

**Oracle® Hospitality Cruise Shipboard
Property Management System**

OPI Handling
Release 8.0.12
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Preface

This document is to guide users attempting to configure Oracle Payment Interfaces (OPI) on Shipboard Property Management System (SPMS).

Audience

This document is intended for application specialists and users of Oracle Hospitality Cruise Shipboard Property Management System.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL: <https://support.oracle.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

Revision History

Date	Description of Change
January 2019	<ul style="list-style-type: none">• Initial Publication
February 2019	<ul style="list-style-type: none">• Removed 2 redundant diagrams from Chapter 4
December 2019	<ul style="list-style-type: none">• Added new PAR 'Enable Online Authorization'.• Added timeout handling when PAR Enable Online Settlement' is set to 1.• Updated to save valid credit card token from OPI card details and set card status to 'active', regardless of the status of initial authorization.• Updated to set a card to active mode once receive a valid credit card token.• Added system behavior when a vendor has no internet information.• Updated the Authorization Screen

Date	Description of Change
April 2020	<ul style="list-style-type: none"> • Version 8.0.13 – Enhanced OPI Handling including bug fixes of previous releases. • Added new tab “GetToken” to Configuration window. • New Parameter: “Number of Transaction per Get Token Batch” • Enhanced Credit Card Deactivation handling. • Enhanced the Void Settlement process. • Added OPI Tokenization handling to include conversion of the token from other payment providers to OPI • Added Offline Token handling • Bug fixes • Changed the behavior when a vendor has no internet information
June 2020	<ul style="list-style-type: none"> • Renamed Allow Offline button to Allow Offline Token V8.0.14 • Version 8.0.14 – Added new tab “Transaction Overview” to Configuration window.
November 2020	<ul style="list-style-type: none"> • Enhanced the Outstanding Process. • Added Gift Card Registration in Management/Crew module • Renamed Parameter “Enable Incremental Authorization” to “Enable Auto Incremental Authorization”.
January 2020	<ul style="list-style-type: none"> • Enhanced Batch Settlement UI
April 2021	<ul style="list-style-type: none"> • Added Transaction Status to Transactions Overview tab
June 2021	<ul style="list-style-type: none"> • Enhanced OPI Quick Billing Screen to allow user to stop or resume the process.
October 2021	<ul style="list-style-type: none"> • Linked RRN for Refund
July 2022	<ul style="list-style-type: none"> • Minor typo update

Prerequisites, Supported Systems, and Compatibility

This section describes the minimum requirement to operate the Oracle Payment Interface (OPI) On-Premise.

Prerequisite

Before you begin, see OPI and Cruise SPMS Installation for detailed requirements and installation steps. A copy of the guide is available at <https://docs.oracle.com/en/industries/hospitality/cruise.html> and [Integrations Platform](#).

Compatibility

SPMS version 8.0.8 or later. For customers operating on a version below 8.0.8, database upgrade to the recommended or latest version is required.

1

SPMS Parameters

The following section lists the parameters used by OPI handling. You can access them from Administration module, System Setup, Parameter or OPI Manager Module, Configuration, Parameter.

PAR_GROUP General

Table 1-1 - PAR Group General

PAR Name	PAR Value	Description
Allow payment for Declined Authorization	1	0 – Do not allow payment if authorization is declined but allow when it is an offline authorization 1 – Allow payment if authorization is declined or offline. 2 – Do not allow payment if authorization is declined or offline
Allow Settlement Voiding	1	0 – Allow voiding, will not prompt message 1 – Allow voiding, will prompt a message 2 – Disallow voiding not allowed
Disable C/Card and Posting when auth is decline		0 - No credit card deactivation and no posting disabled 1 - We will deactivate the credit card first if there is no more active credit card, the guest posting will be disabled. 2 - There is credit card deactivation but no posting disabled
Disable Posting Automatically		0-Posting allowed, 1-Posting disabled
CC Negative Payment Allowed		1-Allowed negative Credit Card payment, 0-Disallow negative Credit Card payment

PAR_GROUP OPI

Table 1-2 - PAR Group OPI

PAR Name	PAR Value	Description
Do not allow if card expire on the debark month	0	1 - Do not allow/0 - Allow, If the card has an expiry on the expected debark registration month
Enable Multiple Credit Card	0	0-No,1-Yes. Allow registration of multiple credit card

PAR Name	PAR Value	Description
Enable Online Initial Authorization	1	Online initial authorization handling. 0 – initial authorization is handled by Batch Manager, 1 – Send to Online initial authorization.
Enable Online Settlement	1	Online Settlement Handling. 0 – Settlement handled by OPI Manager, 1 – Send to Online Settlement
Incremental Calculation Formula	1	1-Total invoice amount + (Total invoice amount * Top Up Percentage), 2-Total invoice amount - Total authorization amount, 3-Total invoice amount, 4-Total invoice amount - Total authorization amount + (Total invoice amount * top-up percentage)
Incremental Top Up Percentage	10	The incremental top-up value in percentage. Example, insert 10 for 10%
Initial Authorization Amount	50	Default initial authorization amount for all card types swiped at the terminal in online mode.
Initial Authorization Formula	1	Define the formula to use for Initial Authorization 1 - Fix amount, 2 - Fix amount x day of stay, 3 - Uses the Department setting minimum authorization amount
No. of retry for Outstanding Incremental Process	3	Number of retry for failed outstanding incremental payment request
Number of Transaction per batch	100	A maximum number of transactions to process for each submitted batch.
Number of Transaction per Get Token Batch	50	Maximum number of transactions to process for each submitted batch from Get Token tab
OPI Daemon Timeout	60	Response Timeout from OPI Daemon -in seconds
OPI Web API Service URL	http://localhost:1569/api	OPI Web API Service URL
Online Incremental Limit	1	The limit for incremental processing by batch or immediate. If an incremental amount is greater than the value defined in Parameter, send for processing immediately. Otherwise, send it by batch.

