

# Oracle® Retail EFTLink

## Validated OPI Partners Guide



Release 21.0

F61682-03

January 2023

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Retail EFTLink Validated OPI Partners Guide, Release 21.0

F61682-03

Copyright © 2023, Oracle and/or its affiliates.

Primary Author: Tracy Gunston

Contributors: Sean Hamill, Ian Williams

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

Send Us Your Comments

---

## Preface

---

Audience	vi
Related Documents	vi
Customer Support	vi
Review Patch Documentation	vii
Improved Process for Oracle Retail Documentation Corrections	vii
Oracle Retail Documentation at the Oracle Help Center	vii
Conventions	vii

## 1 Overview

---

## 2 ACI Worldwide, Inc.

---

## 3 Adyen

---

## 4 Aurus

---

## 5 Citcon

---

## 6 Eigen

---

## 7 Fiserv

---

8 Fortis

---

9 Planet Payment

---

10 Shift4 Payments, LLC

---

11 Software Express

---

# Send Us Your Comments

*Oracle® Retail EFTLink Validated OPI Partners Guide, Release 21.0.*

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).



## Note:

Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Help Center (OHC) website ([docs.oracle.com](https://docs.oracle.com)). It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: [retail-doc\\_us@oracle.com](mailto:retail-doc_us@oracle.com)

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our website at <http://www.oracle.com>.

# Preface

This guide serves as a best practice guide for ensuring secure operation of Oracle Retail EFTLink. Installation and configuration are covered in more detail in separate guides as listed in the Related Documents section below.

## Audience

This Installation Guide is for the following audiences:

- System administrators and operations personnel
- Database administrators
- System analysts and programmers
- Integrators and implementation staff personnel

## Related Documents

For more information, see the following documents in the Release 21.0 documentation set:

- *Oracle Retail EFTLink Release Notes*
- *Oracle Retail EFTLink Core Configuration Guide*
- *Oracle Retail EFTLink Framework Advanced Features Guide*
- *Oracle Retail EFTLink Framework Installation and Configuration Guide*
- *Oracle Retail EFTLink Security Guide*
- *Oracle Retail EFTLink Xstore Compatibility Guide*
- *Oracle Retail EFTLink Rest API Guide*
- *Oracle Retail EFTLink Validated Partners Guide*

## 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
- Screen shots of each step you take

## Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 210) or a later patch release (for example, 21.0.x). If you are installing the base release, additional patch, and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

## Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced at the Oracle Help Center (OHC) website ([docs.oracle.com](https://docs.oracle.com)), or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available at the Oracle Help Center at the following URL:

<https://docs.oracle.com/en/industries/retail/index.html>

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number F123456-02 is an updated version of a document with part number F123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

## Oracle Retail Documentation at the Oracle Help Center

Oracle Retail product documentation is available on the following website:

<https://docs.oracle.com/en/industries/retail/index.html>

(Data Model documents are not available through Oracle Help Center. You can obtain them through My Oracle Support.)

## Conventions

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.



# 1

## Overview

Oracle Payment Interface (OPI) is a payment card-processing interface that integrates with the Oracle Hospitality Point-of-Sale (POS), OPERA, Suite 8 (PMS) and Retail (POS) systems. It defines a standard interface that partner payment service providers can implement to provide credit card processing functionality to Oracle Hospitality OPERA, POS and also Oracle Retail Point of Sale (POS) Systems.

This guide provides information relating to the OPI transaction types for compatibility of Xstore and EFTLink for payment terminal functionality of each Oracle payment partner.

Where the Oracle payment partner does not support an OPI transaction type that is supported by Xstore and EFTLink, it will be left blank to show that there is a gap in that Oracle payment partner's solution. It will be up to the Oracle payment partner or system integrator to suppress that feature in Xstore to ensure that the transaction type is not executed to the point of failure.



### Note:

Although Oracle are validating the OPI transaction types, Oracle is not responsible for support, this is the responsibility of the Oracle payment partner solution providers. The customer or system integrator should always approach the Oracle payment partner in the first instance who should be able to understand and analyze EFTLink logs in order to determine whether the issue is with their solution or EFTLink. If a problem is found within EFTLink, then the system integrator should go through the standard Oracle support channel in order to facilitate a resolution.

