

**SAM INTERFACE RELEASE  
CE UPDATE**

FEBRUARY 1986

**FIELD  
RESOURCE  
MANAGEMENT  
SYSTEM**



## **Section 1 : SAM Interface Release Overview**

Introduction . . . . .	1-1
------------------------	-----

## **Section 2 : Automated Parts Consumption**

Introduction . . . . .	2-1
COMNET . . . . .	2-1
SAM Part Edits . . . . .	2-1
Failing a SAM Part Edit . . . . .	2-3
Decoding SAM Part Edit Error Messages . . . . .	2-3
Unconsumed Parts . . . . .	2-4
Suspending CSOs . . . . .	2-4

## **Section 3 : Unavailable CE**

## **Section 4 : Edits**

New or Changed Edits for RC CSOs . . . . .	4-1
--	-----

## **Section 5 : Misc Changes**

New Statuses . . . . .	5-1
FIREMAN CHANGES . . . . .	5-1
Send, Delete and Reroute CSOs . . . . .	5-1
Multi-Item Changes . . . . .	5-3
HCETS CHANGES . . . . .	5-3
Hotsite Notification . . . . .	5-3
General Messages . . . . .	5-3
After Hours . . . . .	5-3

## **Section 6 : Quiz**

## **Appendix A : New Error Messages**



## **Introduction**

This training document is intended as a brief introduction to the SAM Interface Release. It would also be a good idea for you to complete the SAM Interface Release ITF Training package. For a full introduction to HCETS, see the HCETS Self Paced Learning Guide. Refer to the FIREMAN system training for a full explanation of FIREMAN.

The SAM Interface Release of FIREMAN includes changes that will affect the way you do your job. The major impact will be from the new "Automated Parts Consumption" feature. In addition there is a Unavailable CE feature, Edit Changes, New Status Codes, Screen Changes, and some additional changes to HCETS. They are grouped in the following categories:

- Automated Parts Consumption
- Unavailable CE
- Edits
- Misc Changes

An appendix containing the new error messages is also included.



## Introduction

The goal of automated parts consumption is to eliminate double data entry of parts into FIREMAN and SAM and also provide an on-line approach to part editing. This places the responsibility of accurate parts information on you, the CE, instead of the parts room people.

Currently, when you update a CSO to RC status it is edited by the HCETS Controller. The Controller performs the FIREMAN DC edits. If you pass these edits, the CSO is removed from your terminal. Chances are you do not deal with that CSO again. Any part discrepancies are usually handled by the parts coordinators.

With this release the responsibility for valid parts information is now yours. After you update the CSO to RC status, the Controller performs the new PE (Parts Edit) edits (these are the old DC edits). After it passes these edits, the CSO is sent to SAM where it is edited for correct parts information. If the CSO does not pass, the CSO is returned to you along with the error messages. You can then correct the parts information and retransmit the CSO.

## ComNet

The parts information is passed back and forth between FIREMAN and SAM via a Communication Network called ComNet. ComNet is a combination of message files and message transmitters. It works independently of FIREMAN and SAM, and could be used by other applications in the future. If you would like further information regarding ComNet, refer to the ComNet User Guide.

## SAM Part Edits

After the CSO has passed the HCETS Controller edits (FIREMAN PE edits), it is passed to SAM via ComNet to be edited for valid parts information. At this point, several situations may occur.

1. If SAM indicates that the CSO passed edits during your connection, the CSO is removed from your terminal (you won't hear a beep or see an error message) and updated to status DC in the data base.
2. If SAM edit errors are returned before you disconnect, your terminal will beep with the message:

*(cso key) Failed edits*

The CSO and the edit errors are put back into your terminal at status RC.

## Automated Parts Consumption

3. If the results of the SAM edits are not returned during your connection, your terminal will beep with the message:

*(cso key) No SAM response*

This warning indicates that the CSO is removed from your terminal, but you may not have passed SAM edits. The CSO is now on the FIREMAN data base at status PE. This indicates to the dispatcher that the CSO is awaiting edit information from SAM. When the edit information is returned, FIREMAN checks to see if the CSO passed parts edits.

