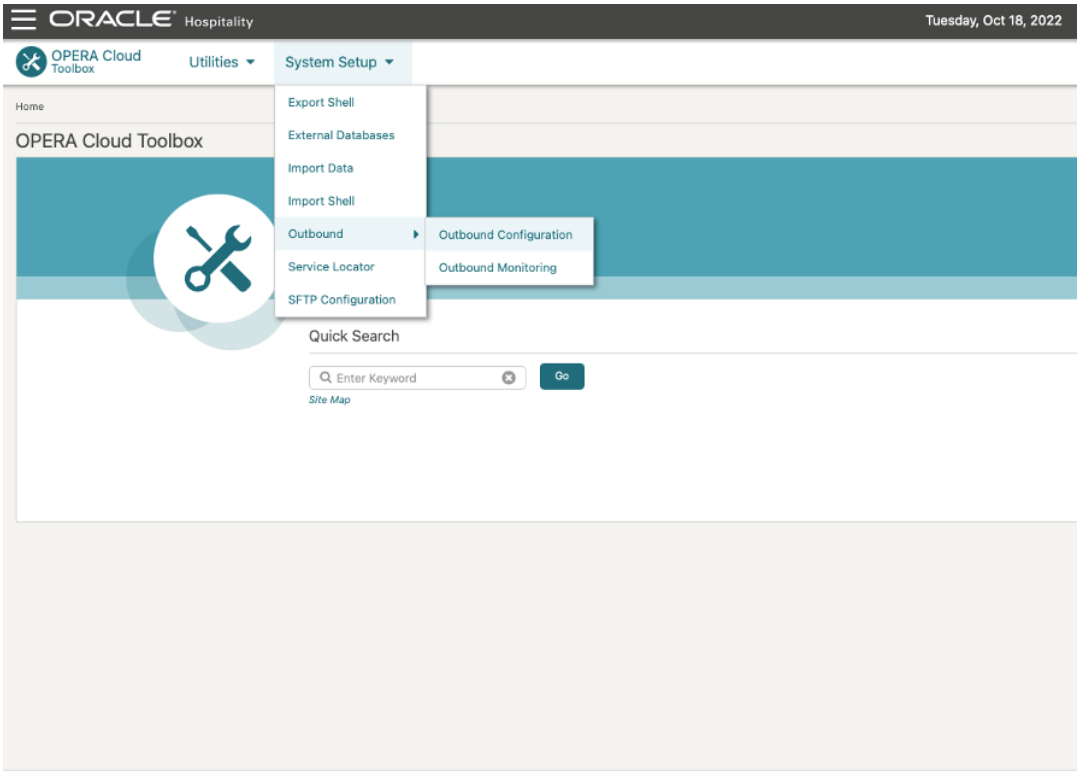
A new outbound system configuration is required for OPERA Cloud to connect to Loyalty.

For additional details on creating an outbound configuration, refer to Configuring Outbound Systems in the OPERA Cloud Services documentation.

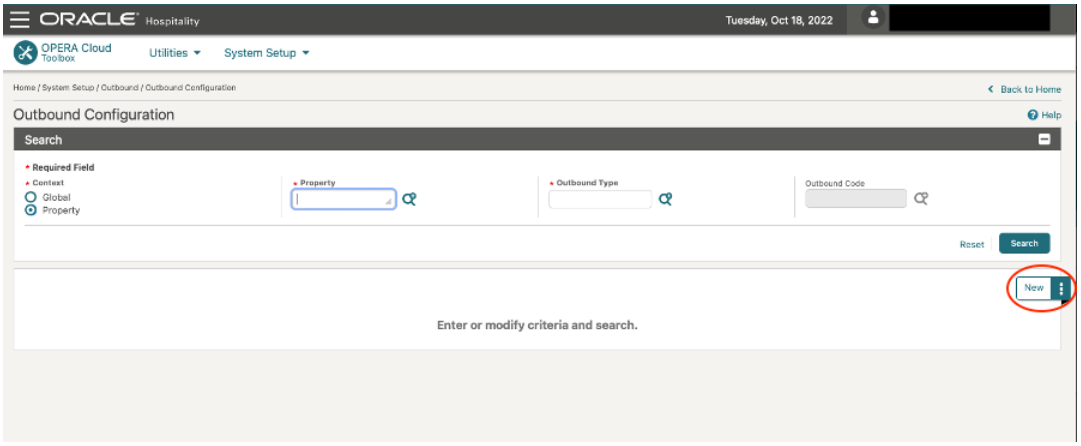
1. Log in to OPERA Cloud and click the **vertical ellipsis** and select **Toolbox**.



2. Select **System Setup**, select **Outbound**, and then select **Outbound Configuration**.



3. Select the **Property** and then click **New** to set up the new Outbound Configuration.



4. Complete the following fields and click **Save**. For the specific details on each field and how to create an Outbound Configuration, see Managing Outbound System Configuration in the OPERA Cloud Services documentation.
   a. **Context**: Select the **Property** option.
   b. **Property**: Select the property for which this configuration is being set up.
   c. **Outbound Type**: Select **GAMING_CUSTOM** from the list of options.
   d. **Outbound Code**: Provide the unique identifier (for example: LOY_{Property_Name}).
   e. **Outbound Description**: Provide the description (optional).
   f. **Authorization Type**: Select **NONE** from the list of options. By selecting this option, all other Authorization related fields no longer appear.

g. **Application Key**: Leave this field blank.

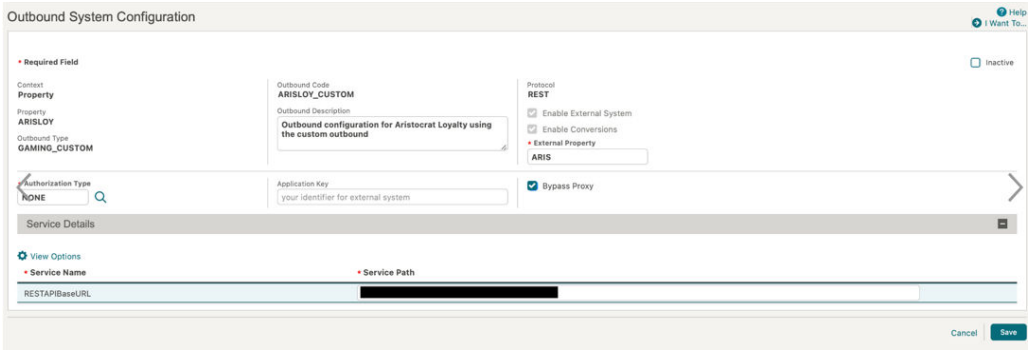
h. **Enable External System**: Select this option.

i. **Enable Conversions**: Select this option.

j. **External Property**: Enter the **Site Id** or **Hotel Id** provided by Aristocrat Loyalty.

k. **Bypass Proxy**: Select this option.