The following Oracle payment partners are validated:

- [ACI Worldwide, Inc.](#)
- [Adyen](#)
- [Aurus](#)
- [Citcon](#)
- [Eigen](#)
- [Fiserv](#)
- [Fortis](#)
- [Planet Payment](#)
- [Shift4 Payments, LLC](#)
- [Software Express](#)

The table below represents the OPI Retail transaction processing messages which are referenced in the validation table for each Oracle payment partner:

**Table 1-1 OPI Retail Transaction Processing Messages**

Message Type	Transaction Type	Function Description
Sale/Purchase	01	Sale/Purchase
Refund	03	Refund
Manual Authorization	37	Manual Authorization
Sales Completion	07	Sales Completion
Void	08	Void
	39	Void of Refund
Reversal	04	Reversal
Trans Inq	20	Transaction Inquiry
Balance Inq	27	Balance Inquiry
Settlement	10	End-of-Day/Settlement
Gift/SVC	28	Gift/SVC Reload
	29	Gift/SVC Activate/Issue
	30	Gift/SVC Redeem
	31	Gift/SVC Void
	32	Gift/SVC Cashout (or Close Card)
ItemAdvice	43	Line Item Advice
Sale End	45	Sale End (Clear Terminal Screen)
Read Non-PCI Card	50	Request non-PCI card swipe
Check Authorization	51	Check (Cheque) Authorization
Void Check Authorization	52	Void Check Authorization
Cancel Current Transaction	53	Cancel current transaction
Get Agreement	60	Custom Forms - Get Agreement
Get Signature	61	Custom Forms - Get Signature
Get Numeric Field	62	Custom Forms - Get Numeric Field
Get AlphaNumeric Field	63	Custom Forms - Get AlphaNumeric Field
Get Date Field	64	Custom Forms - Get Date Field
Get Button Selection	65	Custom Forms - Get Button Selection
Get Radio Button Selection	66	Custom Forms - Get Radio Button Selection
Display Message	67	Custom Forms - Display Message
Display QR Code	68	Custom Forms - Display QR Code
Cancel QR Code	69	Custom Forms - Cancel QR Code
Card Acquisition	09	Card Acquisition (Pre-read)

# 2

## ACI Worldwide, Inc.

Operating Areas: US

### Supported Terminals

The following terminals are supported:

#### Ingenico Telium RBA

- iWL250
- iWL258
- iPP320
- iPP350
- iSC480
- iSC250
- iSMPc
- iSMP4
- iUP250

#### Ingenico Tetra UPP

- Lane7000
- Lane5000
- Move5000

#### Verifone MX 900 Series Form Agent / XPI

- Verifone MX 915
- Verifone MX 925

The following table provides information relating to the compatibility of Xstore, EFTLink and ACI Worldwide, Inc. for payment terminal functionality in the context of OPI transaction types.

**Table 2-1 ACI Worldwide, Inc.**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	ACI's Payment Solution- eSocket.POS - Release Version
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	2.8

Table 2-1 (Cont.) ACI Worldwide, Inc.

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	ACI's Payment Solution- eSocket.POS - Release Version
	Payment by Debit	01	15.0	17.0	2.8
	Manual Authorization	37, 07	-	17.0	2.8
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	2.8
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	2.8
Refund	Refund by Credit	03	15.0	17.0	2.8
	Refund by Debit	03	15.0	17.0	2.8
	Cardless Refund using Token	03	16.0	17.0	2.8
Reversal	Reversal of last transaction	04	15.0	17.0	2.8
	Reversal of last transaction within batch	08	15.0	17.0	2.8
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	2.8
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse >		16.0	17.0	2.8
Customer Display	Sale State Notification	43, 45	15.0	18.0	2.8
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	2.8
IP PED	Support for ethernet/ wireless connected PED device	-	NA	17.0	2.8
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	2.8
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	2.8
Abort	Abort in flight transaction	53	17.0	18.0	2.8
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	2.8
	Redeem Reversal	31	16.0	18.0	2.8

Table 2-1 (Cont.) ACI Worldwide, Inc.

