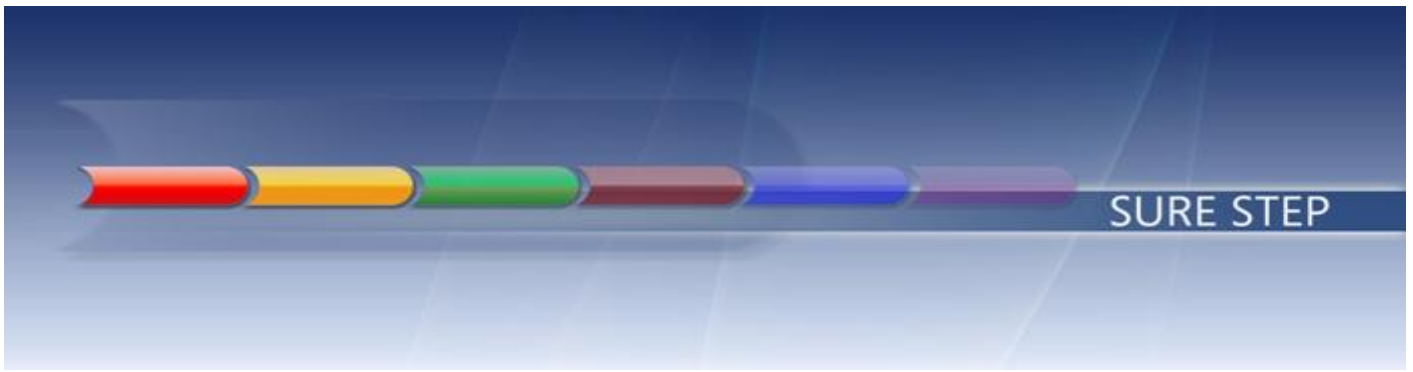




Acumens e-POS Key Usage Scenarios

Prepared & developed by
SBC Dynamics ERP

 Microsoft

Dynamics 365
Business Central

Document History

Revision History:

VERSION	DATE	SECTIONS REVISED	DESCRIPTION
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1 Acumens e-POS

1.1 Application Overview

Acumens e-POS is a comprehensive solution that ties together payments, point-of-sale and inventory management for Dynamics Business Central & Dynamics Nav. It offers a robust solution that allows accepting payments, managing inventory and sales tracking all in one place ensuring security and efficiency in the business process.

Acumens e-POS allows customers initiate payments in-store or via their own devices(eCommerce) for a truly omnichannel experience. It consolidated **card-present** and **card-not-present** payments for a seamless experience for both the business and its customers.

Acumens e-POS supports many payment methods, including EMV and NFC Contactless payments such as Apple Pay and Google Pay, and EMV chips & PIN payment.

Key Features and Benefits:

- **NFC/EMV contactless transactions:** Support for NFC/EMV contactless transactions such as ApplePay, GooglePay, and other mobile wallets as well as contactless enabled cards.
- **One-to-many devices integration:** Acumens e-POS supports dozens of plug-and-play EMV-ready devices from leading OEMs via a universal hardware integration. This one-to-many approach allows easy swapping of PIN pads without making any code changes.
- **PCI DSS-Compliant:** Securely handles customer credit card information. Tokens are used to pair a customer with their payment information without requiring access to the actual sensitive credit card data that is stored by Datacap.
- **ACH Transaction Support:** Facilitates ACH transactions seamlessly.
- **Shipping Integration:** Integrates with e-ship and other shipping add-ons.
- **e-Commerce Integration:** Automatically integrates to Acumens Customer Portal for B2B payments. Web service integration is available for 3 party e-commerce portals.
- **Multiple Transaction Types:** Supports charging, voiding, and refunding transactions.
- **Batch Processing:** Allows for efficient batch processing of transactions.
- **Easy Reconciliation:** Simplifies reconciliation between amounts posted in Dynamics BC bank and the actual bank.
- **Automated Cash Application:** Automatically applies cash to invoices.
- **Sandbox Environment:** Provides a sandbox environment for implementation, testing, and training purposes.
- **High Volume Support:** Handles complex and high volumes of transactions.
- **Convenience Fees:** Supports charging transaction and convenience fees.