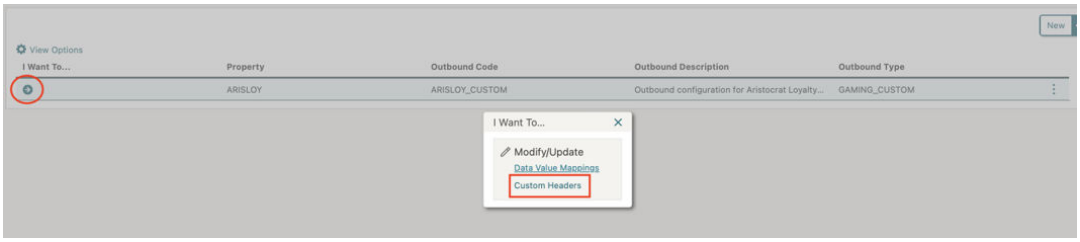
l. **RESTAPIBaseURL**: Type the webservice url of the PartnerNameService (used for CRM operations). [ex: http://{hostname}:{port}/PartnerNameService]



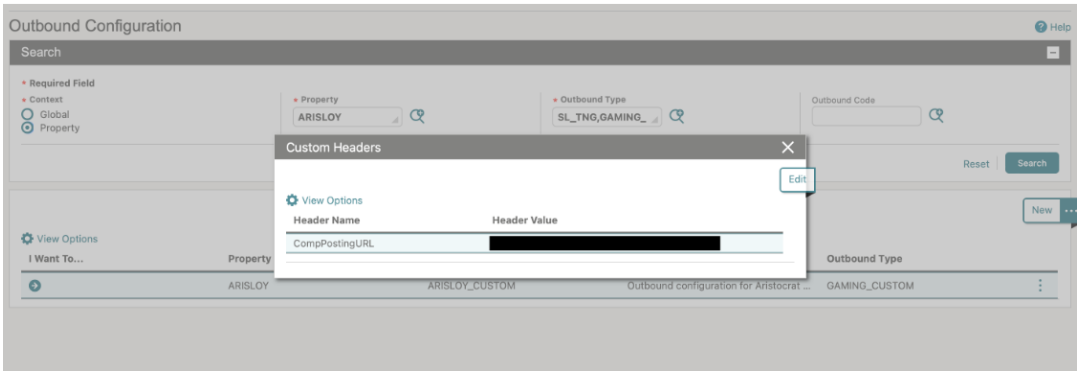
Once the configuration is saved, proceed to Custom Headers and DVM configurations.

5. Add the following Custom Headers for this outbound configuration. Click the **I Want To...** from the search results row where you want to define Custom Headers.

Once the configuration is saved, the final configuration is shown below:



Header Name	Header Value
CompPostingURL	Webservice URL for PartnerGamingService, used for Comp Posting operations [ex: http://{hostname}:{port}/PartnerGamingService]

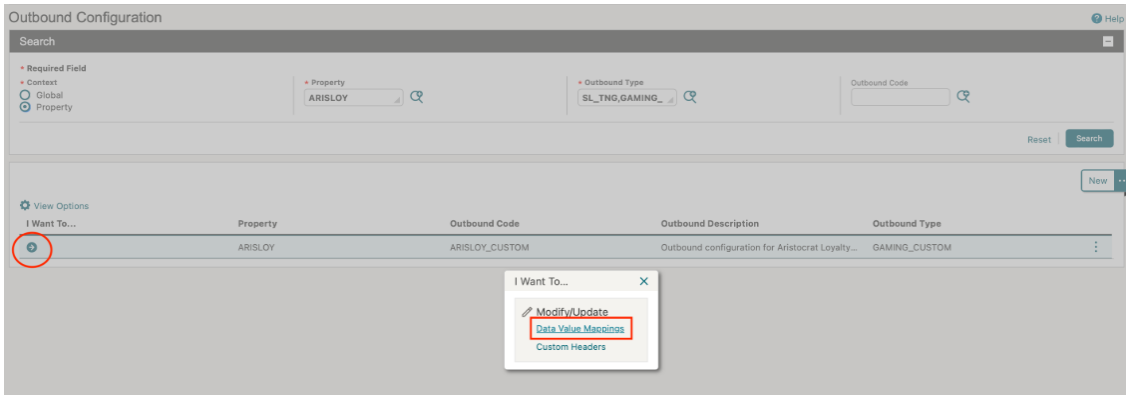


Once the above fields are completed, save the outbound configuration and proceed to Data Value Mappings (DVM).

DVMs for Aristocrat Loyalty

The following Data Value Mappings (DVMs) must be set up for the Aristocrat Loyalty system. DVM configurations are required to convert the categorical values from OPERA Cloud to Loyalty (and vice-versa). For details on how to create DVMs within OPERA Cloud, see Data Value Mappings in the OPERA Cloud Services documentation.

Configure the DVMs for this outbound configuration. Click the **I Want To...** and select **Data Value Mapping**.



The below DVM values are for reference only and can vary by property.

Country Codes

This DVM will convert the Country Code used in OPERA Cloud with the Country Code used in Loyalty for both messages being sent and received from/to OPERA Cloud.

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

> **Note**
>
> This list follows the ISO 3166.