PAR Name	PAR Value	Description
Enable Auto Incremental Authorization	1	This triggers an incremental authorization during posting based on the formula entered in parameter Incremental Calculation Formula
Credit Card Expiry Date Format	MMYY	Define the credit card expiry date format to display either in 'YYMM' or 'MMYY'.
Credit Card Refund	1	Allow user to enable or disable the Credit Card Refund handling, default PAR Value = 0. 0 – Disable Credit Card Refund handling. Credit Card Refund button is not visible. 1 – Enable Credit Card Refund handling. Credit Card Refund button visible.

2

System Configuration

This section describes the various system codes setup within the **Administration** module.

Department Setup

To post a charge/payment, a debit/credit department code for a credit card type is required and this is setup up in **Administration module, Financial Setup, Department setup**.

Credit/Debit Card Department Code Setup

1. Log in to the Administration module.
2. Select **Financial Setup, Department setup** from the drop-down list.
3. Click the **New** button located on the bottom right of the screen to create a Sub-Department code.

The screenshot shows the 'Payments Setup' dialog box. The 'Main Department' is set to '9030 MasterCard'. The 'Payment Type' is 'CC Credit Card' with a 'Department Code' of '9031' and a 'Description' of 'MasterCard Micros'. Under 'Payment Type Details', 'Credit Card Digits' are '-51,-52,-53,-54,-55', 'Credit Card Id' is 'MC', and 'Credit Card Internal Id' is 'M Master Card'. The 'Department Security' section shows 'Dept. Security Level' set to 'Credit Department Level 1'. The 'Payment Department Type' is set to 'Both Credit and Debit Card'. The 'Department for routing' checkbox is checked. The window includes 'OK' and 'Cancel' buttons at the bottom right.

Figure 2-1 - Department Code Setup

4. At the **Main Department section**, enter the credit/debit card information such as Payment type, department code, and description.
5. At the **Payment Type** details section,
 - a. Enter the two digits of the first set of the credit card number in Credit Card Digits field.
 - b. Enter the **Credit Card ID**. For example, MC – MasterCard, VI – Visa, and others



NOTE:

You must map the Credit Card ID with the OPI Issuer ID listed in below table.

Table 2-1 – OPI Issuer ID

Issuer ID	Card Type
AB	AliPay
AL	Alliance
AX	American Express
CU	China UnionPay
CD	China UnionPay Debit
DD	Debit
DC	Diners Club
DS	Discover
GC	Gift Card
JC	JCB
ME	Maestro
MC	MasterCard
MD	MasterCard Debit
PC	PayPal
VA	Visa
VD	Visa Debit
VE	Visa Electron
VP	V Pay
WE	WeChat Pay
BC	Giro Card

- c. Select the corresponding **Credit Card Internal ID** from the drop-down list.
- d. Enter the **Credit Card Merchant Number** provided by the Service Provider.
- e. Select the **Commission Department** from the drop-down list and update the **Commission Rate** in percentage.
- f. Check the **Debit Card No Commission charge** check box if the commission is not applicable to debit cards.

-
6. Under the **Department Security** access, select the relevant security level from the drop-down box
 7. Select the **Payment Type** under Payment Department Type; **Both Credit and Debit card**, **Credit card** or **Debit card**.



NOTE:

This field determines if the payment type is a Credit or Debit Card.

8. Click **OK** to save the form.

Receipt Setup

You can generate a receipt upon payment and would require you to set up a report template. A Standard Credit Card receipt template is available in the **Administration module, System Setup, Report setup, _Receipts group**. Contact Oracle Support if you wish to configure a customize a receipt format.

3

OHC OPI Manager

The OPI Manager is comprised of multiple tabs such as Outstanding Process, Offline Token, Batch Settlement, Cancel Request, Configuration and Get Token tab, and there are an Overview and Log tabs within each of these tabs..

The following section describes the field definition for each tab and its usage in the OPI Manager. The function buttons for each tab vary, depending on the tab you access.

Configuration Tab

This section consists of Connection Setup, Parameter and Schema Mapping between SPMS and OPI.

