



Confidential and Proprietary

Apriva Integration Guide

March 2018

V1.0.9



INTRODUCTION

The following document is a reference guide to assist integrators in determining which Apriva solution will best meet their payment needs. Apriva has proven solutions in:

- Retail
- Restaurant
- Unattended Retail
 - Vending
 - Parking
 - Kiosk
 - Micro Markets
- Mobile POS (Merchant solutions)
- Card Not Present (CNP) Mobile (Consumer facing)

General functionality supported by Apriva solutions:

- Tipping
- Partial Approvals
- Tax Exempt (Commercial Card Processing)
- Address Verification
- CVV Verification

		Payment Environment						
		Stand Alone	PC POS (Integrated)	Cloud POS (Integrated)	Server to Server	Mobile	Vending	Unattended
Solution	PAX	Page 3	Page 3	Page 3		Page 3		
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PAX TECHNOLOGIES

PAX Technologies provides Apriva with many point of sale terminals for attended merchant solutions, such as retail and restaurants.

PAX Solutions:

- Hardware
 - S90: Stand-alone application which communicates to the host via CDMA or GPRS
 - S80: Standalone application which communicates to the host via Ethernet
 - S300: Semi Integrated hardware which communicates to the host via Ethernet. POS Software can communicate to the unit via Ethernet, serial or USB. Features include Multi-lane, contactless, e-signature, and EMV L1 & L2 certified.
 - D210 Semi integrated hardware which communicates to the host via Wi-Fi. PC based POS software can communicate to the unit via Ethernet or Bluetooth. Features include contactless and EMV L1 & L2 certified.
- Semi integrated - PAX Terminals can communicate with PC or mobile POS via HTTP or HTTPS to an IP on local network. It is recommended to issue the PAX terminal a local IP so that configuration does not need to change. This solution also allows merchants to have multiple tables available with PAX terminals at fixed locations. So, if for example a retail store equips their sales people with tablets they can easily ring up the customer and choose to process the payment on the nearest available PAX terminal.
- PAX terminals supports Ethernet communication via socket connections on local network. Point of sale may talk to the unit via TCP only, without utilizing HTTP.
- If an integrator has a native POS application the semi integrated PAX can be connected via serial to the cash register. This can be more efficient than an Ethernet addressable terminal and allows for successful processing even if the network goes offline and forwarding is enabled.
- Supported Transactions
 - Credit: Sale, Pre-Auth, Post-Auth, Refund, Void, Adjust, Balance Inquiry
 - Debit: Sale, Refund, Balance Inquiry
 - EBT: Food Stamp Sale, Refund and Balance Inquire. Voucher Sale and Refund. Cash Benefit Sale and Balance Inquiry.
 - Stored Value: Redemption(+Void), Pre-Auth, Post-Auth(+Void), Balance Inquiry, Activation, Block Activation, Re-Activation, Issue, Issue Virtual, Add Value(+Void), Return, Balance merge(+Void), cash-out(+Void), deactivation(+Void), force redemption, force add value
 - Loyalty: Add Value, Balance Inquiry, Redemption, Replacement, Issue, Deactivation, void
- Application Features:
 - Touch Screen for signature capture
 - Contactless
 - E2E Encryption with 3DES DUKPT
 - Store and Forward
 - Multi-lane



- Card Bin Range White list for customer gift card processing
- Tips
- Integrated PIN pad
- AVS and CVV2

INGENICO

Ingenico provides Apriva with several attended solutions.

Ingenico Solutions:

- Hardware
 - IWL 250: Standalone terminal, GPRS to the host with integrated printer
 - ICT 220 & ICT 250: Standalone or Semi Integrated. Ethernet to the host with Integrated printer
 - IPP 220 & IPP 250: Semi integrated, Ethernet without printer (Not Yet Available)
 - IWL 222 & IWL 252: Semi integrated, Bluetooth to base station. Base station works via Ethernet and has an integrated printer (Not Yet Available)
- Semi integrated – ICT 220, IPP 200, IPP 250, IWL 222, and IWL 252 can communicate with native POS application via Ethernet, serial or USB. For example, terminal can be connected to PC based POS or cash register via serial. This can be more efficient than an Ethernet addressable device and if store When store and forward is enabled it allows for successful processing even if the network goes offline.
- For Semi Integrated, Ingenico supports Ethernet communication via socket connections on the local network. This protocol is not HTTP based so native application work best.
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth, Refund, Void, Adjust, Balance Inquiry
 - Debit: Sale, Refund, Balance Inquiry
 - EBT: Food Stamp Sale, Refund and Balance Inquire. Voucher Sale and Refund. Cash Benefit Sale and Balance Inquiry.
 - Cash Recording: Sale, Refund, Void
- Application Features:
 - Contactless
 - Store and Forward
 - Tips
 - Integrated PIN pad
 - AVS and CVV2
 - Multi-merchant (Standalone only)

VERIFONE

VeriFone provides Apriva with two stand-alone attended solutions.