- **OPERA Cloud Code**: This is the Country Code used in OPERA Cloud.
- **External Value**: This is the Country Code in Loyalty that corresponds to the OPERA Cloud Country Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-25 Country Codes

OPERA Cloud Value	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
AW	ABW	✓	✓
CA	CAN	✓	✓
GB	GBR	✓	✓
IN	IND	✓	✓
JP	JPN	✓	✓
NL	NLD	✓	✓
PH	PHL	✓	✓

Table 7-25 (Cont.) Country Codes

OPERA Cloud Value	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
PT	PRT	✓	✓
SA	SAU	✓	✓
US	USA	✓	✓

Membership Level

This DVM will convert the Membership Levels codes in OPERA Cloud into the Loyalty Ranking Levels codes (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Level code that you previously created.
- **External Value**: This is the Ranking Code in Loyalty that corresponds to the OPERA Cloud Membership Level code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-26 Membership Level

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
BRONZE	1		
DIAMOND	2		
PLATINUM	3		

Membership Type

This DVM will convert the Membership Type used in OPERA Cloud to the Membership type used within Loyalty (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Type code that you previously created.
- **External Value**: This is the Aristocrat Loyalty membership type that corresponds to the OPERA Cloud Membership Type.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-27 Membership Type

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
PTS	GC		

Address Type

This DVM will convert the Address Type used in OPERA Cloud with the Address Type used in Aristocrat Loyalty (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Address Type that exists in OPERA Cloud.
- **External Value**: This is the Address Type in Aristocrat Loyalty that corresponds to the OPERA Cloud Address Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-28 Address Type

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
HOME	Resi		
BUSINESS	Mail		

Table 7-28 (Cont.) Address Type

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
MAILING	Mailing	✓	✓
OTHER	Altn	✓	✓

Phone Type

This DVM converts the Phone Type used in OPERA Cloud with the Phone Type used in Aristocrat Loyalty (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Phone Type that exists in OPERA Cloud.
- **External Value**: This is the Phone Type in Aristocrat Loyalty that corresponds to the OPERA Cloud Phone Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-29 Phone Type

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External Cloud
HOME	Primary	✓	✓

Table 7-29 (Cont.) Phone Type

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External Cloud
MOBILE	Mobile		
EMAIL	EMAIL		
BUSINESS	Work		

Gender

This DVM converts the Gender Code used in OPERA Cloud with the Gender Code used in Aristocrat Loyalty (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Gender Code that exists in OPERA Cloud.
- **External Value**: This is the Gender Code in Aristocrat Loyalty that corresponds to the OPERA Cloud Gender code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-30 Gender

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External Cloud
F	FEMALE		
M	MALE		
U	UNKNOWN		

State Codes

This DVM will convert the State Code used in OPERA Cloud with the State Code used in Aristocrat Loyalty (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the State Code that exists in OPERA Cloud.
- **External Value**: This is the State Code in Aristocrat Loyalty that corresponds to the OPERA Cloud State Code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-31 States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
AB	AB		
BC	BC		
MB	MB		
NB	NB		
NL	NL		
NS	NS		

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
NT	NT	✓	✓
NU	NU	✓	✓
ON	ON	✓	✓
PE	PE	✓	✓
QC	QC	✓	✓
SK	SK	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
YT	YT		
AK	AK		
AL	AL		
AR	AR		
AZ	AZ		
CA	CA		

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
CO	CO	✓	✓
CT	CT	✓	✓
DC	DC	✓	✓
DE	DE	✓	✓
FL	FL	✓	✓
GA	GA	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
HI	HI	✓	✓
IA	IA	✓	✓
ID	ID	✓	✓
IL	IL	✓	✓
IN	IN	✓	✓
KS	KS	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
KY	KY	✓	✓
LA	LA	✓	✓
MA	MA	✓	✓
MD	MD	✓	✓
ME	ME	✓	✓
MI	MI	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
MN	MN	✓	✓
MO	MO	✓	✓
MS	MS	✓	✓
MT	MT	✓	✓
NC	NC	✓	✓
ND	ND	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
NE	NE	✓	✓
NH	NH	✓	✓
NJ	NJ	✓	✓
NM	NM	✓	✓
NV	NV	✓	✓
NY	NY	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
OH	OH	✓	✓
OK	OK	✓	✓
OR	OR	✓	✓
PA	PA	✓	✓
RI	RI	✓	✓
SC	SC	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
SD	SD	✓	✓
TN	TN	✓	✓
TX	TX	✓	✓
UT	UT	✓	✓
VA	VA	✓	✓
VT	VT	✓	✓

Table 7-31 (Cont.) States Codes

OPERA Cloud Code	External Value (aka loyalty)	External > OPERA Cloud	OPERA Cloud > External
WA	WA	✓	✓
WI	WI	✓	✓
WV	WV	✓	✓
WY	WY	✓	✓

Business Events

In the context of Gaming Integration with Aristocrat Loyalty, business events are used to send both profile updates and reservation notifications to Aristocrat Loyalty from OPERA Cloud.

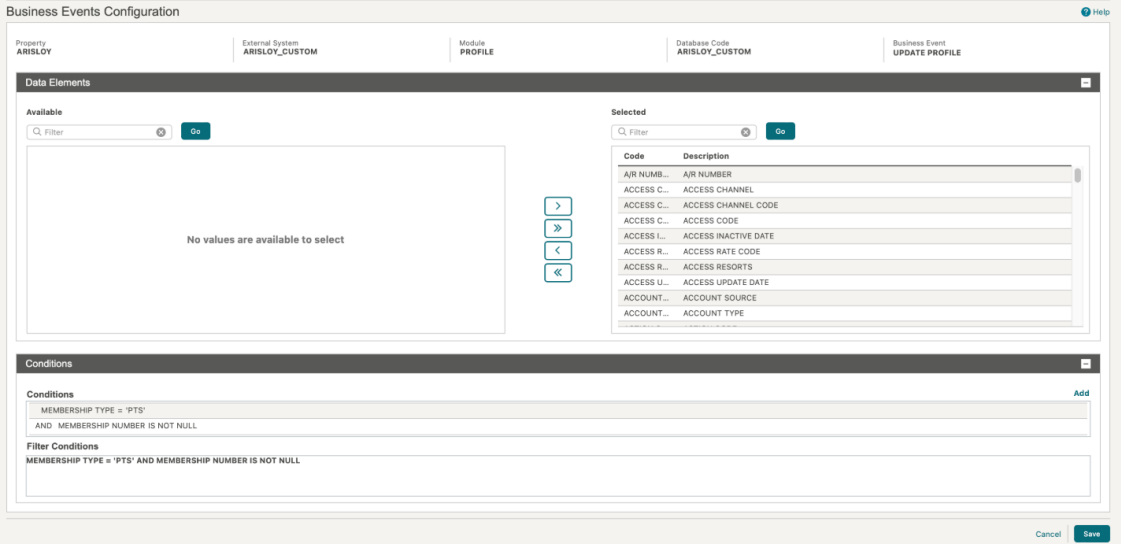
Please configure the below business events in OPERA Cloud in order to have these operations working. For details on configuring business events, refer to Configuring Business Events in the OPERA Cloud services documentation.