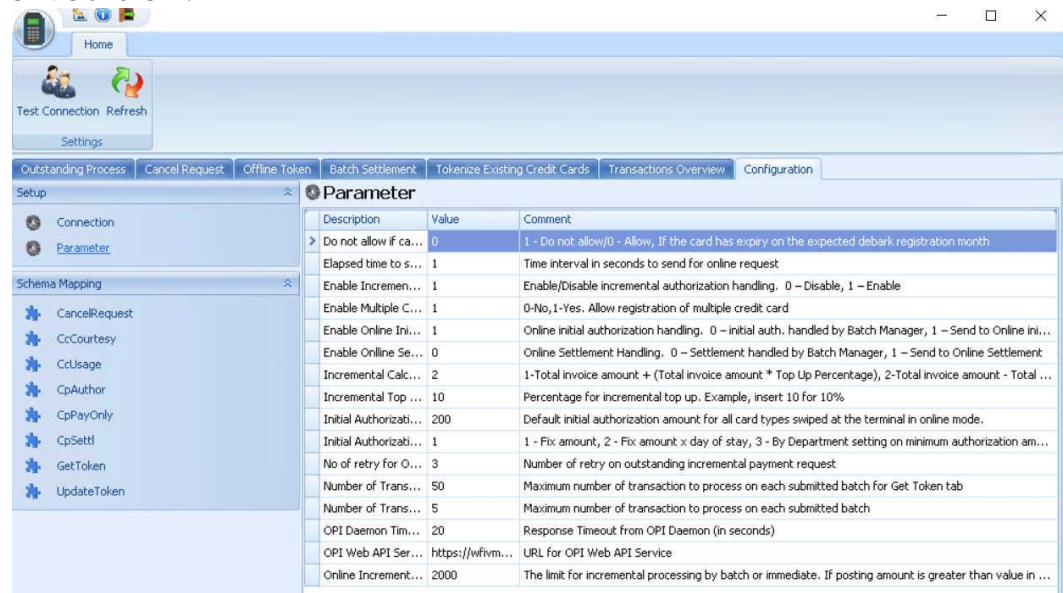


Figure 3-1 - OPI Manager Configuration Tab

Connection

Table 3-1 - Connection Setup

Description	Value
OPI Interface URL	OPI Interface URL (in format ws://ip address:)
SPMS Client Port No.	The SPMS client Port No. defined in OPI Daemon configuration Tool
OPI Daemon Port No.	The OPI Daemon Port No. defined in OPI Daemon configuration Tool
Workstation No.	Workstation No of the client
Merchant ID	Payment Provider Merchant ID

Refresh

This function refreshes the setup screen when clicked.

Test Connection

This function tests the successfulness of the connectivity to OPI.

Schema Mapping

The Schema Mapping is located on the left panel of the Configuration tab. This section describes the mapping fields, pre-defined conditions and the constant value between SPMS and OPI schema for different kinds of Request Types.

Table 3-2 - Schema Mapping

Request Type	Description
CancelRequest	This request type sends a cancel request.
CcCourtesy	This request type obtains the Gift Cards details..
CcCourtesyOperationalSchema	This request type obtains the Gift Cards details for Redeem and Restore
CcUsage	This request type obtains the Credit Card details.
CpAuthor	This request type obtains get Initial Authorization and Incremental/ Top Up.
CpPayOnly	This request type is for Direct Sale.
CpSettl	This request type is for Payment Settlement.
UpdateToken	This request type is used to exchange an offline token for an online token.
GetToken	This request type is used to exchange non-OPI token to OPI token

Each request type has the following table columns.

Table 3-3 - Table Columns

Column Name	Description
Field Name	OPI schema field name
SPMS Field Name	SPMS schema field name
Condition	Define condition for the data updating/ selection
Constant Value	Define value to be updated/ inserted based on the output from the Condition
Enabled	Enable the field to be used for the request type
Mandatory	Flag the field as mandatory fields to be used for the request type.
Direction	Request type direction. (In = response from OPI, Out = request send to OPI)

Get/ Update Schema from OPI

This function sends a request to obtain the latest schema from OPI and updates the SPMS schema.

Refresh

This function refreshes the setup screen when clicked.

Allow Offline Token

This function allows the use of CPAuthor request type in Offline Tokens.

Outstanding Process Tab

The Outstanding Process tab lists all the pending initial authorization/incremental records to send to OPI for approval in the grid.

Overview

All the pending status of initial authorization/ incremental records shown in the grid consists of:

Table 3-4 - Pending Status

Column Name	Description
Cabin	Account cabin no.
First Name	Account First Name.
Last Name	Account Last Name.
Embarked	Account embarkation date
Sequence No.	The sequence number of the record
Auth. Amount	Authorization amount of the record
Current Action	Current action taking of the record
Card Expiry	Account credit card expiry date

Silent Mode

Enabling this mode allows record processing in the background. Updated records status will not show on the screen.

Start

This function triggers the request to process pending initial authorization and incremental records.

Time Out (second)

Defines the response time to flag the outstanding process as time out in seconds.

Log Line

Define the number of record lines to show in the log overview.

Clear Log

This function clears all logs from the log overview screen.

Hide Statistics

This function hides or shows the statistics panel on the right of the screen.

Offline Token Tab

This tab processes the offline token in exchange for online token use by the transaction. If the token exchange fails, the system will deactivate the credit card, and you have to get a new credit card from the guest.

You can create a Crystal report to obtain a list of the failed offline token.