Verifone Solutions:

- Hardware
 - Vx520
 - Vx680
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth, Refund, Void, Adjust, Balance Inquiry
 - Debit: Sale, Refund, Balance Inquiry
 - EBT: Food Stamp Sale, Refund and Balance Inquire. Voucher Sale and Refund. Cash Benefit Sale and Balance Inquiry.
 - Stored Value: Redemption(+Void), Pre-Auth, Post-Auth(+Void), Balance Inquiry, Activation, Block Activation, Re-Activation, Issue, Issue Virtual, Add Value(+Void), Return, Balance merge(+Void), cash-out(+Void), deactivation(+Void), force redemption, force add value

GLOBALCOM

Globalcom provides Apriva with an unattended solution, designed for outdoor sales such as parking, petroleum and car wash. Communication with the unit is via APIs which allows for global support via a basic control board or a standard operating system.

Globalcom Solutions:

- Hardware
 - BV1000: Master MSR and Chip Reader with optional Pin Pad and Contactless slaves. Ethernet or MUX Communication to host available.
 - Contactless: Contactless only unit. Ethernet or MUX Communication to host available.
 - Pin Pad: Debit or Credit Pin Entry
- Semi-integrated - Hardware is triggered via an API.
- Device supports Ethernet connectivity direct from the unit.
- In solar integrations, the device can be configured for MUX when low power and a modem can be used. MUX allows the calling application to proxy the messages between the unit and the Apriva Gateway.
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth
- Application Features
 - Card in out (Unit creates a token of the card for identification at another time)
 - End to End encryption enabled with triple DES DUKPT.
 - Card Bin Range White list for customer gift card processing

OTI

OTI provides Apriva with an unattended solution, designed for markets such as kiosk, car wash, micro markets, and laundry. Linux and Windows Semi-integrated SDK available with API and payment application. SDK allows for easy integration to the existing unattended environment.

OTI Solutions:

- Hardware
 - UNO: Contactless only unit.
 - DUO: Contactless and swipe unit
 - TRIO: Contactless, swipe and EMV Contact
 - Connect 3K: Modem telemetry unit
- Semi-integrated unit that is triggered via an SDK residing on the integrators hardware. Supported operating systems are Windows and Linux running MONO.
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth, Refund
- Application Features:
 - End to End encryption enabled with triple DES DUKPT.

CRANE PAYMENT INNOVATIONS (MEI/CPI)

CPI provides Apriva with an unattended solution designed for the vending industry.

Crane Payment Innovations Solutions:

- Hardware (One bezel with the A5k is required for each install)
 - MEI 4 in 1 Plus Bezel: Cash, Contactless, and Swipe
 - MEI eChoice Bezel: Cash Contactless, Swipe and EMV Contact Unit
 - Advance 5000 (A5K): Modem telemetry unit works on all carriers
- Semi-integrated unit triggered via MDB to the A5k
- METS is the telemetry software available from CPI
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth
 - Debit: Pre-Auth, Post-Auth
 - Stored Value: Sale, Pre-Auth, Post-Auth
- Application Features:
 - Canadian interact FLASH certifications
 - Telemetry support



CRANE MERCHANDISING

Crane provides Apriva with an unattended solution designed for the vending industry

Crane Solutions:

- Hardware
 - Media Machine: Contactless and Swipe. Wireless unit compatible with all US carriers.
 - Navigator: Contactless and Swipe. Wireless unit compatible with all US carriers.
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth
 - Stored Value: Sale, Pre-Auth, Post-Auth
- Navigator is designed as a retro fit kit add-on to allow vending machines to accept cashless.
- StreamWare is the telemetry software available from Crane.
- Media machine is a door panel with integrated payment acceptance.
- Application Features:
 - Telemetry support

COINCO

CoinCo provides Apriva with an unattended solution designed for the vending industry

CoinCo Solutions:

- Hardware (Both pieces are required for an install)
 - Iris Media Telemeter – Modem telemetry unit
 - VRX Bezel – Cash, Swipe, and Contactless
- Communication with the hardware is MDB
- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth
 - Stored Value: Sale, Pre-Auth, Post-Auth



APRIVA APIS

Apriva has 4 APIs available to meet a variety of payment needs. They are designed to integrate to any card acceptance hardware and environment.

