

April 2003 update to IBM® SurePOS ACE for 4690 OS Education:

RE2000: IBM SurePOS ACE for 4690 OS vs. 4680-4690 Supermarket Application - Differences

RE2100: IBM SurePOS ACE Planning Workshop

RE2150: IBM SurePOS ACE Loyalty Program Workshop

Note: This document is intended to supplement the education listed above. It contains information pertaining to recent IBM SurePOS ACE for 4690 OS announcements that is not yet included in the base courses. The information in this document will be included in the next release of the education.

Course and module references are provided in parenthesis under the heading of each SurePOS ACE Version 2 enhancement discussion.

Overview

On February 18, 2003, IBM Retail Store Solutions announced Version 2 of SurePOS Application Client/Server Environment for 4690 OS (SurePOS ACE) and Electronic Payment Support (EPS) Version 2. SurePOS ACE Version 2 provides support for the following additional hardware and application function:

- SurePOS ACE/EPS on CD-ROM
- New Hardware Support
 - 4610 TM6 Printer Support
 - Dual Video Display Support
- SureVision GUI Feature
 - New Operator Touch GUI
 - New Customer GUI (non-touch)
- Terminal Operation
 - Up to 99 Restricted Sales IDs
 - Prompt for Reason Code on Price Override
 - Forced Sign-off at Store Close
 - Alpha Input for Secondary Check IDs
- Version 2 Interface for Catalina Coupons
- Reports
 - Operator Sales by Terminal (removed)
- Item Record
 - Electronic Article Surveillance (EAS) Indicator
- Gift Card/ Value Card Support Enhancements
 - Gift Card Balance Inquiry
 - Value Card Support Enhancements
- Code 39 Bar Code Loyalty Cards

- ACE EPS Enhancements
 - Host Support
 - Kincaid host support
 - Fifth Third Processing Solutions MPS
 - Fifth Third Processing Solutions UPP
 - Bypass host support
 - Increase Stand-in Limit
 - Separate Host Connection for SAFs
 - Add a SAF/TOR Delay
- Developer Tools
 - Item File Layout Tool

SurePOS ACE Version 2 prerequisites – without SureVision

Terminal requirements for SurePOS ACE Version 2 are the same as SurePOS ACE V1.5, 4693 or 4694 terminals with a minimum of 8 MB of memory or SurePOS 700 series terminals supported by the 4690 Operating System.

Controller requirements are unchanged; the controller required is a minimum Pentium 90 MHz processor (for 4690 OS V2.4) or Pentium 100 MHz (for 4690 OS V3) with at least 32 MB of memory.

SurePOS ACE Version 2 requires the IBM 4690 Operating System V2.4, with corrective service diskette 02H0 or later, or 4690 OS Version 3.

SureVision Prerequisites are provided under the SureVision functional discussion.

SurePOS ACE vs. 4680-4690 Supermarket Application differences

The IBM 4680-4690 Supermarket Application supports use of the 4610 TM6 printer.

PRPQ 5799-RQR supports the use of the SureVision Operator GUI with the IBM 4680-4690 Supermarket Application. However, the PRPQ only supports the SureVision Operator GUI. The SureVision Customer GUI and Dual Video Display support are not provided.

SurePOS ACE/EPS on CD-ROM

(Planning /Installation and File Planning)

SurePOS ACE/EPS on CD-ROM – Both products, SurePOS ACE Version 2 and EPS Version 2, are available on individual CD-ROM media. The media will contain diskette images to allow users to make diskettes, as needed. Customers can build diskettes from the images on the CD-ROM and install the products using diskettes or place the media in a controller CD-ROM drive and execute the install procedure.

Up-to-date descriptions on the installation procedures can be found in the product read me files, *SurePOS ACE Planning and Installation Guide*, and *SurePOS ACE Electronic Payment Support User's Guide*.

References:

- *SurePOS ACE Planning and Installation Guide*
 - Installing the Application
- *SurePOS ACE Electronic Payment Support User's Guide (GC30-3923)*
 - Installation and Configuration

New hardware support

(Planning/Product Overview, Differences/Product Introduction)

4610 TM6 Single Station Printer Support – SurePOS ACE Version 2 supports the attachment of a 4610 TM6 single station printer to a POS terminal. The 4610 TM6 does not have a summary journal or a document insert station. No personalization changes are required to support this printer. If the 4610 TM6 is attached the user will not receive prompts related to inserting checks into or removing checks from the printer, regardless of personalization options.

Note: SurePOS ACE supports the 4610 TM6 in native mode only.

Dual Video Display Support – SurePOS ACE Version 2 provides support for the attachment of two video displays to one POS terminal. Typically one display would serve as the operator display and the second display would serve as a customer display.

Note: 4690 OS Version 3 Release 2 is required for dual video display support.

References:

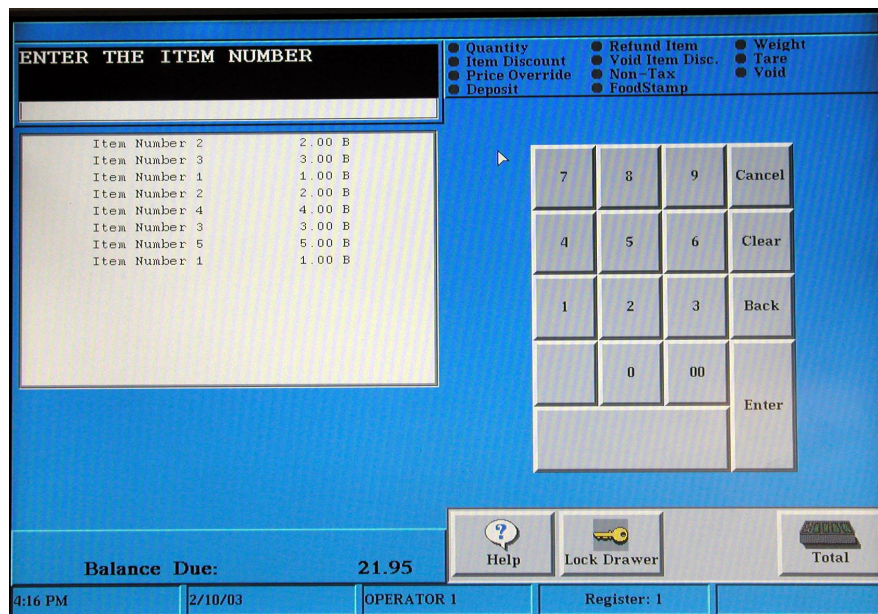
- *SurePOS ACE Planning and Installation Guide*
 - Supermarket Environment
 - “Hardware and Software Requirements and Components”

SureVision features

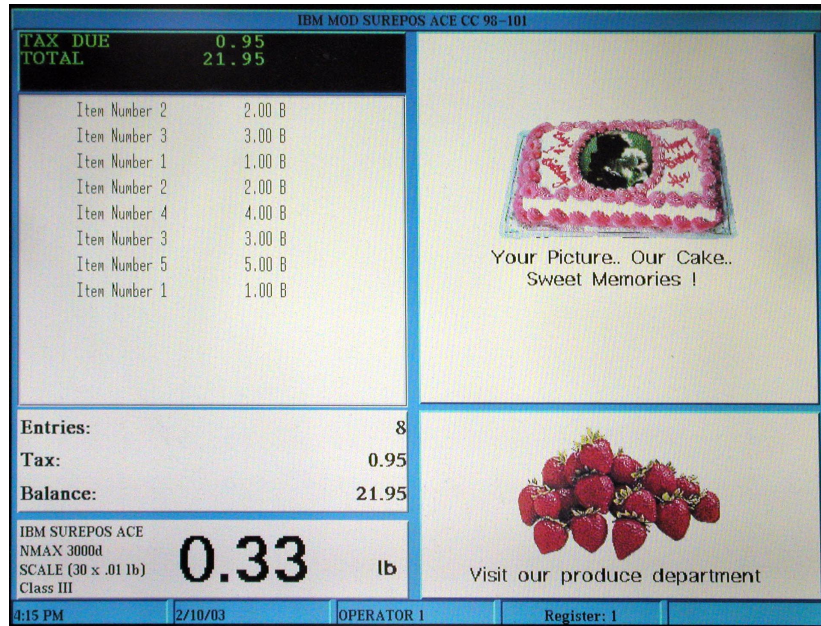
(Planning/Product Overview, Differences/Product Introduction)

In addition to the existing Java ACE customer view, SurePOS ACE Version 2 supports using the IBM SureVision GUI for 4690 application for an operator touch GUI and a non-touch customer GUI.

SureVision Operator Touch GUI – The SureVision Operator touch GUI is used at a terminal instead of the terminal keyboard and the current 2x20 display. The operator touch GUI will accept operator input. The keyboard can only be used for alphanumeric input. With the default configuration, the left side of the GUI displays information provided by SurePOS ACE and the 4690 OS. The right side of the operator touch GUI contains buttons that can be used to enter transaction data or access SurePOS ACE functions.



SureVision Customer Non-Touch GUI – The SureVision customer GUI is used at a terminal instead of the current customer display. With the default configuration the left side of the GUI displays information provided by SurePOS ACE and the 4690 OS, for example the customer receipt and information usually shown on the 2x20 display. The right side of the SureVision customer GUI contains two areas that can be used to display the contents of HTML files, such as graphics or advertising text.



SureVision Dual Video Display – SurePOS ACE supports the SureVision operator touch GUI, and the SureVision non-touch customer GUI in a dual display environment.

The layout of either the SureVision operator touch GUI or the SureVision customer GUI can be customized for each store and even for specific terminals. See the *IBM SureVision GUI for 4690: Installation, Configuration, and Programming Guide* and SurePOS ACE references at the end of this topic.

SurePOS ACE Version 2 supports:

- SureVision operator touch GUI only
- SureVision customer non-touch GUI only
- SureVision operator touch GUI and SureVision non-touch customer GUI in a dual video display environment
- Java GUI customer view (see note)

Note: The Java GUI customer view, which was available in prior releases, is only supported if you have not installed SureVision. The Java GUI customer view cannot be used in a dual video display environment.

SurePOS ACE Version 2 Prerequisites (with SureVision) – To use either the SureVision operator touch GUI or the customer non-touch GUI requires a terminal with a minimum of 64MB of memory and a 300 MHz processor. To use dual graphical displays (both operator and customer displays) requires a minimum of 96 MB of RAM and a 500 MHz processor. A controller with a minimum 100 MHz processor and 64 MB of memory is recommended.

SurePOS ACE Version 2 with SureVision requires IBM 4690 OS V3.2 and the ICESoft e-lite Browser V5.0.6.

SureVision is a separately orderable and priced feature of SurePOS ACE for 4690.