Acumens e-POS includes following granules:

- * **Standard Credit Card Payment Processing.**
- * **Batch Credit Card Payment Processing.**
- * **Standard eCheck Payment Processing.**
- * **Batch eCheck Payment Processing.**
- * **B2B eCommerce Connector for CC Payment.**
- * **B2B eCommerce Connector for eCheck Payment.**
- * **3rd Party UI Integration for CC Processing.**

2 Acumens e-POS Setups

2.1 Datacap API Setup

Search for “Datacap API Setup” to open the setup page.

Acumens Datacap API Setup

Home Setup More options

Payment Methods Finance Charge Terms Create Default Datacap Settings Reset Document Numbers

General

Active ☒

Prod. API Endpoint (Pay API)

Prod. API Endpoint (DC Direct)

Prod. Account ID (DC Direct)

Prod. Auth. Code (DC Direct)

Prod. Reporting API Endpoint

Prod. Reporting API Key

Sandbox API Endpoint (Pay API)

Sandbox API Endpoint (DC Direct)

Sandbox Account ID (DC Direct)

Sandbox Auth. Code (DC Direct)

Sandbox Reporting API Endpoint

Sandbox Reporting API Key

Local API Endpoint (DC Direct)

Default Payment Method

Merchant By Location ☒

Datacap Merchant Setup

Release Before Payment Processing ☒

Auto Apply on Posting ☒

Validate AVS Before Charging ☒

Customer Batch Posting

DC Direct API Call Timeout(Seconds)

Allow Duplicate ☒

Numbering

Credit Card Nos.

ACH Bank Nos.

Email Notification Settings

Sender E-Mail Address

Send Email Notification After CC Trans... ☒

Send Batch Email Notification CC ☒

Send Email Notification After ACH Tra... ☒

Send Batch Email Notification ACH ☒

2.2 Datacap Merchant Setup

Acumens Datacap Merchant Setup Card

SBCDYNAMIC

General

Merchant ID

Name

Location Code

Production MID (Pay API)

Production Token Key

Production MID (ACH)

Production MID (DC Direct)

Run in Test Mode ☒

Sandbox MID (Pay API)

Sandbox Token Key (Pay API)

Sandbox MID (ACH)

Sandbox MID (DC Direct)

Cash Posting Option

Deposit Journal Template

Cash Journal Template

Cash Journal Batch

Capture Signature (DC Direct) ☒

Use Charge Convenience Fee ☒

Add Convenience Fee ☒

2.3 Payment Method

Payment Methods							
+ New Edit List Delete Translation More options							
Code ↑	Description	Bal. Account Type	Bal. Account No.	Direct Debit	Direct Debit Pmt. Terms Code	Pmt. Export Line Definition	Payment Processor
ACCOUNT	Payment on account	G/L Account		☐			
BANK	Bank Transfer	G/L Account		☐			
BNKCONVDOM	Bank Data Conversion for Domestic Banks	G/L Account		☐			
BNKCONVINT	Bank Data Conversion for International Banks	G/L Account		☐			
CARD	Card payment	G/L Account		☐			
CASH	Cash payment	G/L Account	10300	☐			
CC_DATACAP	Datacap	Bank Account	CHECKING	☐			Datacap
CHECK	Check payment	G/L Account		☐			
GIRO	Giro transfer	G/L Account		☐			
INTERCOM	Intercompany payment	G/L Account		☐			
MULTIPLE	Multiple payment methods	G/L Account		☐			
PAYPAL	PayPal payment	G/L Account		☐			
→		G/L Account		☐			

2.4 Credit Card Types

Search for “Credit Card Types” to open page

+ New

Edit List

Delete

Name ↑	Datacap Brand	Validation Rule	Numeric Only	Allow Spaces	Min. Length	Max. Length	First Digit	Fee %	Convenience Fee Calc. Type	Convenience Fee Calc. Value	Max. Convenience Fee Amount (\$)	Finance Charge Account No.	Finance Charge Terms Code
→ AMERICANEXPRL		1	☒	☐	15	15	3	0.00	Percent	0.00	0.00		
DISCOVER		1	☒	☐	16	16	6	0.00	Percent	0.00	0.00		
ECHECK		0	☐	☐	0	0		0.00	Percent	0.50	25.00	40500	1.5 DOM.
MASTERCARD		1	☒	☐	16	16	5	0.00	Percent	0.00	0.00		
VISA		1	☒	☐	16	16	4	0.00	Percent	2.00	20.00	40500	CC CHARGE