MOBILE SDK (IOS AND ANDROID)

The Apriva Mobile SDK is a software development kit for IOS and Android. The SDK packages all the necessary payment functionality to allow integrators to seamlessly add payments to any application. It is available with fully integrated hardware or an integrator's chosen device. The SDK accepts manual entry, swipe, or encrypted swipe plus EMV in our fully integrated version. Authentication is provided through Client ID and Secret through OAUTH 2.0.

Fully Integrated Hardware:

- Miura M010

Supported Transactions:

- Credit: Sale, Pre-Auth, Post-Auth, Refund with Tie, Adjust
- Debit : Sale w/Pin
- Cash Recording: Sale, Refund
- Card on File: Add Card
- Sales History report
- Resend Receipt

WEB SERVICES (JSON)

The Apriva Web Services are REST web services that utilize JSON for the data format. Web services accept Manual, Swipe or Encrypted Swipe data. Authentication is provided through Client ID and Secret through OAUTH 2.0.

Supported Transactions:

- Credit: Sale, Pre-Auth, Post-Auth, Refund with Tie, Adjust
- Cash Recording: Sale, Refund
- Card on File: Add Card, Add Card via transaction, Modify, Remove, Sale with Card on file
- Sales History report
- Resend Receipt



HOSTED PAYMENT SOLUTION - FORM

Apriva supports a hosted payment form that captures and encrypts payment card information for manual entry card present or eCommerce card not present transaction processing. Upon capture of the payment card information, a token is issued for use through the Webservice APIs for one time charges or recurring payments. The form fields are a responsive design that can be used on desktops, mobile or tablets. In addition, the form is customizable to promote your brand image.

- Card Account Number (required)
- Expiration Date (required)
- Postal Code (configurable)
- CVV/CID (configurable)
- Name on Card (configurable)

XML

The Apriva XML Interface is a low-level TLS 1.2 socket connection with client authentication and no additional headers. This protocol is ideal for host to host communications and supports all Apriva transaction types.

- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth, Refund, Void, Adjust, Balance Inquiry
 - Debit: Sale, Refund, Balance Inquiry
 - EBT: Food Stamp Sale, Refund and Balance Inquire. Voucher Sale and Refund. Cash Benefit Sale and Balance Inquiry.
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 - Loyalty: Add Value, Balance Inquiry, Redemption, Replacement, Issue, Deactivation, void

ISO8583

The Apriva ISO8583 protocol is designed for low level operating systems that are limited on their memory and computing power. Apriva has a C++ source code library we provide to assist in the encoding and decoding of this byte level protocol. The communication is via a TLS1.2 socket connection.

ISO8583 is many time used on vending machines with limited memory and computing power.

- Supported Transactions:
 - Credit: Sale, Pre-Auth, Post-Auth, Refund, Void, Adjust, Balance Inquiry
 - Debit: Sale, Refund, Balance Inquiry
 - EBT: Food Stamp Sale, Refund and Balance Inquire. Voucher Sale and Refund. Cash Benefit Sale and Balance Inquiry.
 - Stored Value: Redemption(+Void), Pre-Auth, Post-Auth(+Void), Balance Inquiry, Activation, Block Activation, Re-Activation, Issue, Issue Virtual, AddValue(+Void), Return, Balance merge(+Void), cash-out(+Void), deactivation(+Void), force redemption, force add value,
 - Loyalty: Add Value, Balance Inquiry, Redemption, Replacement, Issue, Deactivation, void



HARDWARE

Apriva has several preferred partners who've incorporated our end to end encryption for bettween card holder protection.

- Anywhere Commerce
 - Mobile hardware
- IDTech
 - PC or Mobile hardware
- Infinite Peripherals (IPC)
 - IOS hardware
- LimePC
 - Full PC platform with integrated card reader
- Miura
 - Bluetooth reader
 - Pin Support
 - M010
- MagTek
 - Bluetooth capable readers
 - PC based hardware



APRIVA PAY

Apriva Pay is a merchant facing mobile application for iOS and Android. It allows basic inventory management, taxation as well as payments. EMV and/or Swipe on several processors is supported on:

- Supported Hardware
 - Anywhere Commerce Walker 2
 - Miura M010
 - Anywhere Commerce C2X (Coming Soon)
- Transaction Support
 - Credit : Sale, Refund, Void, Adjust
 - Check and Cash Recording
- Application Features
 - Inventory Management
 - Invoicing



RELEASE NOTES

Date	Version	Who	Description
Mar 28, 2018	1.0.9	Patty Heit	Updated newly added features.
Nov 1, 2017	1.0.8	Patty Heit	Updated newly added features
June 2, 2017	1.0.7	Carlos Canez, Patty Heit, Ashton Clapp	Added matrix and adjusted content.
May 30, 2017	1.0.1	Patty Heit	Added Coinco and AprivaPay. Added Matrix.
May 25, 2017	1.0.0	Patty Heit	Created document