- If it passed, the status is updated to DC and you won't see the CSO again.
- If it failed SAM edits, the CSO is updated to \*PF status and placed in the HCETS transmission queue. When you connect again the CSO is downloaded to your terminal at status RC. You can then correct the SAM edits and re-transmit.

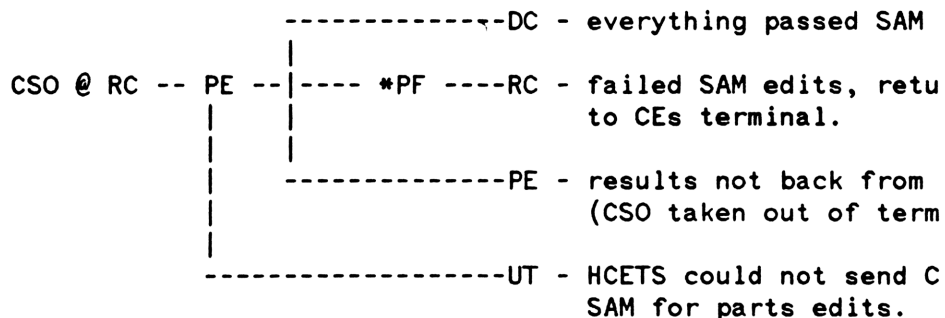
If you cannot pass the SAM edits you may Suspend the CSO and work out the part errors later with the parts room.

4. If HCETS could not access the ComNet message file, then the CSO cannot be sent to SAM for parts edits. If this happens, your terminal will beep with the message:

*(cso key) ComNet unavail.*

The CSO is removed from your terminal and updated to the FIREMAN data base at status UT. When the problem is corrected, the CSO is sent off to SAM for edits by the Dispatcher. Like situation 3 above, the CSO may be loaded to your terminal on a subsequent transmission if it fails edits.

Here is a picture of the statuses a CSO can go to when it is sent to SAM for parts edits:





## Failing a SAM Part Edit

When the CSO is being edited by SAM, the entire CSO is deleted from your HP75. When the errors come back, the CSO is then retransmitted back to you along with the error message. (It is still found in the CSO Message field.)  
NOTE: The CSO is loaded at the end of the CSO file.

The format of this type of error message varies slightly from the HCETS Controller error messages. This message begins with only one "?". It relates to part errors only.

The CSO Message field has room for only eight SAM error codes. In the unlikely event that there are more than eight SAM errors for this CSO, the additional error codes are loaded when you resolve the original errors and re-transmit.

## Decoding SAM Part Edit Error Messages

The following is an example of an error message returned from SAM:

? 1462 1469 2471 0482

This means you have three errors affecting two of your parts and one error affecting the entire CSO. The first number in the error code indicates the part number; a zero relates to the entire CSO. The next three numbers indicate the error number. These can be found in your *CE Pocket Guide* and correspond to the error messages displayed in FIREMAN. The errors are described below.

- The first error refers to the first part. 462 indicates "Part number does not exist on the database".
- The second error is also associated with part one. The code 469 says "Part Quantity exceeds the quantity assigned to CSO on SAM".
- The third error is associated with part two. If you check your *CE Pocket Guide* you see that 471 indicates "This is an expense part - it cannot be issued to a CSO".
- Error number four starts with a zero. This error relates to the entire CSO. 482 indicates there are outstanding orders against this CSO on SAM.

### NOTE

Occasionally you will run across a SAM edit error with an "\*" in the first character. This indicates a SAM error that is undefined in FIREMAN. The error code is an actual SAM error number. To find out what the code means, see the *SAM User Guide*.

# Automated Parts Consumption

## Unconsumed Parts

Another type of SAM error concerns unconsumed parts. Depending on local procedures, you may or may not see these errors. In some regions unconsumed parts are considered an error condition. In other regions the unconsumed parts are not considered an error, and the CSO goes straight to DC status and is processed as usual. Therefore, there are two configurations to deal with.