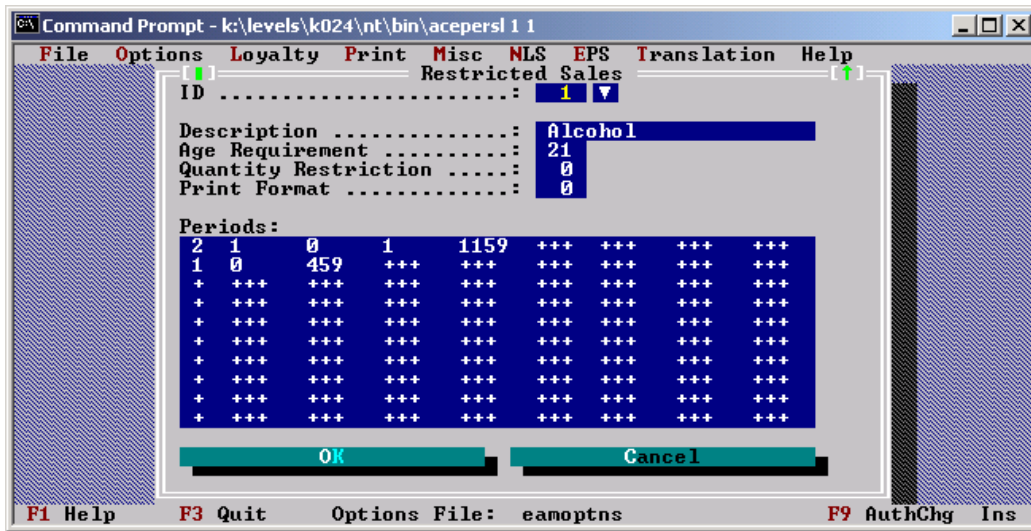
References:

- IBM SureVision GUI for 4690: Installation, Configuration, and Programming Guide
- SurePOS ACE Planning and Installation Guide
 - The Supermarket Environment
 - “Hardware and Software Requirements and Components”
 - “Screen Savers”
 - Configuring the System
 - Planning the Controller Environment
 - Planning XML Files for SureVision GUIs
 - Installing the Application
 - Migration Considerations

Terminal operation

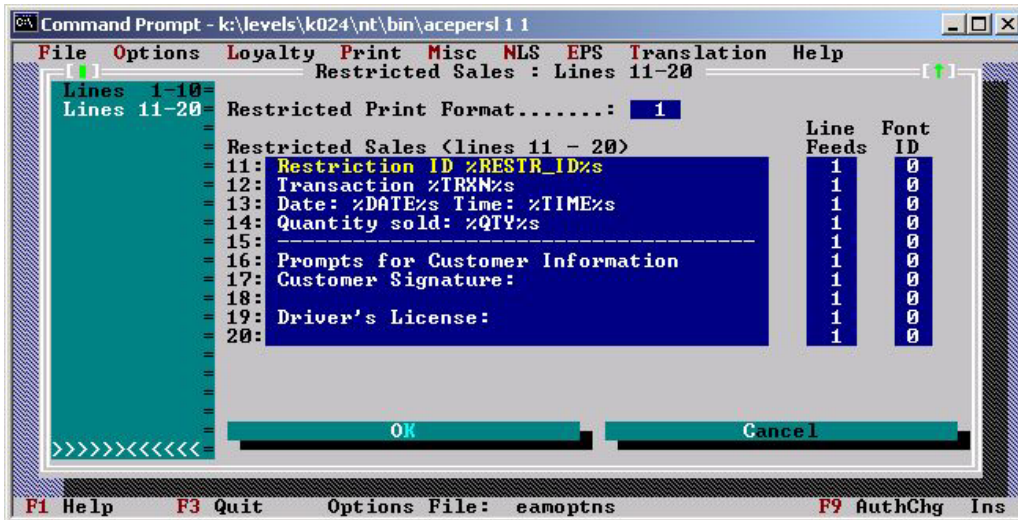
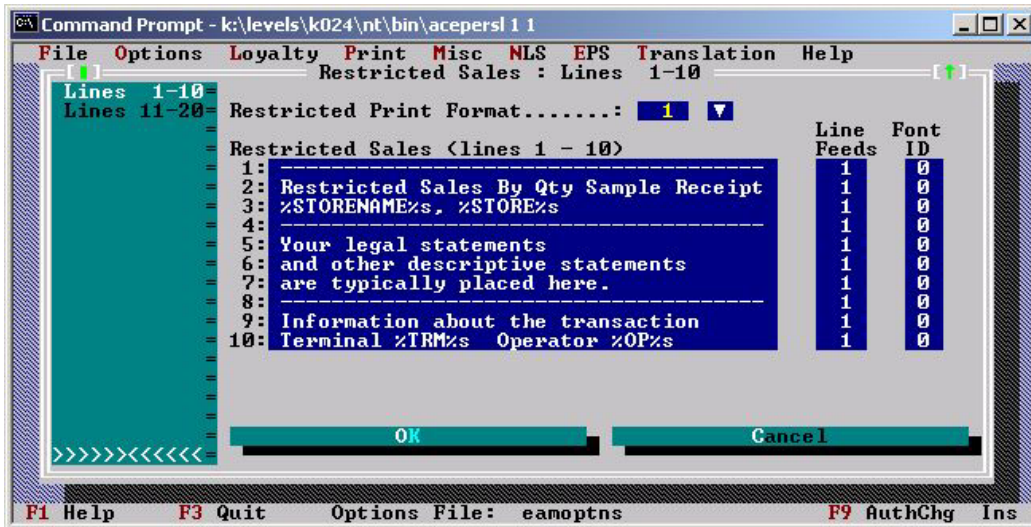
(Differences/Checkout and Reports, Differences/Accounting and Closing, Planning/Accounting and Closing)

Up to 99 Restricted Sales IDs – The number of Restricted Sales IDs has been increased from 9 to 99. Instead of having one quantity restricted ID, any of the IDs can be quantity restricted. This allows a single item to have quantity, time, and age restrictions.



Note: Restricted Sales IDs are defined in Personalization and specified in product item records.