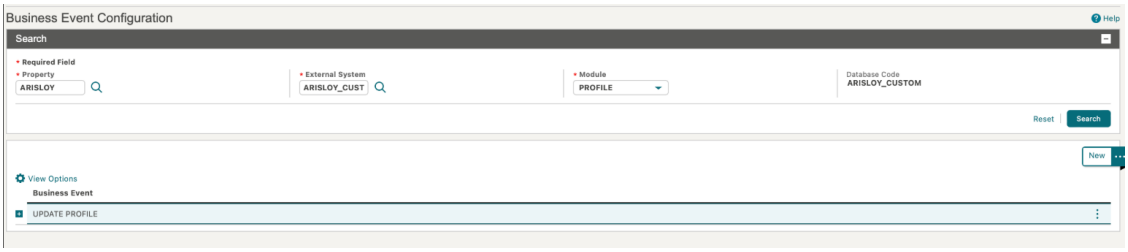
Profiles

Use the below details to create business events for OPERA Cloud Profiles.

- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select PROFILE.
- **Business Event**: Select UPDATE PROFILE.

- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS'
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)

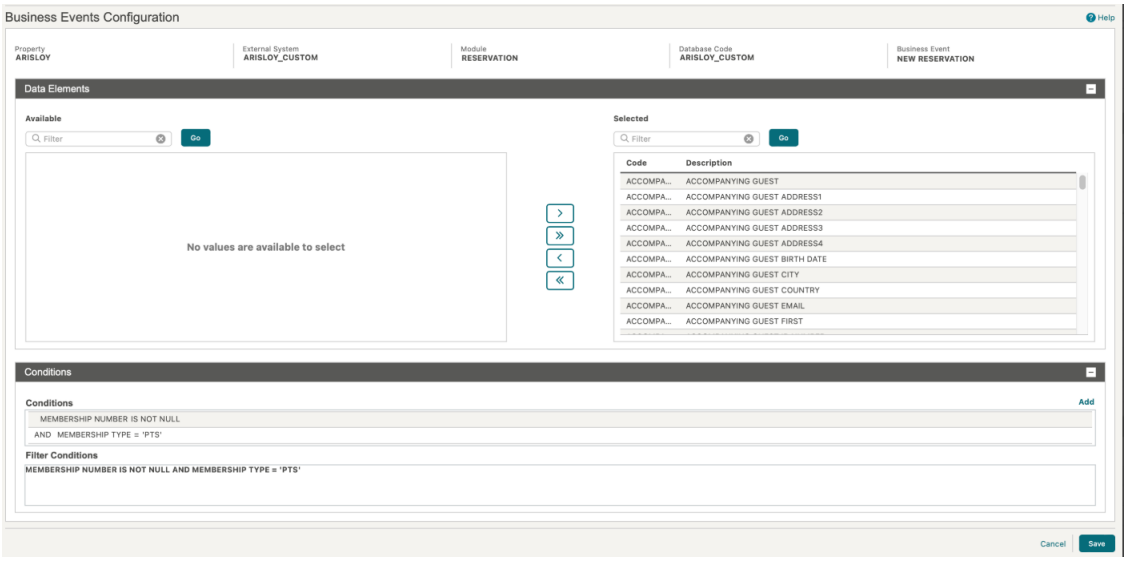




Reservations

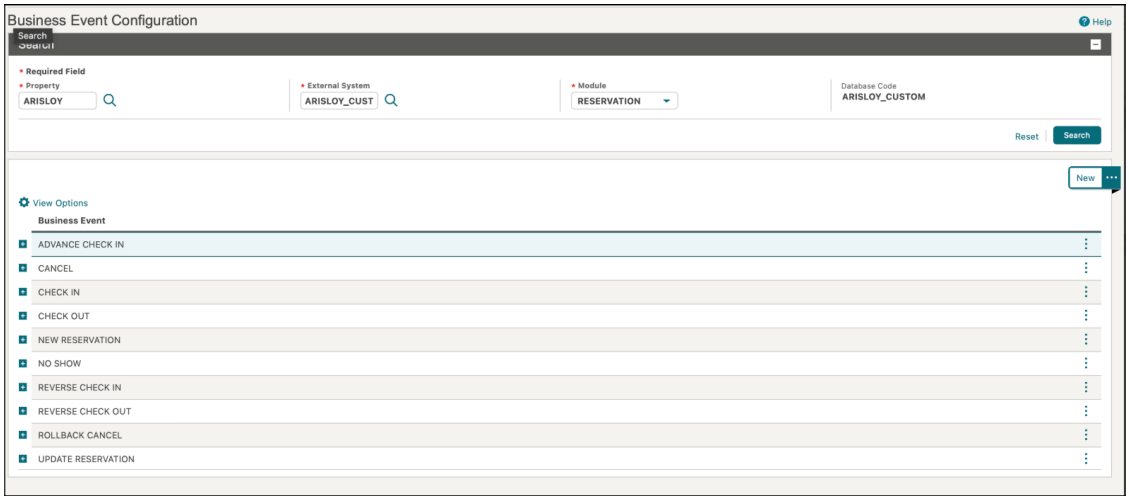
Use the below details to create business events for OPERA Reservations.

- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select RESERVATION.
- **Business Event**: Select NEW RESERVATION.
- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS'
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)



Repeat the above steps to create business events for the following Reservation Modules:

- ADVANCE CHECK IN
- CANCEL
- CHECK IN
- CHECK OUT
- NEW RESERVATION
- NO SHOW
- REVERSE CHECK IN
- REVERSE CHECK OUT
- ROLLBACK CANCEL
- UPDATE RESERVATION

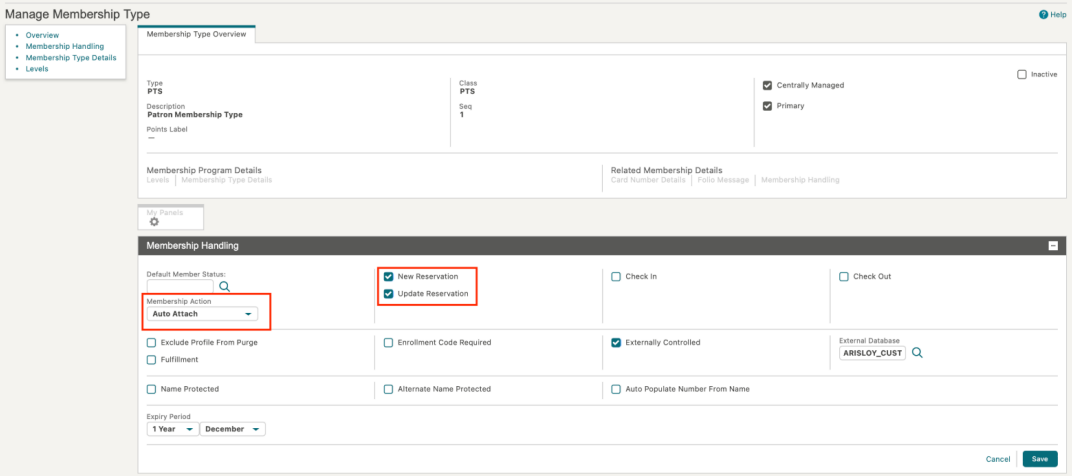


Membership Number automatically assigned to Reservations

To receive updates for a New/Updated reservation, the Membership number of the profile must be attached to the reservation.