2.5 EMV PIN Pads:

From Datacap API Setup Page click on action “EMV PIN Pads”

EMV PIN Pads							
+ New Edit List Delete Test More options							
Test EMV PIN Pad Connection							
Device ID ↑	Device Name	Serial No.	Lane ID	Merchant ID	Device IP Address	Local Com...	Test Device
→ TEST	Simon Lane 7000	3011294926...	1	SBCDYNAMIC	47.232.131.224:7...	☒	☒

2.5 POS EMV Pin Pad Setup

On Datacap API Setup Page and click on action “POS EMV PIN Pad Setup”

←

Acumens POS EMV PIN Pad Setup

✓ Saved

✓

+ New

Edit List

Delete

Test

More options

User ID ↑

Device ID

Device Name

→

DEVELOPER

▼

⋮

TEST

Simon Lane 7000

3.1 Charge Card

Close

3.2 Void of Charge Card

Datacap CC Transaction - Order · S-ORD101103 · 10000 · Adatum Corporation

Manage

Card Swipe

Capture

Refund

Void

Navigate

Test

Page

Actions

Related

Fewer options

Select Trans. to Void...

Void

General

Show less

Merchant ID

SBCDYNAMIC

EMV PIN Pad

TEST - Simon Lane 7000

Swipe Card

Swipe Card

Manually Enter New Card

Test Mode

Card Number

Card Expiry (mm/yyyy)

Card Verification Code

Tokenize

Select Existing Card

Saved Card Alias

CC0000002

Saved Card Type

VISA

Card Number (Last 4 ...)

*****0043

Card Expiry (MMYY)

1224

Tokenized

Save Card

Allow Duplicate

Parent Entry No.

127

Total Amount

5.00

Charge Convenience ...

Convenience Fee

0.00

Amount Captured

5.00

Amount to Capture

0.00

Amount Refunded

0.00

Amount To Refund

5.00

Amount To Void

5.00

Customer No.

10000

Company Name

Adatum Corporation

Address

192 Market Square

Address 2

Zip Code

31772

City

Atlanta

State

GA

Country/Region Code

US

Fax No.

Phone No.

Mobile Phone No.

Transaction Details

Transaction Type

Void

Transaction Date-Time

Transaction Result

Response Origin

Processor

Last Error Message

AVS Result Code

AVS Result Description

Close

3.3 Refund

Datacap CC Transaction - Credit Memo · S-CR1019 · 10000 · Adatum Corporation

ManageRefundVoidNavigatePageActionsRelatedFewer options

Select Trans. to Refund...Refund

GeneralShow less

Merchant IDSBCDYNAMIC

Total Amount5.10

Swipe CardSwipe Card

Amount Refunded0.00

Manually Enter New Card

Amount To Refund5.10

Test Mode

Amount To Void0.00

Card Number.....

Customer No.10000

Card Expiry (mm/yyyy)..... / ..

Company NameAdatum Corporation

Card Verification Code.....

Address192 Market Square

Tokenize

Address 2

Select Existing Card

Zip Code31772

Saved Card AliasCC0000002

CityAtlanta

Saved Card TypeVISA

StateGA

Card Number (Last 4 ...)*****0043

Country/Region CodeUS

Card Expiry (MMYY)1224

Fax No.

Tokenized

Phone No.

Save Card

Mobile Phone No.

Allow Duplicate

Parent Entry No.0

Transaction Details

Transaction Type

Last Error Message

Transaction Date-Time

Transaction Result

AVS Result Code

Response Origin

AVS Result Description

DC Transaction Status

CVV Result Code

Last Error Code

CVV Result Description

Close

3.4 Void Refund

Datacap CC Transaction - Credit Memo · S-CR1019 · 10000 · Adatum Corporation

ManageRefundVoidNavigatePageActionsRelatedFewer options

Select Trans. to Void...Void

General

Merchant IDSBCDYNAMIC

Swipe CardSwipe Card

Manually Enter New Card

Test Mode

Card Number.....