SurePOS ACE Version 2 also allows up to 99 Restricted Sales print formats to be defined.



If a restrictive quantity limit is exceeded for an item, the operator will receive a warning (B911) when the total key is pressed for each Restricted Sales ID for which the restrictive quantity has been exceeded. At this time items can be voided. If the transaction is ended and the item quantities exceed the restrictive limits, special receipts are printed using the print formats specified in Personalization for each item for which the quantity limit has been exceeded.

Note: Restricted Sales ID 10 defaults to a restrictive quantity of 12 and print format 1.

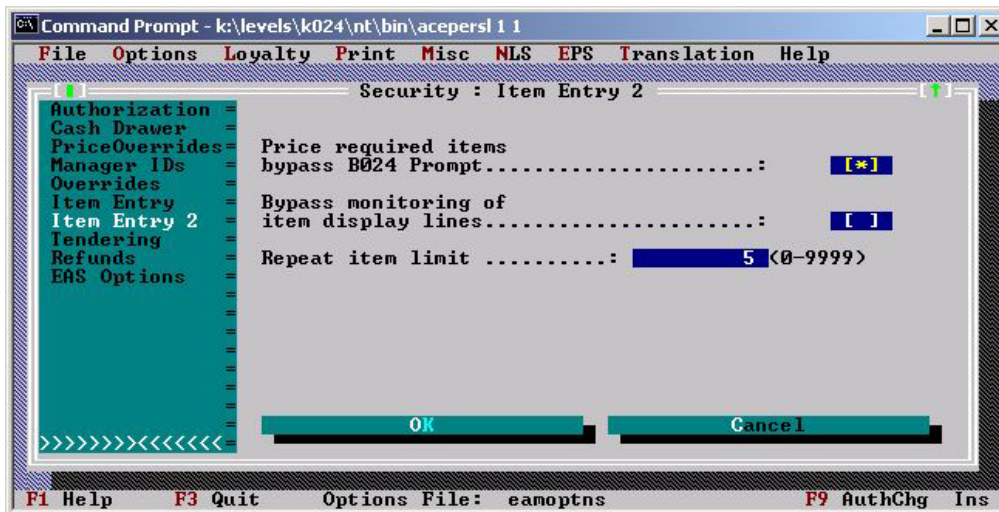
Prompt for Reason Code on Price Override – This function supports prompting the cashier for a reason code when a price override is performed on a non-price required item. If there is a full screen display, a cashier can display reason codes by pressing a key defined with function code 244 when the prompt occurs. If the SureVision GUI feature is installed, the cashier is automatically presented with a selection list of valid reason codes.

Price Override reason codes are added to the Transaction Log and the Exception Log price override log strings.

Cashiers will not be prompted for a reason code for price overrides for voids, refunds, and items in return item transactions.

The prompt message and price override reason descriptors can be modified via Personalization.

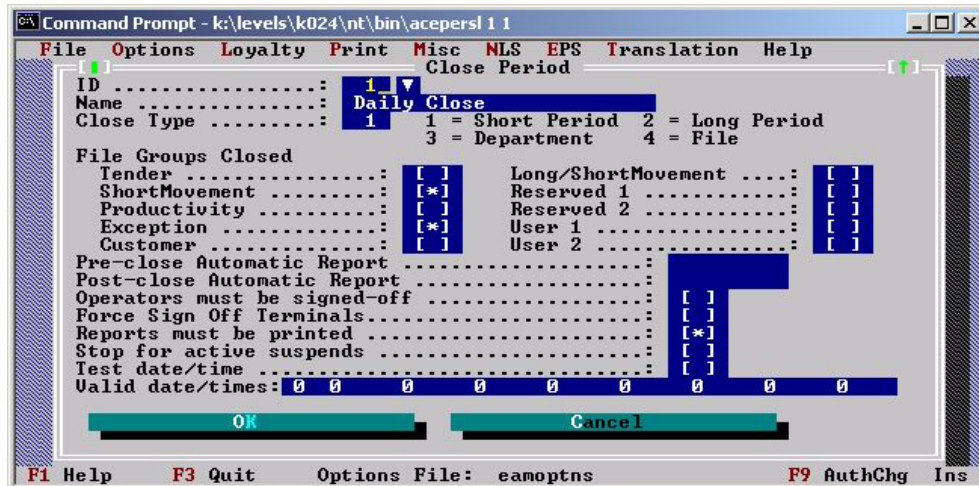
New options, Options > Security > PriceOverrides, are used to specify whether the cashier should be prompted to enter a reason code when the price key is pressed, the reason code descriptions, and Price Override Limits. The Repeat Item Limit option was moved to Options > Security > Item Entry 2 Personalization and the Options > Security > Limits options page was eliminated.



Forced Sign-off at Close – This function will force the signoff of terminals left in Training Mode or Terminal Monitor Mode during a **manual** or **unattended** store close procedure. This will prevent terminals left in these modes from interfering with the start of a store close procedure. Without this function active and the Operators Must Be Signed Off option active, any terminal left signed on in Training Mode, or Terminal Monitor Mode will prevent a close from starting.

This function is supported by the Force Sign Off Terminals option on the Misc > Close Period personalization page.

Note: Terminals left in Price Verify mode are not signed off since they do not hold up the start of a store close. Terminals in other modes are not signed off due to possible accounting exposures.



Forced sign offs are logged in the Close Log File (ACECLSLG.DAT). The terminal number and the operating mode (Training Mode or Terminal Monitor Mode) are logged.

Alpha Input for Secondary Check IDs – With this function, the entry of alpha state abbreviations and driver’s license numbers that contain alpha characters is supported when a driver’s license is used as the second ID for an EPS check authorization. Alpha input is not supported for the entry of a primary ID.