To automatically update the Membership number on the new/updated reservations, follow the below steps for configuration:

1. From the **Administration** menu, select **Client Relations**, **Membership Management**, and then **Membership Types**.
2. Search for **Membership Type** as ‘PTS’ and click **Search**.
3. Select the membership type and click the vertical ellipse **Actions** menu and select **Edit**.
4. Click **Membership Handling**.
5. Click **Edit** and complete the following:
6. Select the Membership Action as **Auto Attach** for attaching memberships to a reservation:
7. Next select the lifecycle of the reservation when you want the membership action to be taken:
   a. **New Reservation**: Select if the Membership Action should be taken when the reservation is created.
   b. **Update Reservation**: Select if the Membership Action should be taken when an existing reservation is accessed.



8. Click **Save**.

Light & Wonder CMP

The following operations are supported as part of this gaming integration product. Only the operations listed below are currently supported.

Table 7-32 Light & Wonder

Function	How it works	Direction
Player Enrollment	• OPERA Cloud sends the name and address information for new player profile or an existing OPERA Cloud profile to Light & Wonder. • Light & Wonder creates a player profile and responds to OPERA Cloud with the Player ID.	OPERA Cloud –> L&W CMP
Profile Lookup	• OPERA Cloud users can search Light & Wonder for profile(s) based on Player ID or Last and/or First Name. • Light & Wonder returns a list of profiles matching the criteria requested, which the OPERA Cloud user views on-screen.	OPERA Cloud –> L&W CMP
Profile Fetch (Profile Download)	• The OPERA Cloud user selects a profile from the list provided during the Lookup operation. • Light & Wonder returns the patron's name, addresses, birth date, and email address; OPERA Cloud will either insert a new profile record or merge the data into an existing record. • Banned Players are shown as Restricted Profiles in OPERA Cloud.	OPERA Cloud –> L&W CMP
Player Snapshot/ PTS Inquiry (Player Statistics) (view only)	• OPERA Cloud users can view basic, real-time balances and account information by sending a Player Statistics request from OPERA Cloud to Light & Wonder. This information is never stored in OPERA Cloud. • Light & Wonder responds with values that appear on the screen with OPERA Cloud. For example, comp dollar or points balance. • The scope of data sent is not configurable in OPERA Cloud.	OPERA Cloud –> L&W CMP
Player Promotions/ Offers (view only)	• Promotion/Offer codes must be created for both OPERA Cloud and Light & Wonder. • OPERA Cloud users can click **Fetch Offer**from the Look to Book screen to view promotions/offers available for the player.	OPERA Cloud –> L&W CMP
Profile Update	• OPERA Cloud notifies Light & Wonder of any changes made to the name and/or address, telephone, and email on any OPERA Cloud profile that has an associated Light & Wonder Player Id.	OPERA Cloud –> L&W CMP

Table 7-32 (Cont.) Light & Wonder

Function	How it works	Direction
Comp Postings (Including reverse)	• OPERA Cloud sends a comp request to Light & Wonder when a charge is posted to a comp window (101-108). A comp posting is any charge that was moved to a comp window, regardless of whether it was originally posted manually, through the End of Day sequence, or by POS interface to OPERA Cloud. • To void a comp transaction, you must move back to a cash window (1-8). A Void is then sent to Light & Wonder. • Light & Wonder will either approve or decline the comp posting. Approval status appears on the OPERA Cloud Comp Journal screen. • OPERA Cloud sends comp postings to Light & Wonder in monetary value / amount only. **Note** Do not move transactions between comp windows (101-108).	OPERA Cloud –> L&W CMP

Required Information

To invoke the Light & Wonder webservices from OPERA Cloud, below are the required details that needs to be requested for configuration:

- Rest API Based Service URL[ex:http://{hostname}:{port}]
- Access Token URI:[ex:http://{Rest API Based Service URL}/oauth?grant_type=client_credentials]
- Client id: Username of the token service
- Client Secret: password of the token service
- client-id: client id parameter of the service call
- property-id: property id of the Light & Wonder

The integration between OPERA Cloud and Light & Wonder uses the following Webservice operations.

Table 7-33 Webservice operations

Operation	L&W Function
Profile Lookup	Search Players
Profile Download	Get Player Information
Enroll Profile	Create a New Player Account
Player Statistics	Get Players Balances
Player Offers	Get Player Offers

Table 7-33 (Cont.) Webservice operations

Operation	L&W Function
Profile Update (with business events)	Update Player Information
Comp Posting (Approve)	Issue Player Comp
Comp Posting (Reverse)	Void Issued Player Comp