Card Expiry (mm/yyyy)..... /

Card Verification Code.....

Tokenize

Select Existing Card

Saved Card AliasCC0000002

Saved Card TypeVISA

Card Number (Last 4 ...)*****0043

Card Expiry (MMYY)1224

Tokenized

Save Card

Allow Duplicate

Parent Entry No.131

Total Amount5.10

Amount Refunded5.00

Amount To Refund0.10

Amount To Void5.00

Customer No.10000

Company NameAdatum Corporation

Address192 Market Square

Address 2

Zip Code31772

CityAtlanta

StateGA

Country/Region CodeUS

Fax No.

Phone No.

Mobile Phone No.

Transaction Details

Transaction TypeVoid

Transaction Date-Time

Transaction Result

Response OriginProcessor

DC Transaction StatusApproved

Last Error Code

Last Error Message

AVS Result Code

AVS Result Description

CVV Result Code

CVV Result Description

Close

3.5 Review Posted Transactions

Credit Cards Transaction Log Entries.

Home

Navigate

More options

Apply Transactions

Print

Email

Document Type	Document No.	Customer No.	Card Type	Credit Card No.	Credit Card Number	Card Pres.	ACH Bank No.	Bank Acc. Number	Bank Name	Entry Met.	Transaction Type	Transaction Result	Transaction Description	Amount	Convenience Fee	Amount Refunded	Transaction Date/Time	Transaction Status
Credit Memo	S-CR1019	10000	VISA	CC0000002	*****0043						Void	Success	Payment transaction has been ...	5.00	0.00	0.00	9/23/2024 2:37 PM	
Credit Memo	S-CR1019	10000	VISA	CC0000002	*****0043						Refund	Success	Payment transaction has been ...	5.00	0.00	0.00	9/23/2024 2:34 PM	Voided
Order	S-ORD1011...	10000	VISA	CC0000002	*****0043						Charge	Success	Payment transaction has been ...	5.10	0.10	0.00	9/23/2024 2:31 PM	Posting No...
Posted Invo...	PS-INV103...	10000	VISA	CC0000001	*****0043						Charge	Success	Payment transaction has been ...	5.34	0.10	0.00	9/23/2024 2:30 PM	Posting No...
Order	S-ORD1011...	10000	VISA	CC0000002	*****0043						Void	Success	Payment transaction has been ...	5.00	0.00	0.00	9/23/2024 2:29 PM	
Order	S-ORD1011...	10000	VISA	CC0000002	*****0043						Charge	Success	Payment transaction has been ...	5.00	0.00	0.00	9/23/2024 2:23 PM	Posting No...
Order	S-ORD1011...	10000		CC0000002	*****0043						Charge	Failed	*Error Code = 004003: Messag...	15.30	0.30	0.00	9/23/2024 2:22 PM	
Posted Invo...	PS-INV103...	10000	ECHECK				*****5566	Test Bank			Charge	Failed	*Error Code = 002757: Messag...	5.27	0.03	0.00	9/22/2024 12:25 ...	
Posted Invo...	PS-INV103...	10000	ECHECK				*****7...	Test 1			Charge	Failed	*Error Code = 004003: Messag...	5.27	0.03	0.00	9/21/2024 11:47 ...	
Posted Invo...	PS-INV103...	10000	ECHECK				*****4455	Test 1			Charge	Failed	*Error Code = 004003: Messag...	5.27	0.03	0.00	9/21/2024 11:44 ...	
Posted Invo...	PS-INV103...	10000	ECHECK				*****4455	Test 1			Charge	Failed	*Error Code = 004003: Messag...	5.27	0.03	0.00	9/21/2024 11:43 ...	

3.6 Post Deposit

Bank Deposit

✓ Saved

D0000032 (20240923CH)

Posting

Bank Deposit

More options

Test Report...

Post...

Post and Print...

General

No.

D0000032

...

Post as Lump Sum

☒

Bank Account No.