### Configuration 1: Unconsumed Parts Causing Errors

Let's say you use three parts for a CSO, but you checked out five parts to this CSO on SAM. You correctly enter the parts information for the three consumed parts into your HCETS and set the status to RC.

After the CSO has been sent to SAM, the CSO comes back to your HP75 with the SAM edit error message. The code indicates that you have unconsumed parts on the CSO. Also, the parts that SAM thinks were unconsumed are actually loaded into your terminal.

If the parts are unconsumed you must place a "U" in the Use Code field to indicate to SAM that the parts were not used in the repair. Otherwise complete the part information and retransmit the CSO.

If SAM detects more than eight parts assigned to a CSO, the CSO is returned to FIREMAN with the first eight parts and the status is updated to ?PF. The CSO is not put in the HCETS transmission queue. This is due to a memory limitation of the HP75. FIREMAN will not notify you of this error. The additional unconsumed parts have to be dealt with on SAM.

### Configuration 2: Unconsumed Parts Not Causing Errors

In the above scenario, even though SAM knows there were more parts assigned to the CSO, the CSO won't be returned to you. It goes to DC status and is processed as usual. It is up to the Parts Coordinator and you to ensure that the unconsumed parts are returned to the parts room.

## Suspending CSOs

Another feature of this release is the ability to remove a CSO from your terminal by *suspending* it. There are two reasons to suspend a CSO. To get help in resolving parts edits and to help you manage your CSO load.

Let's say you have a CSO at RC status and you cannot pass SAM Part edits. You can suspend the CSO by typing "SUSPEND" in the CSO Message field and transmitting. The CSO is removed and updated on the FIREMAN data base at status ?SU. This indicates that PE edits are passed, but the CSO still needs valid parts information from the CE. You could work out part discrepancies later with the parts room.

Now let's say you have a CSO at less than RC status in your terminal that you are not going to work on right now. If you need more room for additional CSOs in your terminal you can suspend the CSO by changing the

## Automated Parts Consumption

status to RL, typing "SUSPEND" in the CSO Message field, and transmitting. *This works only if the status is RL in the terminal.* When you connect, the Controller removes the CSO from your terminal without doing any editing. It is placed in the FIREMAN data base at SU status. This status indicates that the CSO is still under your control, but still requires more data.

When you are ready to work on the CSO again, contact a dispatcher and have the CSO retransmitted. It is returned to you at status NC.



The Unavailable CE feature allows Dispatchers to track your unavailable time. In the past, dispatchers probably kept a list of unavailable CEs at their desk to refer to when assigning a CE to a CSO.

Now FIREMAN keeps that list internally and checks it each time an assignment is made. If a dispatcher tries to assign an unavailable CE to a CSO, a message appears and the assignment does not take place. (A dispatcher can force the assignment on the Update 1 screen.)

The most efficient way to make yourself unavailable is by using FIREMAN's General Message screen. This process is explained in the FIREMAN SAM Interface Release ITF Training.

If you don't have access to a FIREMAN terminal, you can alert the Dispatcher that you are (going to be) unavailable by sending a general message with pertinent information. Upon reviewing the general message, the Dispatcher enters the information on the General Message screen. She can enter the time you become unavailable and the time you become available again. You need to give her the following information to make this feature work:

- A very brief (20 characters or less) reason for your unavailability.
- A Date and Time when you will start to be unavailable.
- A Date and Time when you will become available again.



The SAM Interface release introduces some new edits and also changes some existing edits. A brief list of them are:

- Receive date and time, Start date and time, and Finish date are always required.
- Repaired unit and parts are edited, even when a check digit exists
- Serial number of Repaired unit and System model must contain valid Country of Manufacturing Code.
- Overrides on Repaired unit and System model require supplying division, product type and product line.
- K/T field must be S, T, O, C, or K.
- Part Location is only required when Location Type is C.
- Part Use Code must now be equal to Y, N, or U.