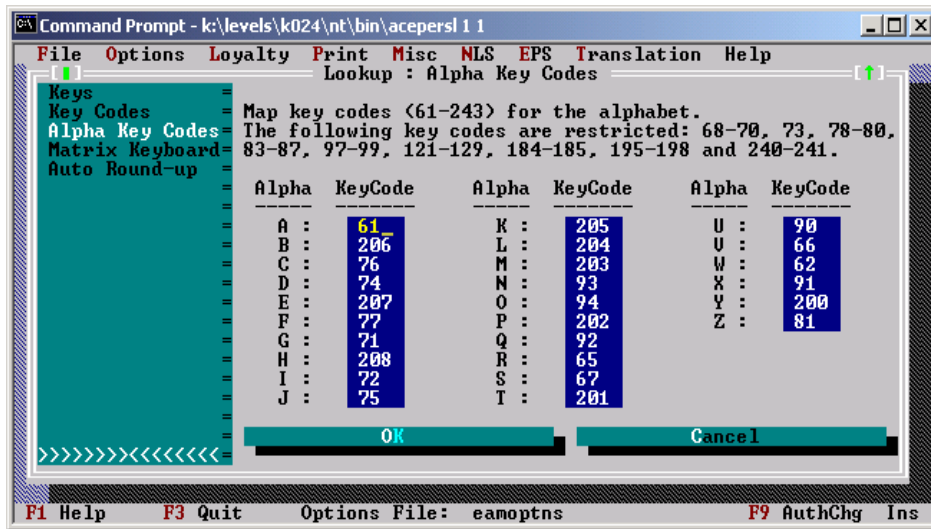
With this function cashiers may enter alphanumeric input when prompted for a driver’s license number and alpha or numeric input when prompted for a state ID. Two new variables have been added so that state abbreviations and alphanumeric driver’s license numbers can be used in franking on the back of a check.

This function also supports a host-initiated request for a second ID. When the original EPS check authorization request does not contain a second ID and a second ID is required to authorize a check, the host will send the terminal a request to prompt the cashier for a second ID. The original authorization request, including the second ID, is then resent to the host.

New Personalization Options have been added to enable alpha input. An EPS Alpha Entry page has been added under EPS > Check IDs. These options will allow users to enable the functions and to specify acceptable alpha state IDs. The state abbreviations and State IDs will default to the 50 United States plus the District of Columbia in alphabetical order by the state name.



To support the use of alpha input, a new Alpha Key Codes page has been added to Options > Lookup Personalization. On this page you can specify keyboard mapping to define A thru Z.



The default keyboard layout:

Sign On	Over-	Dept 7	Dept 6	Dept 7	Dept 4	Food	Misc	Void 70
61 (A)	ride 79	206 (B)	205 (K)	204 (L)	203 (M)	Stamp 93 (N)	94 (O)	
			7	8	9			
F5/ NoFS 76 (C)	Price 74 (D)	Dept 8 207 (E)	4	5	6	Dept 3 202 (P)	Check 92 (O)	MFR Coupon 65 (R)
								Refund 67 (S)
Tax 77 (F)	Tare 71 (G)	Dept 9 208 (H)	1	2	3	Dept 2 201 (T)	Check Verify 90 (U)	Store Coupon 66 (V)
								Dis-count 62 (W)
	Weight 72 (I)						Cash 91 (X)	
Clear 73	Qty 75 (J)	Enter 80	0 /		Dept 1 200 (Y)		Total 81 (Z)	NoSale 100

Note: Users cannot use alpha keys on an ANPOS keyboard to enter alpha characters. Alpha input is only supported via the key code mapping on the Alpha Key Codes personalization page.

References:

- *SurePOS ACE Planning and Installation Guide*
 - Planning Storewide and Terminal Options

V2 Interface for Catalina Coupon Support

(Planning /Coupons/Catalina Coupon Support)

SurePOS ACE Version 2 contains the following update to the Catalina Coupon Interface.

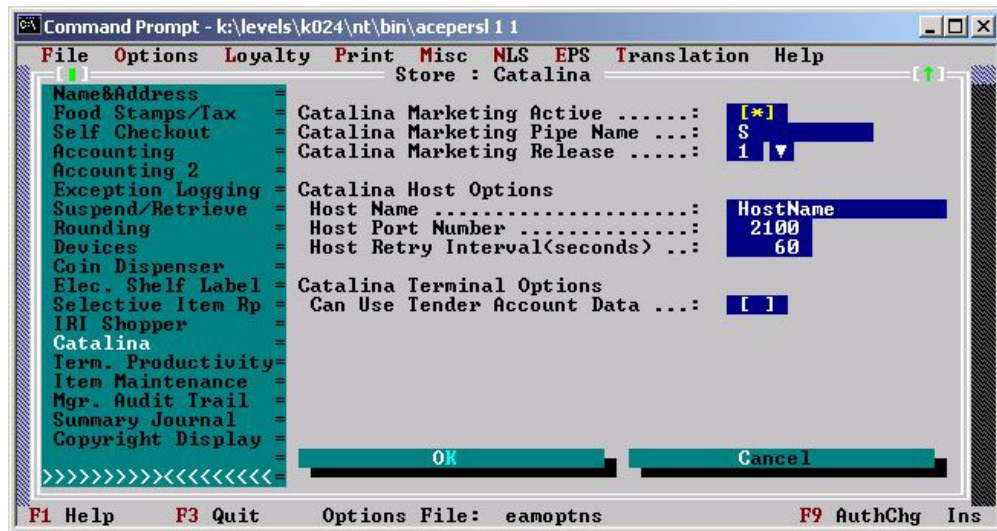
User Datagram Protocol (UDP) Communication Layer – In SurePOS ACE Version 1, the Catalina background application (acectlna.286) received messages sent from terminals. These received messages were thrown away without additional processing. If the V2 Catalina Coupon Interface is

implemented, these messages will be forwarded to a Catalina host using UDP communication protocol.