Overview

All the offline token records shown in the grid consists of:

Table 3-5 - Offline Token Records

Column Name	Description
First Name	Account First Name.
Last Name	Account Last Name.
Sequence No.	The sequence number of the record
Card Status	Status of the registered credit card
Current Action	Current action taking of the record
Card Expiry	Account credit card expiry date

Silent Mode

Enabling this mode allows record processing in the background. Updated records status will not show on the screen.

Start

This function starts the token exchange from offline to online.

Time Out (second)

Defines the response time to flag the outstanding process as time out in seconds.

Log Line

This function defines the number of record lines to show in the log overview.

Clear Log

This function clears all logs from the log overview screen.

Batch Settlement Tab

The Batch Settlement Tab is a placeholder for all unprocessed records. By default, the parameter '**Enable Online Settlement**' is '**enabled**', allowing all settlement records to be sent immediately to OPI for approval.

Overview

All the pending settlements show in the grid, which consists of:

Table 3-6 - Pending Settlement

Column Name	Description
Cabin	Account cabin no.
First Name	Account First Name.
Last Name	Account Last Name.
Embarked	Account embarkation date
Sequence No.	The sequence number of the record
Settl. Amount	The settlement amount of the record
Current Action	Current action taking of the record
Status	Status of the record
Card Expiry	Account credit card expiry date

Account Type

Filter for the account type you wish to process.

Embark Date:

Filter the records by the selected date.

Cabin:

Filter the records by the cabin number defined.

Preview

This function shows the records to process and its statistics on the right of the grid.

Page

This function navigates to the next/previous page of the records shown. You can navigate to a specific page using the page number.

Silent Mode

Enabling this mode allow record processing in the background. Updated records status will not show on the screen.

Start

This function commences the Batch Settlement. The system only allows you to process the Batch Settlement from one client machine at a time.

Time Out (second)

Defines the response time to flag the outstanding process as time out in seconds.

Log Line

Define the number of record lines to show in the log overview.

Clear Log

This function clears all logs from the log overview screen.

Hide Statistics

This function hides or shows the statistics per status listed below.

- **Records Approved**
Shows the total of records and amount for the approved records.
- **Records Declined**
Shows the total of records and amount for the declined records.
- **Records Time Out**
Shows the total of records and amount for the timed-out records.
- **Pending Outstanding Authorization**
Shows the total of records and amount for the pending authorizations records that are not able to process.

Cancel Request Tab

The Cancel Request tab list all pending status of the initial authorization, incremental, and settlement records are sent to OPI for approval.

Overview

All the pending status of initial authorization/ incremental/ Settlement records show in the grid, which consists of:

Table 3-7 - Pending Status

Column Name	Description
Cabin	Account cabin no.
First Name	Account First Name.
Last Name	Account Last Name.
Embarked	Account embarkation date
Sequence No.	The sequence number of the record
Auth. Amount	Authorization amount of the record
Current Action	Current action taking of the record
Card Expiry	Account credit card expiry date

Silent Mode

Enabling this mode allows record processing in the background. Updated records status will not show on the screen.

Start

This function commences the cancel request.

Time Out (second)

Defines the response time to flag the outstanding process as time out in seconds.

Log Line

This function lists the number of record lines to show in the log overview.

Clear Log

This function clears all logs from the log overview screen.

Hide Statistics

This function will hide or show the statistics panel on the right of the screen.

Tokenize Existing Credit Cards Tab

The Tokenize Existing Credit Cards tab lists all cards and changes the non-OPI token to OPI token. This feature duplicates the existing checked-in and future reservation cards before tokenizing the card. Before performing this step, you must ensure all invoice balances from the previous payment provider are settled. For checked-in reservations and if the credit card has been deactivated after a settlement, the system will re-activate the card based on the settlement history.

Overview

All cards shown in the grid consists of:

Table 3-8 - Pending Status

Column Name	Description
First Name	Account First Name.
Last Name	Account Last Name.
Sequence No.	The sequence number of the record
Card Status	Current card status, inactive
Current Action	Current action taking of the record
Card Expiry	Account credit card expiry date

Start

This function commences the tokenization process.

Time Out (second)

Defines the response time to flag the outstanding process as time out in seconds.

Log Line

This function lists the number of record lines to show in the log overview.

Clear Log

This function clears all logs from the log overview screen.

Transactions Overview Tab

The Transactions Overview tab lists all records filtered by the selected Transaction Type, Transaction Status, Transaction Dates and Account Type(s). The total number of

transaction records displayed is based on the value set in the parameter “**Number of Transaction per batch**”.

The fields shown in the Offline Token window is slightly different from the Initial Authorization, Incremental, and Settlement, as listed in Table 3-10 - Transaction Type(s) Initial Authorization/Incremental/ Settlement

Overview

All Transaction Type Offline Token shown in the grid consists of:

Table 3-9 – Transaction Type Offline Token

Column Name	Description
Sequence No.	The sequence number of the record.
First Name	Account First Name.
Last Name	Account Last Name.
Expire Date	Account credit card expiry date.
Card No	Credit Card No with masked value.
Card Status	Current card status, inactive
Reason	Card Non Approval Text
Transaction Date	Transaction Date
Account Type	Account Type (Crew, Staff, Guest, Group & System Account)

Account Type

Filter for the account type you wish to process.