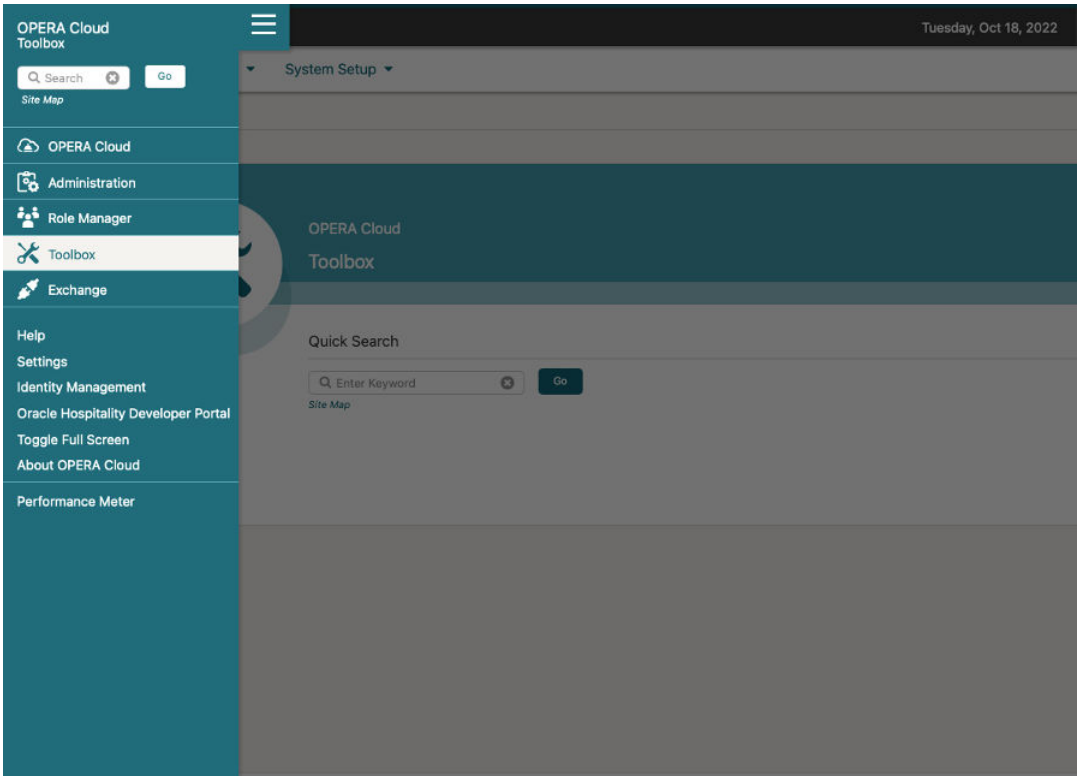
For further details on Light & Wonder configurations, please get in touch with your Light & Wonder point of contact or your Oracle Hospitality point of contact.

OPERA Cloud Outbound Configuration for Light & Wonder

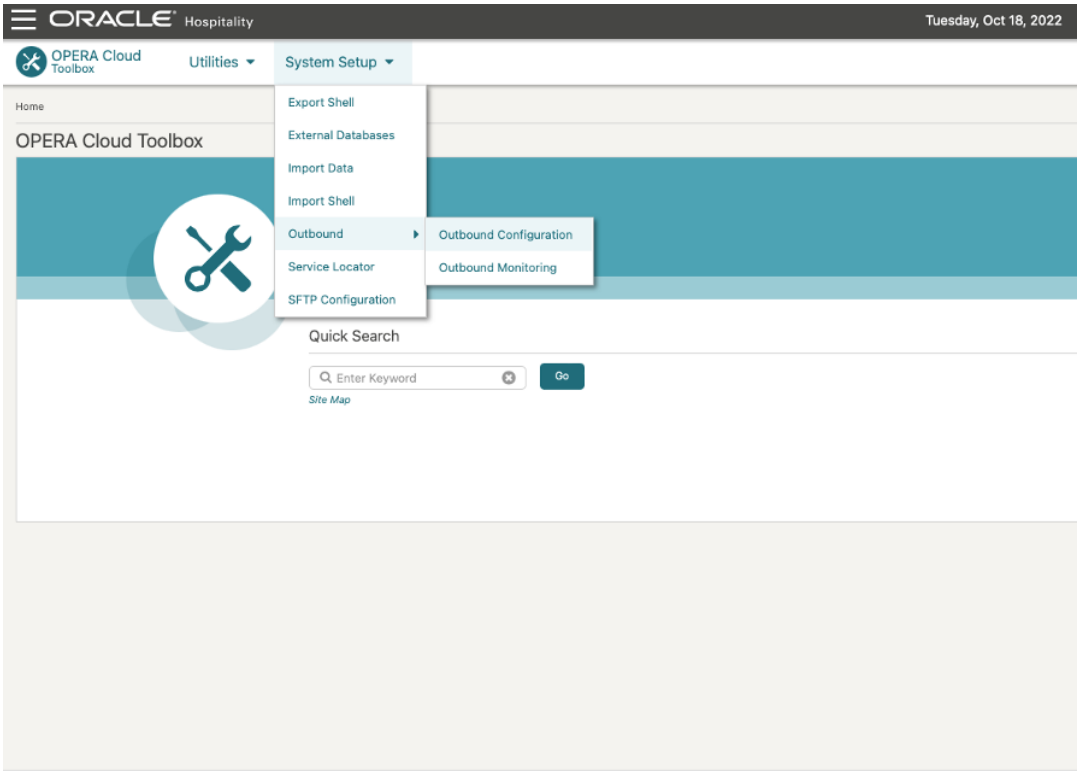
A new outbound system configuration is required for OPERA Cloud to connect to Light & Wonder.

For additional details on creating an outbound configuration, refer to Configuring Outbound Systems in the OPERA Cloud Services documentation.

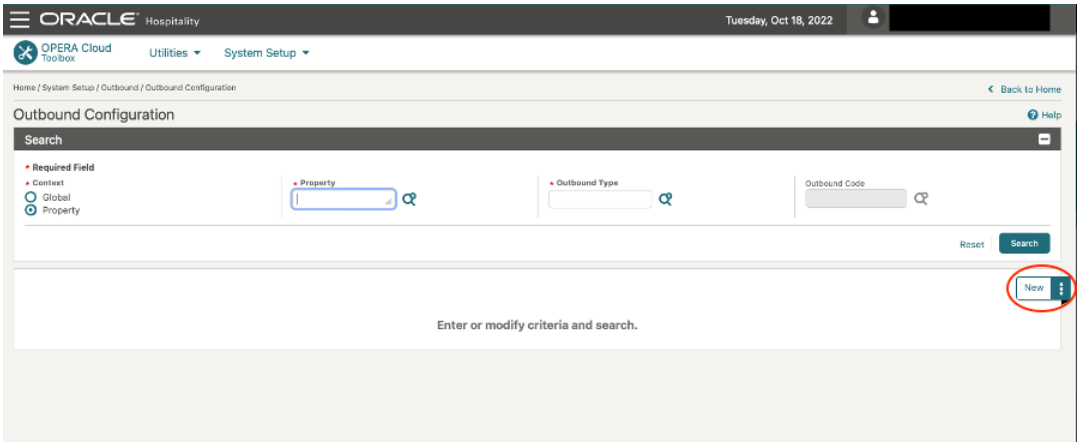
1. Log in to OPERA Cloud and click the **vertical ellipsis** and select **Toolbox**.