Note: Terminals will still use pipes to pass messages to the Catalina background application.

Users have the option of implementing V1 or V2 of the Catalina Coupon Interface.

The Options > Store > Marketing personalization page has been renamed, Options > Store > Catalina. The new personalization page includes the Catalina Marketing Active and Catalina Marketing Pipe Name options, as well a new options used to specify the Catalina Marketing Release, host options, and the Can Use Tender Account Data option. The Can Use Tender Account Data option is used to determine whether or not Catalina can use tender account information such as credit, debit, or checking account numbers for customer identification and marketing purposes.



The new host options and the Can Use Tender Account Data option are used only if the Catalina Marketing Release option is set to 2. If the Release option is set to 1, these options are not used.

Note: The Keep Ring and Tender Time option has been moved from the Options > Store > Catalina personalization page to the Options > Store > Accounting 2 page.

References:

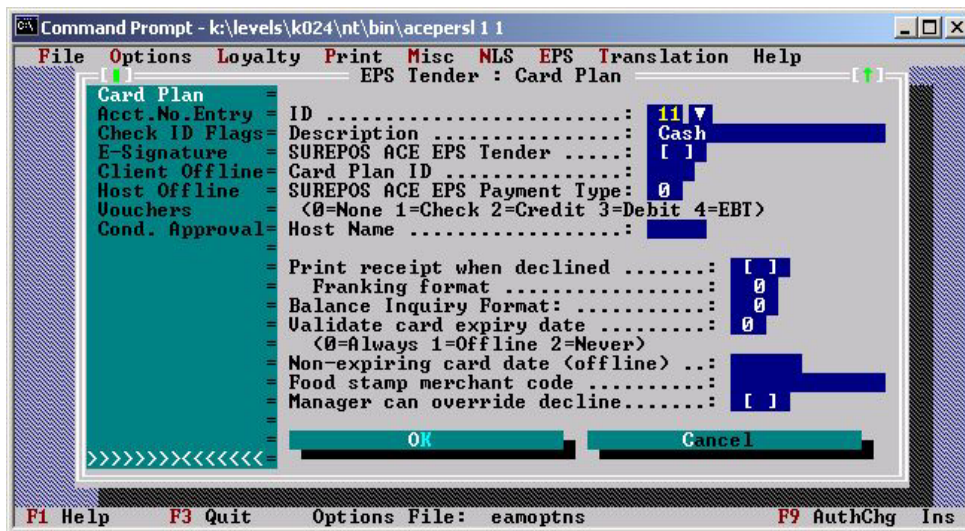
- *SurePOS ACE Planning and Installation Guide*
 - Planning Storewide and Terminal Options

Gift and Value Card Support Enhancements

(Planning/Non-sales Procedures, Planning/EPS, Differences/EPS, Differences/Non-sales Procedures)

Gift Card Balance Inquiry – Gift Card Balance Inquiry is a new non-sales procedure, procedure 21. When a terminal operator signs on to procedure 21, SurePOS ACE will prompt for gift card account number and expiration date. The card balance information will be printed on the customer receipt. The gift card account balance is considered private information and will not be displayed.

This new function is enabled for all terminal operators, when the gift card tender is defined, by specifying a non-zero print format in the new Balance Inquiry Format option on the EPS > EPS Tender > Card Plan personalization page.



Gift card inquiry print formats are defined in Print > Balance Inquiry. Up to 99 formats may be defined.

Gift card balance inquiries are logged in the SurePOS ACE Exception Log.

Note: Although Procedure 21 is listed as “Value card balance inquiry” on the terminal list of non-sales procedures, only gift card balance inquiry is supported in SurePOS ACE Version 2.

Value Card Support Enhancements – To remedy potential problems, the following enhancements have been made to SurePOS ACE Value Card support. If you currently use Value Cards, review these enhancements.

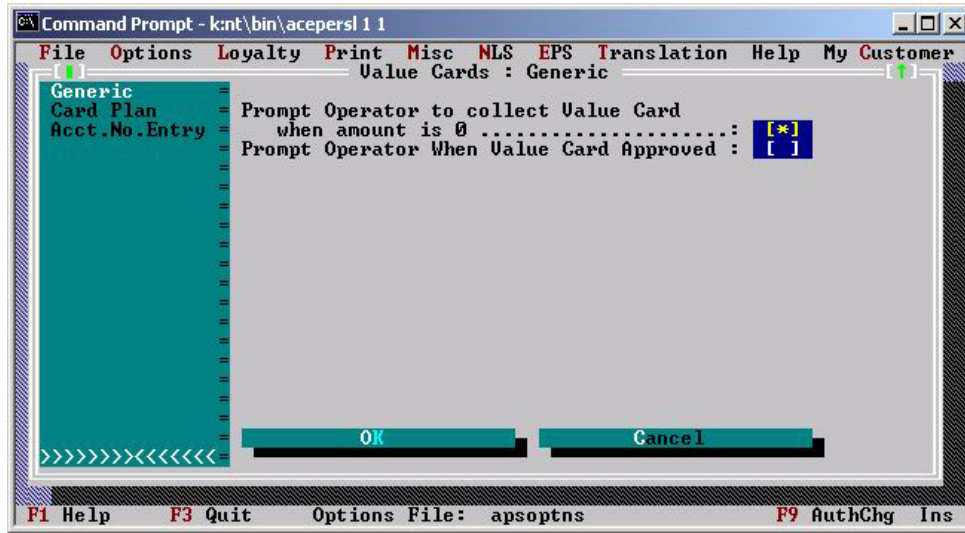
- Previously, in a transaction, the void of a Value Card could be “Approved” even if the GIPC application was not active. This could cause the store to lose money since the void is never sent to the EPS Server, leaving the original value still available on the card. SurePOS ACE Version 2 will validate that GIPC is up and running before voiding Value Cards. If GIPC is not active a manager override is required to void a value card from a transaction. It is the manager’s responsibility to collect the voided cards and use the Return Item Procedure (procedure 12) when GIPC is back online.
- In SurePOS ACE Version 1 Release 5 Value Cards receiving approval from a host system, but not added to the transaction, are not included in the transaction during terminal recovery. This causes the store to lose money, since the customer is not charged for the activated Value Card.