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	ACI's Payment Solution- eSocket.POS - Release Version
	Cashback /Unload	32	16.0	18.0	2.8
	Load/Reload	28	16.0	18.0	2.8
	Refund	32	16.0	18.0	2.8
	Cash out (Close)	32	16.0.1	18.0	2.8
	Balance Inquiry	27	16.0	18.0	2.8
	Activate	29	16.0	18.0	2.8
	Activate and Load	29	16.0	18.0	2.8
	Activate Reversal	31	16.0	18.0	2.8
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	2.8
	Customer Question	60	*	18.0	2.8
	Phone Number Capture	62	*	18.0	2.8
	Email Address Capture	63	*	18.0	2.8
	Signature Capture	61	*	18.0	2.8
	Customer Buttons	65	*	18.0	2.8
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 3

## Adyen

Operating Areas: Europe, US, Canada, Brazil, Hong Kong, Singapore, Malaysia, Australia, New Zealand

### Supported Terminals

The following terminals are supported:

#### Verifone

- e285
- M400
- P400Plus
- V240m (Brazil only), V400m, V400cPlus

#### Castles

- Saturn 1000E

The following table provides information relating to the compatibility of Xstore, EFTLink and Adyen for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 3-1 Adyen**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Adyen VOS Firmware
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	1.XX
	Payment by Debit	01	15.0	17.0	1.XX
	Manual Authorization	37, 07	-	17.0	-
	Installments	01		19.0.1	1.XX
	Partial Authorization	01		17.0	-

Table 3-1 (Cont.) Adyen

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Adyen VOS Firmware
	eWallet Shopper initiated on PED - EWallet button pressed on PED (Flow 1).	01		19.0	1.XX
	eWallet Cashier initiated with EWallet tender — QR code displayed on PED (Flow 2).	01		19.0	1.XX
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	1.XX
	Refund by Debit	03	15.0	17.0	1.XX
	Cardless Refund using OriginalRRN	03	16.0	17.0	1.XX
	Cardless Refund using TransToken	03	16.0	19.0.1	1.XX
Reversal	Reversal of last transaction	04	15.0	17.0	1.XX
	Reversal of a transaction within batch <sup>+</sup>	08	15.0	17.0	1.XX
	Reversal of a refund transaction within a batch <sup>**</sup>	39	15.0	17.0	-
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	1.XX
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	1.XX

Table 3-1 (Cont.) Adyen

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Adyen VOS Firmware
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	1.XX
Transaction Inquiry	Time out handling	20	-	17.0	1.XX
Abort	Abort in flight transaction	53	17.0	18.0	1.XX
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	1.XX
	Redeem Reversal	31	16.0	18.0	1.XX
	Cashback /Unload	32	16.0	18.0	1.XX
	Load/Reload	28	16.0	18.0	1.XX
	Refund	32	16.0	18.0	1.XX
	Cash out (Close)	32	16.0.1	18.0	1.XX
	Balance Inquiry	27	16.0	18.0	1.XX
	Activate	29	16.0	18.0	1.XX
	Activate and Load	29	16.0	18.0	1.XX
	Activate Reversal	31	16.0	18.0	1.XX
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Card Acquisition	Card Acquisition (Pre-read)	09	-	19.0.1	1.XX
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	1.XX
	Phone Number Capture	62	*	18.0	1.XX
	Email Address Capture	63	*	18.0	1.XX
	Signature Capture	61	*	18.0	1.XX
	Customer Buttons	65	*	18.0	1.XX
	Display QR Code	68	*	18.0	1.XX
	Cancel QR Code	69	*	18.0	1.XX

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.



+ Adyen do not currently support receipts for void transactions. This is acceptable as all receipts OPIRetail receive are pre-certified.

\*\* Adyen do not currently support refund reversal transactions due to the nature of their asynchronous platform. Xstore will send the directive to perform a refund reversal. This is a note to warn that this will always fail in the OPI integration with Adyen.

# 4

## Aurus

Operating Areas: United States, Canada, Mexico, Puerto Rico, Austria, Belgium, Czech Republic, Denmark, Finland, France, Iceland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United Kingdom, Ireland, China\*, Hong Kong\*, India

\* China and Hong Kong are restricted to EWallet tender options.