2. Select **System Setup**, select **Outbound**, and then select **Outbound Configuration**.



3. Select the **Property** and then click **New** to set up the new Outbound Configuration.



4. Complete the following fields and click **Save**. For the specific details on each field and how to create an Outbound Configuration, see Managing Outbound System Configuration in the OPERA Cloud Services documentation.

   a. **Context**: Select the **Property** option.

   b. **Property**: Select the property for which this configuration is being set up.

   c. **Outbound Type**: Select **GAMING_CUSTOM** from the list of options.

   d. **Outbound Code**: Provide the unique identifier (for example: LWCMP_{Property_Name}).

   e. **Outbound Description**: Provide the description (optional).

   f. **Authorization Type**: Select **NONE** from the list of options.

g. **Application Key**: Leave this field blank.

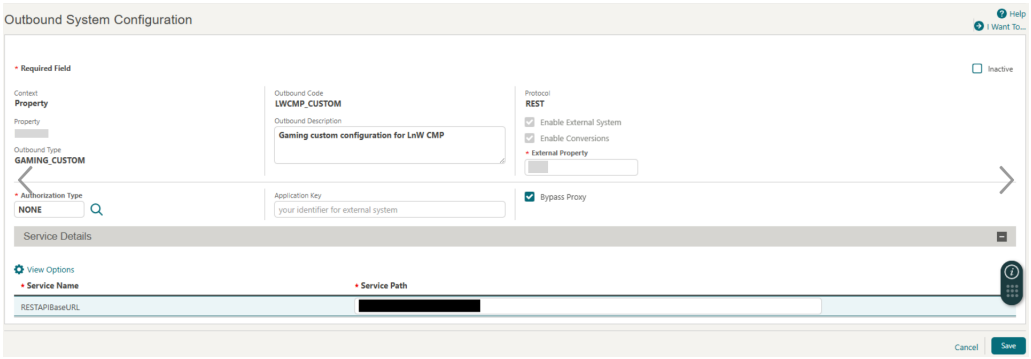
h. **Enable External System**: Select this option.

i. **Enable Conversions**: Select this option.

j. **External Property**: Enter the **Site Id** or **Hotel Id** provided by Light & Wonder.

k. **Bypass Proxy**: Select this option.

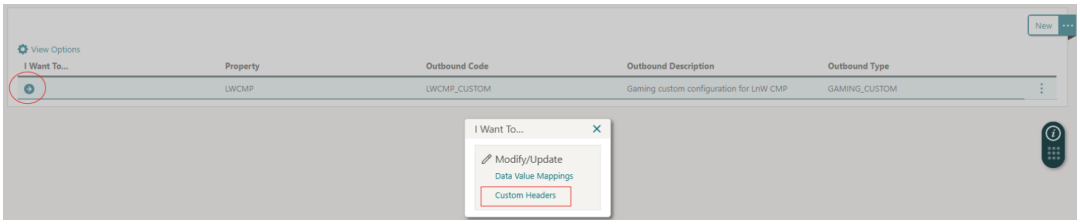
l. **RESTAPIBaseURL**: Type the webservice url of the Light & Wonder. [ex: http://{hostname}:{port}]



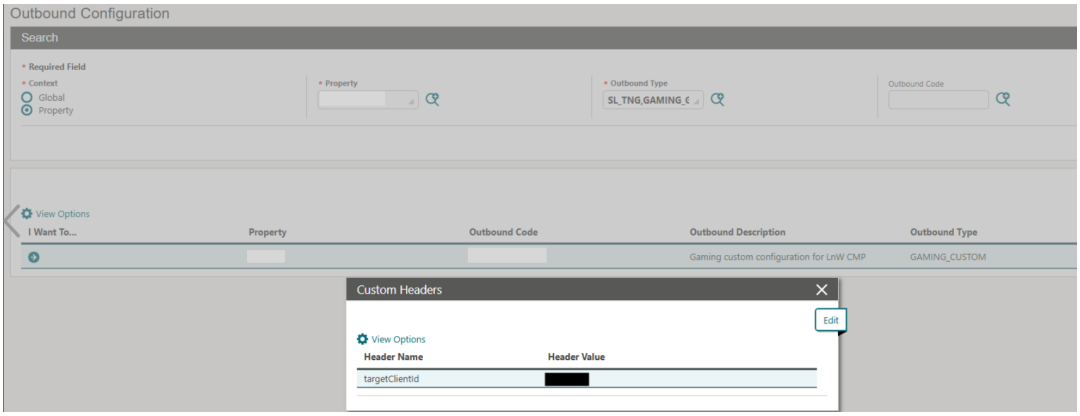
Once the configuration is saved, proceed to Custom Headers and DVM configurations.

5. Add the following Custom Headers for this outbound configuration. Click the **I Want To...** from the search results row where you want to define Custom Headers.

Once the configuration is saved, the final configuration is shown below:



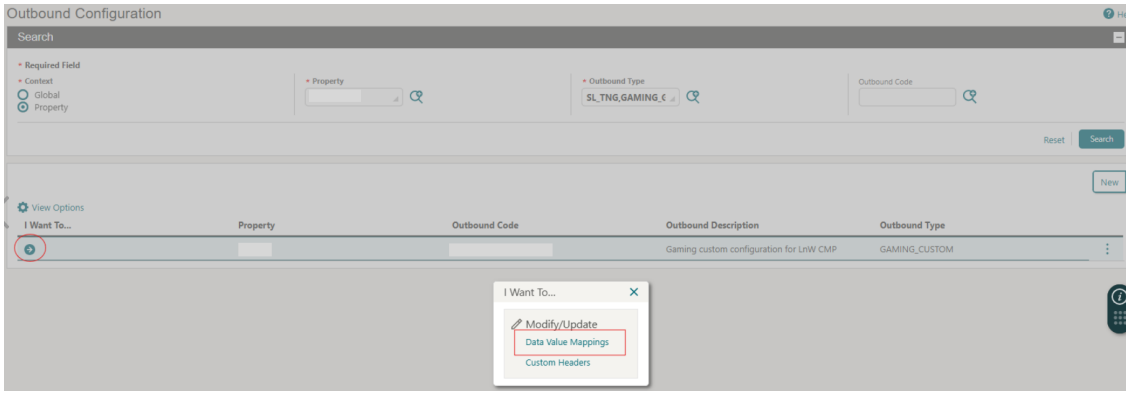
Header Name	Header Value
targetClientId	client-id parameter to call Light & Wonder services



Once the above fields are completed, save the outbound configuration and proceed to Data Value Mappings (DVM).