In SurePOS ACE Version 2 the Value Card activation is reversed after terminal recovery. This is the same logic used for the handling of outstanding EPS tenders.

After terminal recovery these value cards will have to be re-sent for approval (reactivated).

- Users now have the option of receiving a Value Card Approval message and only having a tone sound when the approved value card message is received by the terminal application.

To support this function, the new Prompt Operator When Value Card Approved option has been added to EPS > Value Cards > Generic Personalization.



References:

- *SurePOS ACE Electronic Payment Support User's Guide (GC30-3923)*
 - Personalization
- *SurePOS ACE Planning and Installation Guide*
 - Print Personalization

Reports

(Planning/Sales and Reports, Differences/Sales and Reports)

Operator Sales by Terminal – The Operator Sales by Terminal Report is not supported by SurePOS ACE Version 2. If you need support for this report, contact the IBM NRSC.

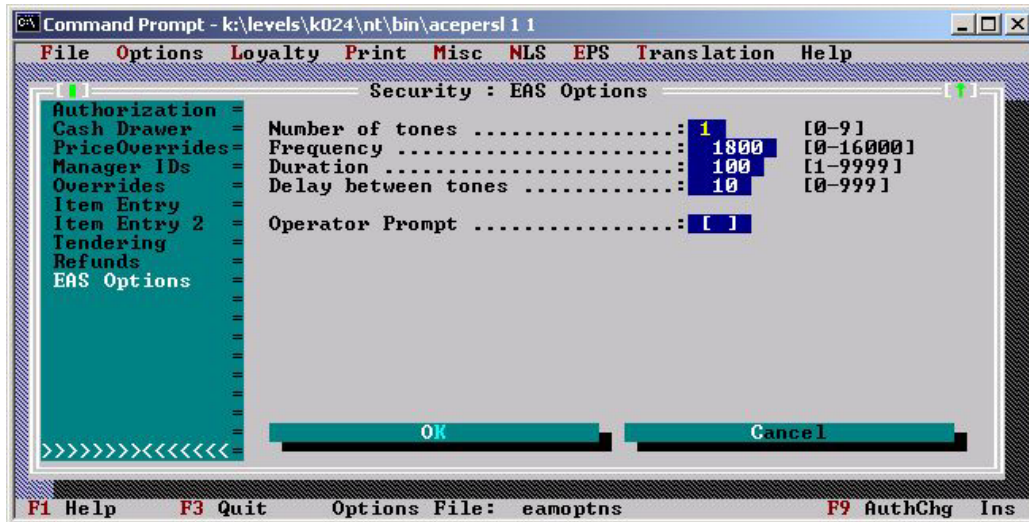
Item Record

(Planning/Item Record, Differences/Item Record)

Electronic Article Surveillance Indicator – This function supports the addition of an Electronic Article Surveillance (EAS) Indicator to item records of items that have an EAS device attached. The EAS indicator is a one-byte field that contains an integer in the range of 0-255. When an item with a non-zero EAS indicator is sold, the cashier can optionally receive a prompt instructing the cashier to deactivate the EAS device on the item and a tone can be sounded. This is intended to reduce the occurrence of shoppers leaving the store with items they have purchased, but whose EAS devices have not been deactivated, thus reducing the numbers of inconvenienced and embarrassed shoppers; and reducing the number of false alarms.

The EAS Indicator is supported for normal and miscellaneous type item sales. Value cards are not a supported EAS item type.

This function is enabled/disabled via Personalization > Options > Database > Item2. The tone frequency, count, duration, delay and operator prompt are specified under Options > Security > EAS Options Personalization. The prompt can be modified under Misc > Descriptor Editor > Sales Descriptors.



Both Data Maintenance and Batch Data Maintenance support EAS indicator maintenance. The Selective Item Report batch creation facility may be used to set the EAS type value for items and the EAS type may be reported and searched using normal SurePOS ACE reporting facilities.

References:

- SurePOS ACE Planning and Installation Guide
 - Planning Storewide and Terminal Options

Code 39 Bar Code Loyalty Cards
(Loyalty/Customer Identification)

SurePOS ACE Version 2 includes support for the scanning and key entry of loyalty cards, with a nine-digit customer number, using the CODE39 barcode format.

Support is also included for swiping the CODE39 cards on the keyboard MSR. Cards must meet specific criteria for MSR swiping and there are migration considerations. See Appendix A: Migration Considerations in the *SurePOS ACE Planning and Installation Guide*.

To implement this support in Personalization, set Category to 0 in Loyalty > General > ID Entry and set Max length of customer number to 9 in Loyalty > Home Store.

Keying sequences are covered in the SurePOS ACE Guide to Operations.