CHECKING

▼

Document Date

9/23/2024

Total Deposit Amount

10.44

Department Code

▼

Difference

0.00

Customergroup Code

▼

Posting Date

9/23/2024

Currency Code

Lines

Manage

Functions

Line

New Line

Delete Line

Account Type	Account No.	Description	Document Date	Document Type	Document No.	External Document No.	Credit Amount	Payment Method Code	Credit Card Type
→ Customer	10000	Posted Invoice PS-INV103261	9/23/2024	Payment	2MTC6JIM1C...	D0000032	5.34	CC_DATACAP	VISA
Customer	10000	Order S-ORD101104	9/23/2024	Payment	2MTCHQIR6K...	D0000032	5.10	CC_DATACAP	VISA

Total Deposit Lines

10.44

4 Credit Card Transaction using DC Direct

Card Swipe

Datacap CC Transaction - Order · S-ORD101105 · 10000 · Adatum Corporation

Manage

Card Swipe

Capture

Refund

Void

Navigate

Test

Page

Actions

Related

Fewer options

Card Swipe

General

Show less

Merchant ID ······SBCDYNAMIC

EMV PIN Pad ······TEST - Simon Lane 7000

Swipe Card ······Swipe Card

Manually Enter New Card

Test Mode

Card Number.....

Card Expiry (mm/yyyy)..... / DEFAULT

Card Verification Code.....

Tokenize

Select Existing Card

Saved Card Alias ·····

Saved Card Type ·····

Card Number (Last 4 ... ·····

Card Expiry (MMYY) ·····

Tokenized ·····

Save Card ·····

Allow Duplicate ·····

Parent Entry No. ····· 0

Total Amount ····· 7.00

Charge Convenience ...

Convenience Fee ····· 0.00

Amount Captured ····· 0.00

Amount to Capture ····· 7.00

Amount Refunded ····· 0.00

Amount To Refund ····· 0.00

Amount To Void ····· 0.00

Customer No. ····· 10000

Company Name ····· Adatum Corporation

Address ····· 192 Market Square

Address 2 ·····

Zip Code ····· 31772

City ····· Atlanta

State ····· GA

Country/Region Code ····· US

Fax No. ·····

Phone No. ·····

Mobile Phone No. ·····

Transaction Details

Transaction Type ·····

Transaction Date-Time ·····

Transaction Result ·····

Response Origin ·····

Last Error Message ·····

AVS Result Code ·····

AVS Result Description ·····

Close

5 Credit Card Transaction from Cash Receipt Journal

←Cash Receipt Journals

✓ Saved

📄🔍🔄

Batch Name: GENERAL

🔍📄🔄

ManageHomeRequest ApprovalLineAcumens ePOSMore options

🔍📄🔄

📄Credit Card Processing...📄eCheck Processing...📄Credit Cards Transaction Log Entries📄eCheck Transaction Log Entries

🔍📄🔄

	Posting Date	Document Type	Document No.	Account Type	Account No.	Description	Amount	Amount (\$)	Payment Method Code	Rel. Account Type	Rel. Account No.	Credit Card Type	App. (Yes/No)	Applies-to Doc. Type	Applies-to Doc. No.	Corr.	Department Code	Customer Group Code
→	9/23/2024	Payment	2MTENTBEA...	Customer	10000	Order S-ORD101105	-7.14	-7.14	CC_DATACAP	Bank Acco...	CHECKING	VISA		Invoice	S-ORD101105	☐	SALES	SMALL

6 Batch Credit Card Transaction

Open Batch credit Card processing from the customer card.

Datacap Credit Card Transaction - Posted Invoice · BATCH · 10000 · Adatum Corporation

Home

Card

Page

More options

Get Unpaid Invoices

Charge Card

Credit Card Details

Transaction Type

Charge

Merchant ID

SBCDYNAMIC

Test Mode

Card Number

Card Expiry (mm/yyyy)

Card Verification Code

Card Type

VISA

Credit Card No.

CC00000002

Cr. Card Number (Last 4 Digits)

*****0043

Card Expiry (MMYY)

1224

Tokenized

Customer No.

10000

Company Name

Adatum Corporation

Address

192 Market Square

Address 2

Zip Code

31772

City

Atlanta

State

GA

Country/Region Code

US

Fax No.

Phone No.

Mobile Phone No.