DVMs for Light & Wonder

On the Outbound Configuration page, click the arrow under **I Want To...** and select **Data Value Mappings** from the pop-up dialog. DVM configurations are required to convert the categorial values from OPERA Cloud to Light & Wonder (and vice-versa). For details on how to create DVMs within OPERA Cloud, see Data Value Mappings in the OPERA Cloud Services documentation.



The below DVM values are for reference only and can vary by property.

Membership Level

This DVM will convert the Membership Levels codes in OPERA Cloud into the Light & Wonder Ranking Levels codes (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Membership Level code that you previously created.
- **External Value**: This is the Ranking Code in Light & Wonder that corresponds to the OPERA Cloud Membership Level code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent out by OPERA Cloud.

Table 7-34 Membership Level

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External
LW10	10		
LW40	40		
LW50	50		

Document Type

This DVM will convert the Document Type used in OPERA Cloud to the Identity type used within Light & Wonder (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Document Type code that you previously created.
- **External Value**: This is the Light & Wonder identity type that corresponds to the OPERA Cloud Document Type.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-35 Document Type

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External
BIRTH	Birth Certificate		

Table 7-35 (Cont.) Document Type

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External
DL	Driver's License	✓	✓
SSN	SSN	✓	✓

Address Type

This DVM will convert the Address Type used in OPERA Cloud with the Address Type used in within Light & Wonder (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Address Type that exists in OPERA Cloud.
- **External Value**: This is the Address Type in Light & Wonder that corresponds to the OPERA Cloud Address Type code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received by OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent out by OPERA Cloud.

Table 7-36 Address Type

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External
HOME	Home	✓	✓
OTHER	Alternate	✓	✓

Phone Type

This DVM converts the Phone Type used in OPERA Cloud with the Phone Type used in Light & Wonder (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Phone Type that exists in OPERA Cloud.
- **External Value**: This is the Phone Type in Light & Wonder that corresponds to the OPERA Cloud Phone Type code. Use "E_" prefix for Email types.
- **External > OPERA Cloud**: Select this option to translate these values for messages received in OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-37 Phone Type

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External Cloud
BUSINESS	Business		
EMAIL	E_Home		
HOME	Home		
WORK	E_Business		

Gender

This DVM converts the Gender Code used in OPERA Cloud with the Gender Code used in Light & Wonder (and vice-versa).

The values in the table below are just for illustration purposes. To complete this DVM, you need the following:

- **OPERA Cloud Code**: This is the Gender Code that exists in OPERA Cloud.

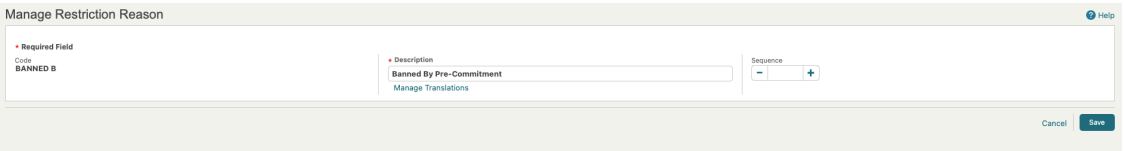
- **External Value**: This is the Gender Code in Light & Wonder that corresponds to the OPERA Cloud Gender code.
- **External > OPERA Cloud**: Select this option to translate these values for messages received by OPERA Cloud.
- **OPERA Cloud > External**: Select this option to translate these values for messages being sent by OPERA Cloud.

Table 7-38 Gender

OPERA Cloud Code	External Value (aka Light & Wonder CMP)	External > OPERA Cloud	OPERA Cloud > External
F	FEMALE	✓	✓
M	MALE	✓	✓
U	UNKNOWN	✓	✓

Restricted Reasons

Light & Wonder has the concept of Ban-Unban profiles. A profile can be banned or unbanned on the patron side, and this information must be passed into OPERA Cloud when downloading a profile. The same codes that exist on the patron side must be configured in OPERA Cloud. Since the Restriction Reason Code in OPERA Cloud is limited to 8 characters, it will be truncated. However, you must still enter the same code, or it will not appear in the edit profile section.

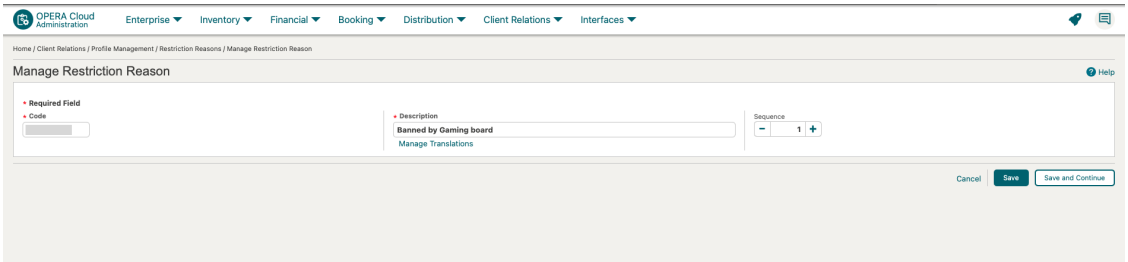


If you need details on how to configure Restriction Reasons, see OPERA Cloud online documentation.

You can use the below details to create Restriction Reasons.

- **Code**: Add the same code as the external system.

- **Description**: Add the same description from the external system.



Business Events

In the context of Gaming Integration with Light & Wonder, business events are used to send both profile updates and reservation notifications to L&W from OPERA Cloud.

Please configure the below business events in OPERA Cloud in order to have these operations working. For details on configuring business events, refer to Configuring Business Events in the OPERA Cloud services documentation.

Profiles

Use the below details to create business events for OPERA Cloud Profiles.

- **Property**: Select your OPERA Cloud property.
- **External System**: Select the external system with the same name as the Outbound Configuration you previously created.
- **Module**: Select PROFILE.
- **Business Event**: Select UPDATE PROFILE.
- **Data Elements**: Select all available data elements.
- **Conditions**:
  - MEMBERSHIP NUMBER IS NOT NULL
  - MEMBERSHIP TYPE = 'PTS' (the Membership Type setup in OPERA Cloud)
  - Ensure these conditions are used as ‘AND’ (do not use ‘OR’)