### Supported Terminals

The following terminals are supported:

#### Verifone

- CM5
- e265, e265G
- e280, e280s
- e285
- e315, e315M
- e355
- M400, M424, M440
- MX915, MX925, MX915 ECR, MX915 ECR-C
- P400, P400 Plus, P400 DMSR
- T650c, T650p
- UX100, UX400, UX300
- V400m

#### Ingenico

- Desk1500, Desk3500, Desk5000
- DX8000, EX8000, AXIUM EX6000
- iPP350
- iSC250, iSC Touch 250
- iSC480, iSC Touch 480
- iSMP4
- IUC250, IUC285, IUP250, IUR250
- Lane3000, Lane3600, Lane5000, Lane7000, Lane8000
- Link2500, Link2500i
- Move2500, Move3500, Move5000
- Self2000, Self4000, Self5000

## Equinox

- Luxe 8500i
- Luxe 6200m

The following table provides information relating to the compatibility of Xstore, EFTLink and Aurus for payment terminal functionality in the context of OPI transaction types.



### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 4-1 Aurus**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	AurusShield Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	v2x.xxx
	Payment by Debit	01	15.0	17.0	v2x.xxx
	Manual Authorization	37, 07	-	17.0	v2x.xxx
	Instalments	01	-	19.0	-
	eWallet Cashier initiated with EWallet tender - ScanQR code displayed on shopper's phone (Flow 3).	01	-	19.0	v2x.xxx
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	v2x.xxx
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	v2x.xxx
Refund	Refund by Credit	03	15.0	17.0	v2x.xxx
	Refund by Debit	03	15.0	17.0	v2x.xxx
	Cardless Refund using Token	03	16.0	17.0	v2x.xxx
Reversal	Reversal of last transaction	04	15.0	17.0	v2x.xxx
	Reversal of last transaction within batch	08	15.0	17.0	v2x.xxx

Table 4-1 (Cont.) Aurus

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	AurusShield Software
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	v2x.xxx
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	v2x.xxx
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	v2x.xxx
IP PED	Support for ethernet/ wireless connected PED device	-	NA	17.0	v2x.xxx
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	v2x.xxx
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	v2x.xxx
Abort	Abort in flight transaction	53	17.0	18.0	v2x.xxx
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	v2x.xxx
	Redeem Reversal	31	16.0	18.0	v2x.xxx
	Cashback /Unload	32	16.0	18.0	v2x.xxx
	Load/Reload	28	16.0	18.0	v2x.xxx
	Refund	32	16.0	18.0	v2x.xxx
	Cash out (Close)	32	16.0.1	18.0	v2x.xxx
	Balance Inquiry	27	16.0	18.0	v2x.xxx
	Activate	29	16.0	18.0	v2x.xxx
	Activate and Load	29	16.0	18.0	v2x.xxx
	Activate Reversal	31	16.0	18.0	v2x.xxx
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-

Table 4-1 (Cont.) Aurus

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	AurusShield Software
Custom Forms	Terminal Display	67	*	18.0	v2x.xxx
	Customer Question	60	*	18.0	v2x.xxx
	Phone Number Capture	62	*	18.0	v2x.xxx
	Email Address Capture	63	*	18.0	v2x.xxx
	Signature Capture	61	*	18.0	v2x.xxx
	Customer Buttons	65	*	18.0	v2x.xxx
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 5

## Citcon

Operating Areas: US, Canada, UK, EU, Australia, New Zealand, Japan, Korea, Mainland China, Hong Kong, Taiwan and Singapore.

### Supported Terminals

The following terminals are supported:

- Consumer devices

The following table provides information relating to the compatibility of Xstore, EFTLink and Citcon for EWallet functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

Please also note that where there is no version for Citcon it means that they do not support that OPI feature.

**Table 5-1 Citcon**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Citcon Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Payment	Payment by Credit	01	15.0	17.0	
	Payment by Debit	01	15.0	17.0	
	Payment by EWallet Cashier initiated with EWallet tender - Scan QR code displayed on shopper's phone (Flow 3)	01	19.0	19.0	v1.XX
	Manual Authorization	37, 07	-	17.0	
	Installments	01		19.0	-