Transaction Type

This function filters the transaction type to process – Offline Token, Initial Authorization, Incremental, or Settlement.

Transaction Status

Choose either one of the filter statuses to process - Timeout, Decline, Approved, or Pending authorization

Transaction Date

Filter the transactions by the selected date.

All Date

Retrieves all the transaction records without filtering the transaction modified date.

Page

This function navigates to the next/previous page of the records shown. You can also navigate to a specific page using the page number.

Filter

This function filters and populates the selected information on the screen when clicked.

All Transaction Type **Initial Authorization/Incremental/ Settlement** is shown in the grid consists of:

Table 3-10 - Transaction Type(s) Initial Authorization/Incremental/ Settlement

Column Name	Description
Sequence No.	The sequence number of the record.
Cabin No.	Reservation's Cabin Number.
First Name	Account First Name.
Last Name	Account Last Name.
Expire Date	Account credit card expiry date.
Card No	Credit Card No with masked value.
Card Status	Current card status, inactive
Amount	Credit Card Record Amount
Transaction Date	Transaction Date
Reason	Card Non Approval Text
Account Type	Account Type (Crew, Staff, Guest, Group & System Account)

Account Type

Filter for the account type you wish to process.

Transaction Type

This function filters the transaction type to process – Offline Token, Initial Authorization, Incremental, or Settlement.

Transaction Status

Choose either one of the filter statuses to process - Timeout, Decline, Approved, or Pending authorization.

Transaction Date

Filter the transaction by the selected date.

All Date

Retrieves all transaction records without filtering the transaction modified date.

Page

This function navigates to the next/previous page of the records shown. You can also navigate to a specific page using the page number

Filter

This function filters and populates the selected information on the screen when clicked.

Retry

This function sends a retry request for Initial Authorization with Time Out status for all active cards.

This section describes the steps and usage of OPI Handling in SPMS.

The behavior of OPI Handling is dependent on the Parameter defined.

You can perform the get credit card from these modules - OHC Management, OHC Crew or OHC Advance Quick Check-In (AQCI). You can also import the credit card data into SPMS using OHC DGS ResOnline and OHC Data Import.

Registering a Credit Card

When performing a get credit card, if Parameter '**Enable Multiple Credit Card**' is set to:

- **True:** the system will allow multiple active credit cards and a prompt dialogue box for you to select the invoice within the guest account;
- **False:** the system will deactivate an earlier registered card. Only the newly added card is set to active.

Upon successful registration of the card, it will perform an Initial Authorization. If a timeout happens during the initial authorization, OPI Manager will handle the registration based on the timeout value is set in the parameter '**OPI Daemon Timeout**', in seconds.

The value to obtain by the initial authorization is controlled by one of the following options in the parameter '**Initial Auth Formula**':

1. A fixed amount is set in Parameter '**Online Initial Auth Amount**'.
2. A fixed amount x by the number of days on board.
3. Amount defined in **Department Code Setup, Payment Details, Minimum Authorized Value**.

To speed up the check-in process, the initial authorization can be processed by OPI Manager by enabling/disabling the parameter '**Enable Online Initial Authorization**'. If the parameter is set to:

- **1:** The system sends an initial authorization request to OPI after receiving the credit card token;
- **0:** Initial Authorization processed by OPI Manager. A message 'Initial authorization will be processed by OPI Manager' is shown after receiving the credit card token.

The default value for this Parameter is = 1.

OHC Management/OHC Crew

1. Login to **OHC Management** or **OHC Crew** module and select **Guest** from the **Cashier Menu**.
2. Select a checked-in guest and click the **Get Credit Card** button located at the bottom of the screen.
3. The system prompts for a card to be swiped/insert. Swipe/insert the credit card through the card device.

-
4. Once the guest enters the credit card pin, the OPI Web API checks and authenticates the initial authorization at the same time, and stores the card information in the **Guest Handling, Credit Card tab**.
 5. After receiving a valid credit card token from OPI, the system will save the card details and set the card status to an 'Active' mode, regardless of the status of the initial authorization.

**NOTE:**

The system will not register the card if it is declined by the payment provider.

6. If the initial authorization is declined, the credit card status is in 'deactivate' mode.

OHC Advance Quick Check-In (AQCI)

The process to register a credit card in AQCI is relatively similar to the OHC Management module.

1. Login to the AQCI module and select the **Guest** option from the search function.
2. Select a guest from the list, and click the **Get Credit Card** button located at the top of the screen. You can also register the credit card from the **Check-In Wizard, Get Credit Card** function.
3. Swipe the credit card through the card device when prompt.
4. In Check In Wizard, once the guest enters the credit card pin, the OPI Web API checks and authenticates the initial authorization at the same time, and stores the card information in the **Guest Handling, Credit Card tab**.
5. Once the credit card is registered successfully and the initial authorization is either approved or outstanding, the Credit Card information populates in the credit card section as 'Active' status.

OHC DGS ResOnline

The majority of the reservation's information including the credit card information is imported through the OHC DGS ResOnline module. Initial authorization is triggered once the guest checks in.

OHC Data Import

You can import the Credit card information through the Data Import module, using a specific text file. For example, if you are importing credit card information, the text file should only contain the credit card information. The Initial authorization is triggered during the guest is checked-in at embarkation.