References:

- *SurePOS ACE Planning and Installation Guide*
 - Appendix A: Migration Considerations
- *SurePOS ACE Guide to Operations*

EPS Enhancements

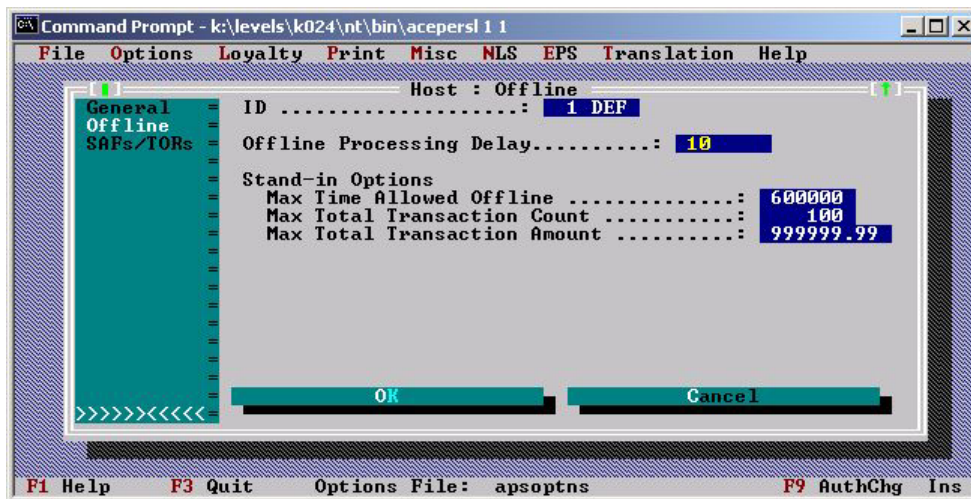
(Planning/EPS, Differences/EPS)

Host Support – SurePOS ACE Version 2 supports the following host interfaces:

- Kincaid
- Bypass
- Fifth Third Processing Solutions MPS
- Fifth Third Processing Solutions UPP

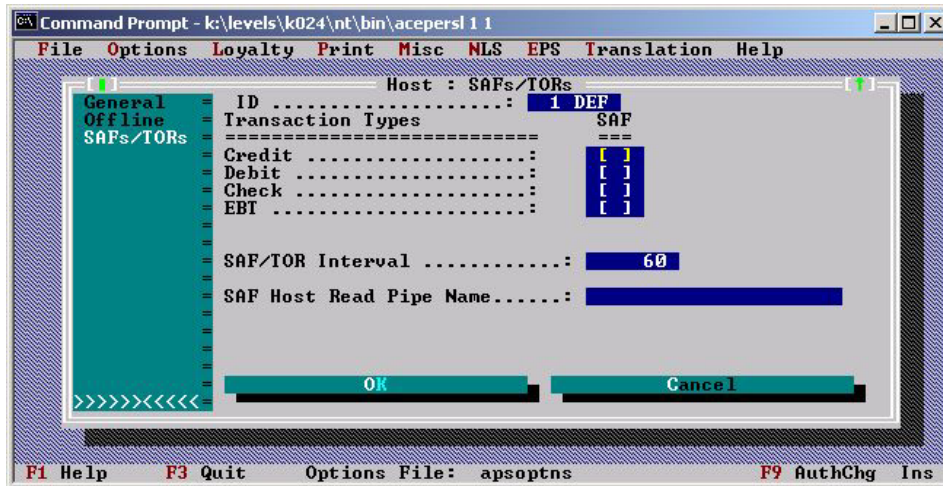
Review the SurePOS ACE EPS User's Guide host specific planning and Installation checklist for the major tasks required to implement your selected host interface.

Increase Stand-in Limit – The Stand-in Limit specified in EPS > Host > Offline has been increased from \$99,999.99 to \$999,999.99. This will potentially allow a store to operate offline for a longer period of time before reaching the stand-in limit.



Separate Host Connection for Store and Forwards (SAFs) – This function provides support for two separate host link tasks configured to use the same host with different TCP/IP host ports, one pipe for Store and Forwards and another pipe for other online traffic. This will allow a customer the option of disabling sockets to keep SAFs from being sent by the stores when the host is overloaded with other traffic.

The EPS > Host > SAFs personalization page has been renamed EPS > Host > SAFs/TORs. A new option SAF Host Read Pipe Name will be used to specify the pipe that will handle all SAF processing.



Other online traffic will be handled by the pipe specified in Host Read Pipe Name option specified on the EPS > Host > General personalization page. Since it is not used, the existing Host Read Pipe Size option has been removed from the EPS > Host > General page.



SAF/TOR Delay – The SAF Interval has been changed to the SAF/TOR Interval and moved from EPS > Host > General to the new EPS > Host > SAFs/TORs personalization page. In order to allow time for a transaction to process before receiving the TOR, the timer interval will apply to both SAFs and TORs.

References:

- *SurePOS ACE Electronic Payment Support User's Guide (GC30-3923)*
 - Planning
 - Personalization

Developer Tools

(Planning/SurePOS ACE Extensions)

Item File Layout Report – SurePOS ACE Version 2 provides an Item Record Layout Report that contains the offset, length, and SQL data type of all item record fields in the SAPATH.DDF file.

This report can be accessed from the reports menu under the heading Developer Tools when the ACEREINI.USX overlay file is renamed ACEREINI.US9. Other reports that appear under the Developer Tools heading are:

- SQL Query Report – Issues SQL queries against the tables and columns that are defined in the SAPATH.RVT file
- SQL Update Report – Issues SQL updates against the tables and columns that are defined in the SAPATH.RVT file.

These reports are provided for use during SurePOS ACE development, debugging, and migration.

References:

- *SurePOS ACE Program Reference*
 - INI File Descriptions
 - “ACEREINI (Report Engine)”