Table 5-1 (Cont.) Citcon

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Citcon Software
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	
Refund	Refund by Credit	03	15.0	17.0	
	Refund by Debit	03	15.0	17.0	
	Refund by EWallet <sup>+</sup>	03	19.0	19.0	v1.XX
	Cardless Refund using OriginalRRN	03	16.0	17.0	
Reversal	Reversal of last transaction	04	15.0	17.0	
	Reversal of last transaction within batch	08	15.0	17.0	
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse >		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	
IP PED	Support for ethernet/ wireless connected PED device	-	NA	17.0	
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	
Abort	Abort in flight transaction	53	17.0	18.0	
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	
	Redeem Reversal	31	16.0	18.0	
	Cashback /Unload	32	16.0	18.0	

Table 5-1 (Cont.) Citcon

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Citcon Software
	Load/Reload	28	16.0	18.0	
	Refund	32	16.0	18.0	
	Cash out (Close)	32	16.0.1	18.0	
	Balance Inquiry	27	16.0	18.0	
	Activate	29	16.0	18.0	
	Activate and Load	29	16.0	18.0	
	Activate Reversal	31	16.0	18.0	
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	
	Customer Question	60	*	18.0	
	Phone Number Capture	62	*	18.0	
	Email Address Capture	63	*	18.0	
	Signature Capture	61	*	18.0	
	Customer Buttons	65	*	18.0	
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

+ Denotes that for EWallet transactions only a verified refund can be performed at the POS. This is where Xstore will pass back the RRN to Citcon so they can reference the original payment.



 **Note:**

Citcon have not implemented the transaction inquiry to support the timeout reversal logic. Citcon are taking control of this scenario within their solution and therefore accept any reconciliation issues which may occur in the event they are not able to reverse a transaction as a result of a communications issue with their host.

Citcon do not support void of a payment or void of a refund transaction. The expectation is that a payment can only be reversed by a refund transaction.

# 6 Eigen

Operating Areas: USA, Canada, Puerto Rico.

## Supported Terminals

The following terminals are supported:

### Verifone

- e280, e355
- M400, Mx915, Mx925
- P400
- V400C, Vx805, Vx820

### Ingenico

- iCT250
- Lane 3000, Lane 5000

The following table provides information relating to the compatibility of Xstore, EFTLink and Eigen for payment terminal functionality in the context of OPI transaction types.



### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 6-1 Eigen**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	MiraServ Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	v6.94x
	Payment by Debit	01	15.0	17.0	v6.94x
	Manual Authorization	37, 07	-	17.0	v6.94x
	Instalments	01	-	19.0	-

Table 6-1 (Cont.) Eigen

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	MiraServ Software
	eWallet Shopper initiated on PED-EWallet button pressed on PED (Flow 1).	01	-	19.0	v6.94x
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	v6.94x
	Refund by Debit	03	15.0	17.0	v6.94x
	Cardless Refund using Token	03	16.0	17.0	v6.94x
Reversal	Reversal of last transaction	04	15.0	17.0	v6.94x
	Reversal of last transaction within batch	08	15.0	17.0	v6.94x
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
IP PED	Support for ethernet/wireless connected PED device	-	NA	17.0	v6.94x
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	-
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	v6.94x
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	v6.94x
	Redeem Reversal	31	16.0	18.0	v6.94x
	Cashback /Unload	32	16.0	18.0	v6.94x
	Load/Reload	28	16.0	18.0	v6.94x

Table 6-1 (Cont.) Eigen

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	MiraServ Software
	Refund	32	16.0	18.0	v6.94x
	Cash out (Close)	32	16.0.1	18.0	v6.94x
	Balance Inquiry	27	16.0	18.0	v6.94x
	Activate	29	16.0	18.0	v6.94x
	Activate and Load	29	16.0	18.0	v6.94x
	Activate Reversal	31	16.0	18.0	v6.94x
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	-
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 7

## Fiserv

Operating Areas: Hong Kong, Singapore, Malaysia, Macau, India, Philippines, Australia, Japan, Taiwan, and Korea.

### Supported Terminals

The following terminals are supported:

#### Ingenico

- **Move5000** FDMS 1.38

#### PAX

- Android platform terminals series: A920, IM30, A50, (All models running the same Android application)

FDMS Base24 A920 1.00.01\_20211214

The following table provides information relating to the compatibility of Xstore, EFTLink and Fiserv for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 7-1 Fiserv**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	FiServ OCEAN ONLINE Version
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	7.X
	Payment by Debit	01	15.0	17.0	7.X
	Manual Authorization	37, 07	-	17.0	-
	Instalments	01	-	19.0	-
	eWallet	01	-	19.0	-
	Shopper initiated on PED- EWallet button pressed on PED (Flow 1).				