OHC WebServices

Reservations information including the credit card information is imported through the OHCWeb Services. The Initial authorization is triggered once the guest checks in. See the OHC Web Service Technical Specification for further details.

Deactivating a Credit card

In the event where the credit card is deactivated and no settlement history is found, the system performs a reversal on the authorization and releases the authorized amount held on the card.

If the initial authorization fails, the system deactivates the credit card.

If the multiple cards parameter is enabled, the system reassigns the invoice.

The system deactivates the credit card and releases the initial authorization amount when you change the payment method to cash in OHC Management, OHC Crew, and AQCI.

Credit Card Authorization Incremental

During posting, the system calculates the incremental amount based on the following four (4) formulas

- [Formula 1] Incremental = total invoice amount + (total invoice amount * top-up percentage).
- [Formula 2] Incremental = total invoice amount - (total initial authorization + total incremental).
- [Formula 3] Incremental = total invoice amount.
- [Formula 4] Incremental = total invoice amount - (total initial authorization + total incremental) + (total invoice amount * top-up percentage).

The following parameter plays a role in storing the formula number and the top-up percentage.

- Parameter '**Incremental Calculation Formula**' stores the formula number.
- Parameter '**Incremental Top Up Percentage**' stores the top-up percentage.

An incremental request is triggered based on the authorization amount. If the incremental amount is greater than the value defined in the parameter '**Online Incremental Limit**', the system performs an online incremental. Otherwise, OPI Manager performs this task from the Outstanding Process tab.

In the event a manual incremental request is necessary, the system will skip the incremental amount calculation and use the amount entered by the user as the incremental amount.

Viewing Authorization in OHC Management, OHC Crew, AQCI

1. Login to **OHC Management, OHC Crew, or AQCI** module and navigate to the **Guest Handling** screen.
2. At the **Search Panel**, browse for the guest account.
3. Go to the **Credit Card** tab of the guest account. The registered card should be in *Active* mode.
4. To display the initial authorization, select the credit card and click **View Authorization**.

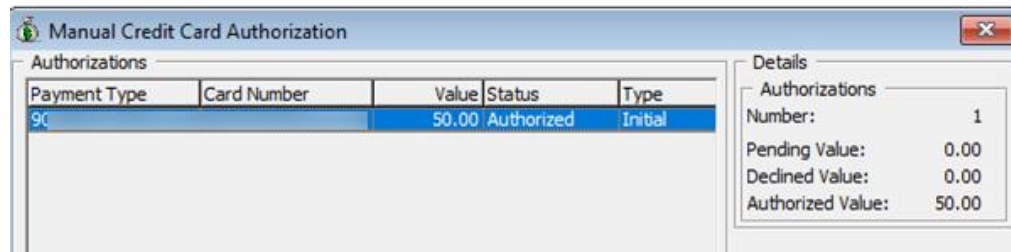


Figure 4-1 - Authorization Screen

Credit Card Settlement

During settlement, the system will first check if the total invoice amount is greater than the total authorization amount. If it is, it triggers an incremental authorization before proceeding to settlement.

If the parameter '**Enable Online Settlement**' is set to '1', incremental authorization is sent to OPI directly. Otherwise, it is processed by OPI Manager. When the invoice amount is lesser or equal to the total authorization, no incremental is required.

There are two (2) validations in OPI settlement to ensure:

- there is an active card in the guest account.
- no outstanding authorization for the card.

In the event a settlement transaction fails, the system will insert a negative posting to offset the credit amount and to ensure the invoice balance does not become "0" when the settlement fails.

On timeout, you will receive a dialogue prompt that either allow you to:

1. Choose an option to retry the transaction at OPI Manager.
2. Terminate the transaction.

If you choose option 1 and the answer is:

- **Yes** - OPI Manager terminates the retry and inserts a negative posting. Once the request is canceled successfully, you can then proceed to retry the settlement from OPI Manager\Batch Settlement. The number of retries follows the value in the parameter, '**Number of retry for Outstanding Incremental Process**'.
- **No** - the transaction will terminate with a negative posting inserted to offset the settlement transaction.