Charge Convenience Fee

Total Amount

31,562.76

Total Payment Discount

0.00

Total Amount Captured

30.69

Total Convenience Fee

110.34

Total Amount To Capture

31,642.41

Unpaid Invoices

Delete Line

Document No.	Customer No.	Company Name	External Document No.	Currency Code	Total Amount	Payment Discount	Cha... Con... Fee	Convenience Fee	Amount Captured	Amount to Capture	Batch Action	Transaction Result	Transaction Description
→ PS-INV103...	10000	Adatum Corporation			5.10	0.00		0.00	5.10	0.00	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.00	5.24	0.00	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.00	5.24	0.00	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.10	0.00	5.34	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.10	0.00	5.34	Include		
PS-INV103...	10000	Adatum Corporation			50.00	0.00		1.00	0.00	51.00	Include		
PS-INV103...	10000	Adatum Corporation			50.00	0.00		1.00	0.00	51.00	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.10	0.00	5.34	Include		
PS-INV103...	10000	Adatum Corporation			5.24	0.00		0.10	0.00	5.34	Include		

Close

7 ACH Transaction Using Pay API

7.1 Debit Bank

Datacap ACH Transaction - Order · S-ORD101106 · 10000 · Adatum Corporation

↗

✕

Manage

Debit

Credit

Void

ACH Bank

Page

Debit Bank Account

🔗

General

Merchant ID ······

SBCDYNAMIC

▼

Location Code ······

ACH Bank No ······

ACH0000001

▼

Bank Name ······

Test Bank

Bank Account Number ···

Bank Acc. No.(Last 4 D... ·

XXXXXXXXXXXX0043

ABA Routing No. ······

114000721

First Name ······

Edwin

Last Name ······

Rono

Bank Acc. Type ······

Personal Checking

▼

Save Bank Account ·····

Parent Entry No. ······

0

Total Amount ······

8.00

Amount Paid ······

0.00

Charge Convenience F... ·

Convenience Fee ······

0.04

Amount to Debit ······

8.04

Amount Refunded ······

0.00

Amount To Refund ······

0.00

Amount To Void ······

0.00

Customer No. ······

10000

Company Name ······

Adatum Corporation

Address ······

192 Market Square

Address 2 ······

Zip Code ······

31772

▼

City ······

Atlanta

▼

State ······

GA

Country/Region Code ····

US

▼

Fax No. ······

Phone No. ······

0887163665

Mobile Phone No. ······

Email ······

edwin@sbcdynamicserp.com

Transaction Details

🖱

Transaction Type ······

Transaction Date-Time ···

Transaction Result ······

Response Origin ······

DC Transaction Status ····

Response Code ······

Last Error Code ······

Last Error Message ·····

Close

7.2 Void of Debit Bank

Datacap ACH Transaction - Order · S-ORD101106 · 10000 · Adatum Corporation

Manage

Debit

Credit

Void

ACH Bank

Page

Select Trans. to Void...

Void

General

Merchant ID ······

SBCDYNAMIC

▼

Location Code ······

ACH Bank No ······

ACH0000001

▼

Bank Name ······

Test Bank

Bank Account Number ···

Bank Acc. No.(Last 4 D... ·

XXXXXXXXXXXX0043

ABA Routing No. ······

114000721

First Name ······

Edwin

Last Name ······

Rono

Bank Acc. Type ······

Personal Checking

▼

Save Bank Account ·····

Parent Entry No. ······

135

Total Amount ······

8.04

Amount Paid ······

8.04

Charge Convenience F... ·

Convenience Fee ······

0.04

Amount to Debit ······

0.00

Amount Refunded ······

0.00

Amount To Refund ······

0.00

Amount To Void ······

8.04

Customer No. ······

10000

Company Name ······

Adatum Corporation

Address ······

192 Market Square

Address 2 ······

Zip Code ······

31772

▼

City ······

Atlanta

▼

State ······

GA

Country/Region Code ···

US

▼

Fax No. ······

Phone No. ······

0887163665

Mobile Phone No. ······

Email ······

edwin@sbcdynamicserp.com

Transaction Details

Transaction Type ······

Void

Transaction Date-Time ···

Transaction Result ······

Response Origin ······

Processor

DC Transaction Status ···

Approved

Response Code ······

Last Error Code ······

Last Error Message ·····

Close

7.3 Credit Bank