Table 7-1 (Cont.) Fiserv

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	FiServ OCEAN ONLINE Version
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	7.X
	Refund by Debit	03	15.0	17.0	-
	Cardless Refund using Token	03	16.0	17.0	7.X
Reversal	Reversal of last transaction	04	15.0	17.0	7.X
	Reversal of last transaction within batch	08	15.0	17.0	7.X
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
IP PED	Support for ethernet/wireless connected PED device	-	NA	17.0	7.X
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	-
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	7.X
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	-
	Redeem Reversal	31	16.0	18.0	-
	Cashback /Unload	32	16.0	18.0	-
	Load/Reload	28	16.0	18.0	-
	Refund	32	16.0	18.0	-
	Cash out (Close)	32	16.0.1	18.0	-

Table 7-1 (Cont.) Fiserv

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	FiServ OCEAN ONLINE Version
	Balance Inquiry	27	16.0	18.0	-
	Activate	29	16.0	18.0	-
	Activate and Load	29	16.0	18.0	-
	Activate Reversal	31	16.0	18.0	-
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	-
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 8

## Fortis

Operating Areas: USA, Canada.

### Supported Terminals

The following terminals are supported:

#### Ingenico

- iPP 320, iPP 350
- iSC Touch 250, iSC Touch 480
- iWL 228, iWL 258
- Lane 3000, Lane 5000, Lane 7000, Lane 8000
- Link 3500
- Move 5000

The following table provides information relating to the compatibility of Xstore, EFTLink and Fortis for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 8-1 Fortis**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Fortispa y Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	v2X.XXX
	Payment by Debit	01	15.0	17.0	v2X.XXX
	Manual Authorization	37, 07	-	17.0	v2X.XXX
	Instalments	01	-	19.0	-



Table 8-1 (Cont.) Fortis

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Fortispany Software
	eWallet Shopper initiated on PED-EWallet button pressed on PED (Flow 1).	01	-	19.0	v2X.XXX
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	v2X.XXX
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	v2X.XXX
Refund	Refund by Credit	03	15.0	17.0	v2X.XXX
	Refund by Debit	03	15.0	17.0	v2X.XXX
	Cardless Refund using Token	03	16.0	17.0	v2X.XXX
Reversal	Reversal of last transaction	04	15.0	17.0	v2X.XXX
	Reversal of last transaction within batch	08	15.0	17.0	v2X.XXX
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
IP PED	Support for ethernet/wireless connected PED device	-	NA	17.0	v2X.XXX
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	v2X.XXX
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	v2X.XXX
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	-
	Redeem Reversal	31	16.0	18.0	-
	Cashback /Unload	32	16.0	18.0	-
	Load/Reload	28	16.0	18.0	-

Table 8-1 (Cont.) Fortis

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Fortispany Software
	Refund	32	16.0	18.0	-
	Cash out (Close)	32	16.0.1	18.0	-
	Balance Inquiry	27	16.0	18.0	-
	Activate	29	16.0	18.0	-
	Activate and Load	29	16.0	18.0	-
	Activate Reversal	31	16.0	18.0	-
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	v2X.XXX
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	v2X.XXX
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 9

## Planet Payment

Operating Areas: Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Guadalupe, Greece, Hong Kong, Croatia, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Martinique, Malta, Mexico, Netherlands, Norway, Poland, Puerto Rico, Portugal, Qatar, Romania, Slovenia, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States, United Arab Emirates, Virgin Islands

### Supported Terminals

The following terminals are supported:

#### Ingenico

- Desk5000
- Lane 3000
- Move2500, Move5000

#### PAX

- A30, A35
- A77
- A80
- A920, A920 Pro
- IM30

#### Verifone

- e355
- P400

#### Worldline

- Valina
- Yomani
- Yoximo

The following table provides information relating to the compatibility of Xstore, EFTLink and Planet for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