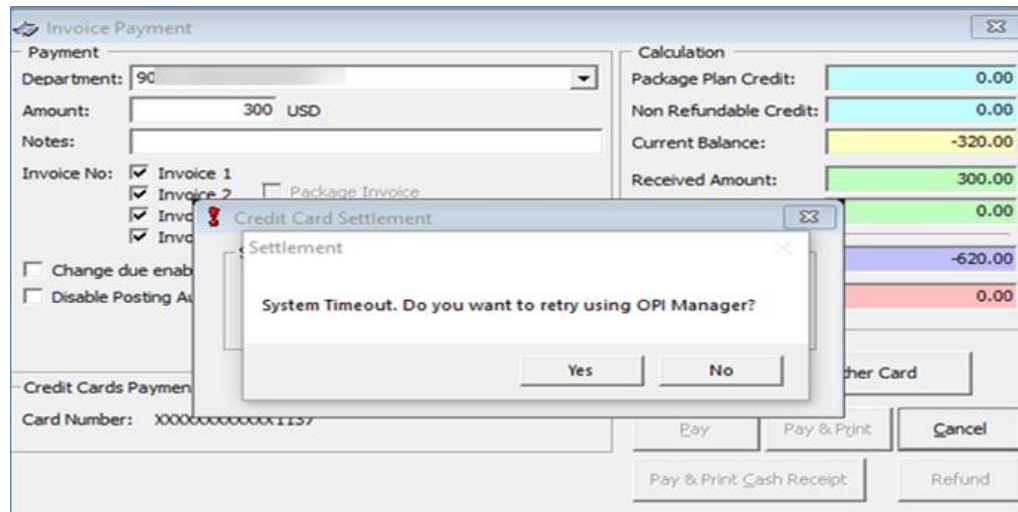


Figure 4-2 - System Timeout

Where you have the Parameter **“Enable Online Settlement”** is set to **“0”**, the system follows the above ‘Yes’ logic. When the SPMS client is not able to connect to OPI API or OPI Daemon, the system will delete the posting record so that the invoice value is not 0.

Quick Billing

The Quick Billing function allows you to balance the accounts in batches by selecting the payment method as criteria. For payment methods with credit cards, the system will integrate with OPI for credit card related transactions.

If the parameter **“Enable Online Settlement”** is set to **“1”**, the incremental authorization is sent to OPI directly; else it will be processed by OPI Manager.

For Online Settlement, if a connection error occurs at the OPI Daemon or Payment Provider, an alert message shall prompt for each transaction. You have the option to click the **Stop** or **Resume** button.

Credit Card Refund

In the event a credit card refund is necessary, you need to select the settlement record to perform the refund. This is to allow the system to send the refund with the initial authorization number it is linked to and enable the payment vendor to track from which settlement the refunded amount is linked. You can only perform the Credit Card Refund on settlements paid by credit card, and a credit card refund on a *voided* credit card settlement is not allowed.

If the parameter **'Credit Card Refund'** is set to:

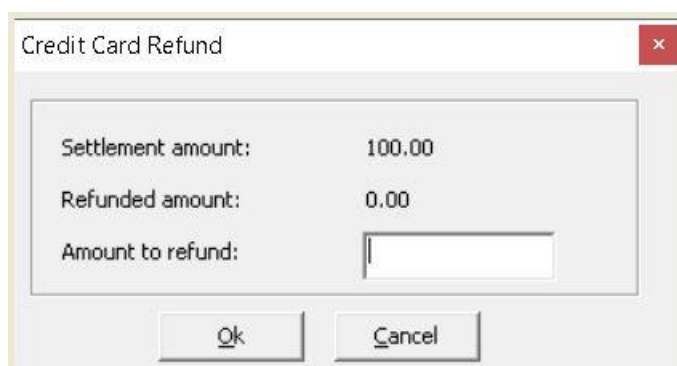
- **True:** Credit Card Refund Handling is enabled and the Credit Card Refund button is visible on the Invoice tab.
- **False:** Credit Card Refund Handling is disabled and the Credit Card Refund button is not visible on the Invoice tab.

OHC Management /OHC Crew

1. Login to **OHC Management** module.
2. At the **Cashier Menu**, select a checked-in guest that you wish to refund with a credit card payment.
3. Under the Invoice tab, click the **Credit Card Refund** button. This prompts the Credit Card Refund window, displaying **Settlement amount**, **Refunded amount** and **Amount to refund**.

NOTE:

- Settlement Amount: The selected settlement amount
- Refunded Amount: Total refunded amount for the selected settlement
- Amount To Refund: User input amount to refund



Settlement amount:	100.00
Refunded amount:	0.00
Amount to refund:	<input type="text"/>

Ok Cancel

Figure 4-3 – Credit Card Refund

4. Insert the value in **Amount to refund** and click the **OK** button to proceed. The sum of the **Refunded amount** and **Amount to refund** must not exceed the Settlement amount.
5. A success message is displayed when the credit card refund process is successful.
6. The refunded amount is reflected in the Invoice tab, Credit column as a negative amount.

Voiding a Settlement

In the event a void settlement is necessary, the system will post a negative amount upon pressing **Void**. You are not allowed to void a direct sales payment.

Credit Card Direct Sale

When performing a settlement in **OHC Management** or **OHC Crew**, you can choose to settle with the registered payment method, or use the **Pay With Other Card** option, also known as Direct Sales.

If you choose to settle using Direct Sales,

- You would require the guest to present their credit card.
- A new credit card record will be created with an inactive status.

-
- Direct Sales is always an online transaction, where it will connect to OPI Daemon to perform the full payment process with OPI.

In the event where you have to perform a refund,

- You need to first enter a negative value.
- The system will prompt for a credit card to be inserted before you are allowed to settle using the **Refund** option.

Deactivate Credit Card

When a credit card is deactivated and there is no settlement history found, the system will perform a reverse authorization to return the authorization amount to the card.

Gift Card Handling

The Gift Card feature enables you to register, redeem, void, reload and transfer balances of the gift card. These tasks are performed in OHC Management or OHC Crew module. The use of this function would require OPI version 20.3 and higher.