Table 9-1 Planet

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Planet Integra Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	v1.0.5.18
	Payment by Debit	01	15.0	17.0	v1.0.5.18
	Manual Authorization	37, 07	-	17.0	v1.0.5.18
	Instalments	01	-	19.0	-
	eWallet Shopper initiated on PED-EWallet button pressed on PED (Flow 1).	01	-	19.0	v1.0.5.18
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	v1.0.5.18
	Refund by Debit	03	15.0	17.0	v1.0.5.18
	Cardless Refund using Token	03	16.0	17.0	v1.0.5.18
Reversal	Reversal of last transaction	04	15.0	17.0	v1.0.5.18
	Reversal of last transaction within batch	08	15.0	17.0	v1.0.5.18
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	v1.0.5.18
IP PED	Support for ethernet/ wireless connected PED device	-	NA	17.0	v1.0.5.18

Table 9-1 (Cont.) Planet

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Planet Integra Software
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	v1.0.5.18
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	-
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	-
	Redeem Reversal	31	16.0	18.0	-
	Cashback /Unload	32	16.0	18.0	-
	Load/Reload	28	16.0	18.0	-
	Refund	32	16.0	18.0	-
	Cash out (Close)	32	16.0.1	18.0	-
	Balance Inquiry	27	16.0	18.0	-
	Activate	29	16.0	18.0	-
	Activate and Load	29	16.0	18.0	-
	Activate Reversal	31	16.0	18.0	-
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	v1.0.5.18
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	-
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	v1.0.5.18
	Cancel QR Code	69	*	18.0	v1.0.5.18

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

# 10

## Shift4 Payments, LLC

Operating Areas: United States, Canada

### Supported Terminals

The following terminals are supported:

- Verifone MX915
- Verifone MX925
- Ingenico (all attended Tetra models)
- Ingenico (all attended Telium Models)

The following table provides information relating to the compatibility of Xstore, EFTLink and Shift4 Payments, LLC for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

**Table 10-1 Shift4 Payments, LLC**

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Shift4 Payments LLC Universal Transaction Gateway (UTG)
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	5.0.0.3024
	Payment by Debit	01	15.0	17.0	5.0.0.3024
	Manual Authorization	37, 07	-	17.0	5.0.0.3024
	Instalments	01		19.0	-
	Partial Authorization	01		17.0	5.0.0.3024
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Transaction Inquiry	Timeout Handling**	20	-	17.0	5.0.0.3024

Table 10-1 (Cont.) Shift4 Payments, LLC

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Shift4 Payments LLC Universal Transaction Gateway (UTG)
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	5.0.0.3024
	Refund by Debit	03	15.0	17.0	5.0.0.3024
	Cardless Refund using Token	03	16.0	17.0	5.0.0.3024
Reversal	Reversal of last transaction	04	15.0	17.0	-
	Reversal of transaction within batch	08	15.0	17.0	5.0.0.3024
	Reversal of refund transaction within batch	39	15.0	17.0	5.0.0.3024
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code  Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	5.0.0.3024
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	-
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	-
	Redeem Reversal	31	16.0	18.0	-
	Cashback /Unload	32	16.0	18.0	-
	Load/Reload	28	16.0	18.0	-
	Refund	32	16.0	18.0	-
	Cash out (Close)	32	16.0.1	18.0	-
	Balance Inquiry	27	16.0	18.0	-
	Activate	29	16.0	18.0	-
	Activate and Load	29	16.0	18.0	-
	Activate Reversal	31	16.0	18.0	-

Table 10-1 (Cont.) Shift4 Payments, LLC

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Shift4 Payments LLC Universal Transaction Gateway (UTG)
Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0	-
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	-
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.

\*\* Time out handling - The UTG time out setting will always be set to a value less than the OPIRetail setting which means OPIRetail will always get a response from the UTG. Therefore in production UTG will return one of the following response codes to OPIRetail:

90 - Cutoff In Progress

91 - Host or Switch Unavailable, Card Issuer Signed Off, Card Issuer Timed Out, Card Issuer Unavailable

92 - Unable to Route Transaction

The standard behavior for UTG would be to expect a transaction inquiry [Type 20] message but OPI Retail will treat these response codes as a decline in line with the OPI Specification. It has been agreed with Oracle Retail and Shift4 Payments LLC that Shift4 Payments LLC will be responsible for voiding the transaction in this scenario. This means the UTG will send a void for the payment. Shift4 Payments LLC provided evidence to support that this void is executed. This was enough to convince Oracle Retail that it would not be possible to see a double charge scenario for those decline reason codes.