Registering a Gift Card

When registering a gift card, if the parameter '**Enable Multiple Credit Card**' is set to:

- **True or False:** the system will allow multiple active gift cards on all invoices within the guest account.
1. From the **OHC Management or OHC Crew** module, select **Guest** from the **Cashier Menu**.
 2. Select a checked-in guest and click the **Credit Card** tab.
 3. At the Rewards Card Panel, click the **Get Gift Card** button. This prompts the Inquire Gift Card Points window - 'Requesting gift card token' message.
 4. After receiving a valid gift card balance response from OPI, the system will save the gift card details and set the card status to an '**Active**' mode.
 5. Click the **View Card Transactions** button and the **Gift Card Authorization** dialogue box will display, where you can view the **Payment Type, Card Number, Value, Status, Type, Auth Date, Auth Code, Error Code** and **Comments** of selected Gift Card.



NOTE:

The system will not register the card if it is declined by the payment provider.

Redeeming a Gift Card

1. From the **OHC Management or OHC Crew module**, select the **Guest** from the **Cashier Menu**.
2. Ensure the invoice tab of the selected guest has a registered gift card.
3. Under the Rewards Card Panel, click the **Redeem** button. A dialogue box will prompt, displaying the **Current card balance, Current invoice outstanding** and **Amount to redeem**.
4. Enter a value in **Amount to redeem** and click **OK** to proceed.

-
5. You will receive a success message if the redemption is successful, and the amount redeemed is shown on the Invoice tab as a positive amount.
 6. Clicking the **View Card Transactions** button will display the **Gift Card Authorization** dialogue where you can view the **Payment Type, Card Number, Value, Status, Type, Auth Date, Auth Code, Error Code** and **Comments** of selected Gift Card.



NOTE:

The **Amount to redeem** field only accepts an amount more than 0, equal or less than the current invoice outstanding amount, equal or less than current card balance amount.

Voiding a Gift Card

The Gift Card Void allows you to reverse the redemption by posting a negative when you press the **Void** button.

1. From the OHC Management or OHC Crew module, select the **Guest** from the **Cashier Menu**.
2. Ensure the selected guest has a redeemed transaction and a registered gift card.
3. Under the Rewards Card Panel, click the **Void** button. A dialogue box shall prompt, displaying the **Current card balance, Total amount redeemed** and **Amount to void**.
4. Insert the value in **Amount to Void** and click the **OK** button to proceed.
5. A success message will display when the void is successful.
6. The **Void amount** shown in the Invoice tab is a negative amount.
7. Clicking the **View Card Transactions** button will display the **Gift Card Authorization** dialogue box, showing the **Payment Type, Card Number, Value, Status, Type, Auth Date, Auth Code, Error Code** and **Comments** of selected Gift Card.



NOTE:

The Amount to void field accepts amounts more than 0, equal to or less than the Total amount redeemed, or equal or less than the current card balance amount.

Reloading Gift Card

You can only reload the Gift Card when there is a credit amount in the account.

To perform a reload,

1. From the OHC Management or OHC Crew module, select the **Guest** from the **Cashier Menu**.
2. Under Rewards Card Panel, select the gift card and click the **Reload** button. A dialogue box shall appear, displaying **Current Card Balance** and **Amount To Reload**.
3. Enter the reload value in **Amount To Reload** and click **OK** to proceed.

-
4. A message will display when the reload transaction is successful and the **Reload Amount** shown in the Invoice tab is a credit amount.
 5. Clicking the **View Card Transactions** button opens the **Gift Card Authorization** dialogue box containing the following column; **Payment Type, Card Number, Value, Status, Type, Auth Date, Auth Code, Error Code** and **Comments** of selected Gift Card, with **Reload** indicated in the Type column.

Transferring Gift Card Balance

The Gift Card Transfer allows you to transfer the balance from one gift card to another gift card.

1. From the OHC Management or OHC Crew module, select the **Guest** from the **Cashier Menu**.
2. Ensure the selected guest has multiple gift cards registered.
3. Under Rewards Card Panel, select the gift card and click the **Transfer** button. A dialogue box shall prompt, displaying the From, To, and Amount To Transfer.
 - a. The field **From** displays Gift Card Number, Owner Name, and Current Balance the gift card user selects.
 - b. The **To** field consists of a drop-down list with active gift cards available.



NOTE:

You are not allowed to transfer a partial amount with Gift Card Transfer.

4. The field **Amount To Transfer** is disabled and displays the same amount as gift card balance amount.
5. Click **OK** to transfer from the old gift to the new card. A success message shall prompt. Clicking the **View Card Transactions** button will display the **Gift Card Authorization** dialogue box containing the following columns; **Payment Type, Card Number, Value, Status, Type, Auth Date, Auth Code, Error Code** and **Comments** of the selected Gift Card, with **Transfer** is indicated in the Type column.

5 Troubleshooting

This section describes the troubleshooting steps that will assist you in resolving the known errors with OPI Handling.

Known Error Messages

Table 5-1 - Known Error Messages

Error Message	Resolution
Web API: The card department XX didn't set up properly	Check the card type from OPI and ensure it is configured correctly in SPMS's administration module. XX = the card type defined by OPI
Web API: Unauthorized	Invalid login or web API token, re-login the program.
Web API: Internal server error	Please contact Oracle Support for assistance