# 11

## Software Express

Operating Areas: Brazil, Mexico, Argentina and Venezuela.

### Supported Terminals

The following terminals are supported:

#### Verifone

- C680
- P200
- VX680, VX690, VX820

#### Ingenico

- iCMP122
- iPP320, iPP350
- Lane300
- Link2500

#### Gertec

- PPC900, PPC910, PPC920, PPC930
- MP5, MP10

#### PAX

- D175, D180, D195, D200
- S300

#### Newland

- ME30S

The following table provides information relating to the compatibility of Xstore, EFTLink and Software Express for payment terminal functionality in the context of OPI transaction types.



#### Note:

Where there is no version noted for Xstore it implies that the functionality is driven by EFTLink and the OPI Retail Core. Xstore is not required to implement any additional API feature.

Table 11-1 Software Express

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Software Express Software
Sign On		-	15.0	-	-
Sign Off		-	15.0	-	-
Card Payment	Payment by Credit	01	15.0	17.0	v1.0.0
	Payment by Debit	01	15.0	17.0	v1.0.0
	Manual Authorization	37, 07	-	17.0	-
	Installments	01		19.0	v1.0.0
	eWallet Shopper initiated on PED - EWallet button pressed on PED (Flow 1).	01		19.0	-
Cashback	Cashback prompted on PED, return amount to POS	01	15.0	-	-
Check Payment / Check Verification	Payment by Check	51	17.0	18.0	-
Refund	Refund by Credit	03	15.0	17.0	-
	Refund by Debit	03	15.0	17.0	-
	Cardless Refund using Token	03	16.0	17.0	-
Reversal	Reversal of last transaction	04	15.0	17.0	v1.0.0
	Reversal of a transaction within batch	08	15.0	17.0	v1.0.0
DCC (currency conversion)	Foreign exchange tender amount, rate, currency code Functionality that is driven through the Core plugin by virtue of the <DeviceRequest> / <DeviceResponse> API	01, 03, 07, 20	17.0	18.0	-
Combined EFT/Tax Receipts	Defer customer copy to <CardServiceResponse>		16.0	17.0	-

Table 11-1 (Cont.) Software Express

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Software Express Software
Customer Display	Sale State Notification	43, 45	15.0	18.0	-
Card Swipe - non PCI Cards	Get card data	50	15.0	18.0	-
IP PED	Support for ethernet/wireless connected PED device	-	NA	17.0	v1.0.0
Customer Not Present	CVV2 / AVS / partial entry on PED	01	17.0	17.0	-
Electronic Signature Capture	3 byte ASCII (3BA)	01	15.0	18.0	-
Abort	Abort in flight transaction	53	17.0	18.0	-
Stored Value Cards (Gift Cards)	Redeem	30	16.0	18.0	-
	Redeem Reversal	31	16.0	18.0	-
	Cashback /Unload	32	16.0	18.0	-
	Load/Reload	28	16.0	18.0	-
	Refund	32	16.0	18.0	-
	Cash out (Close)	32	16.0.1	18.0	-
	Balance Inquiry	27	16.0	18.0	-
	Activate	29	16.0	18.0	-
Stored Value Cards (Gift Cards)	Activate and Load	29	16.0	18.0	-
	Activate Reversal	31	16.0	18.0	-
	Reconciliation	Reconciliation with Closure functionality that is typically available via the hardware maintenance menu on the Xstore POS client, that is, uses the <ServiceRequest> / <ServiceResponse> API	10	15.0	17.0
Custom Forms	Terminal Display	67	*	18.0	-
	Customer Question	60	*	18.0	-
	Phone Number Capture	62	*	18.0	-

Table 11-1 (Cont.) Software Express

Payment Terminal Function	Subtype	Oracle Payment Interface Retail Transaction Type	Xstore Release Version	EFTLink OPI Retail Core Release Version	Software Express Software
	Email Address Capture	63	*	18.0	-
	Signature Capture	61	*	18.0	-
	Customer Buttons	65	*	18.0	-
	Display QR Code	68	*	18.0	-
	Cancel QR Code	69	*	18.0	-

\* Denotes that the system integrator would have to implement this functionality in the Xstore custom overlay.