## **New or Changed Edits for RC CSOs**

- The Receive date and time, Start date and time, and Finish date are always required.

In the past, these fields were only required when product and repair types were as follows: when product type is equal to "02" or "03" and repair type was not equal to "03C", "06C" or "04". The product type field wasn't required and usually wasn't filled in, because SORDS automatically looks up product type. If the product type field wasn't filled in, the Received date and time, Start date and time and Finished date and time weren't edited. By removing the edits on product and repair type, we ensure that the edits on the date and time fields are executed. In many cases FIREMAN automatically fills in the dates and times.

- Repaired unit and parts are edited, even when a check digit exists.

In the past, the repaired unit or part field passed edits only when the check digit was present. This was because we edited for existence on all 16 characters, not just the 15 characters of the repaired unit or part number. The existence edit now examines the 15 characters of the repaired unit or part number and excludes the check digit.

- Serial number of Repaired unit and System model must contain valid Country of Manufacturing code.

These codes are determined by PRIME, and if the code is not valid, an error results.

## Edits

- Overrides on Repaired unit and System model require supplying division, product type and product line.

In the past, you could pass edits when both System and Repaired unit were overridden with an "R" in the check digit field without having to fill in supplying division, product type and product line. When this happened, there was no way to determine which divisions to bill for the service provided on the CSO. We are changing the edit so that the supplying division, product type and product line are required when both the repaired unit and system unit are overrides.

- K/T field must be S, T, O, C, or K (spells STOCK).

The automated part consumption interface has made the Part Location Type (K/T in HCETS) an important field. Consider the following variations of Part Location and how it affects how parts are processed. NOTE: In all of the cases below, the part Office field may be left blank. If left blank, then it defaults as your Repair Office.

Location Type = S:

If the part came from the Stockroom, you would specify "S" as the part Location Type. You do not need to specify a part Location for parts taken from Stock.

Location Type = T:

If the part came from your Tech Stock (or another Tech's Stock), then you would specify "T" as the part Location Type. You would also need to specify the Tech number in the Location field if it was not from your Tech Stock.

Location Type = O:

If the part was an ordered part, then you would specify "O" as the part Location Type. The part Location is left blank if the part was ordered.

Location Type = C:

If you wish to use a part assigned to a different CSO (in the same Repairing Office), you would specify "C" in the part Location Type. In addition, you need to specify the Base number and Item number of that CSO in the Location field.

For example, if you used a part assigned to CSO 2606A123400141, you would specify A123401 in the Location field.

Location Type = K:

If the part came from a Kit, you would specify "K" as the part Location Type. Also, you need to supply the actual Kit number in the Location field.

- Part Location is only required when Location Type is C or K.



A Location Type of "C" or "K" indicates part movement from another CSO or from a Kit. Therefore, the CSO number or Kit number must be supplied in the Location field in order for SAM to perform the movement.

- Part Use Code must now be equal to Y, N or U.

In the past, if there was an "A" or "B" in the CE field on the Update 2 screen, the Use Code had to be a non-blank value. For the SAM Interface Release, we are changing this edit to require either a Y, N or U in this field. SAM utilizes this field for part reordering.

Y indicates that the part was consumed and should be reordered, N indicates that the part was consumed but should not be reordered, and U indicates that the part was unconsumed.

- Before transmitting parts data to SAM, FIREMAN does some new preliminary edits. This is being done to reduce the number of unnecessary transmissions between FIREMAN and SAM. These edits are performed after the CSO passes the FIREMAN edits.

1. Valid part number - a PRIME access to ensure an existing valid part number. If a part number isn't found on PRIME but you know that the part number is valid, you may override the part number by entering an "R" in the check digit position for that part (last character in part number field).

The part number is then edited by SAM, which has a local parts data base to handle parts that haven't been added to PRIME. If SAM can't find the part on either PRIME or the local parts data bases, an error is returned to FIREMAN for that part.

A price must be provided to SORDS for overridden parts. If the parts price field passed to SAM is empty and SAM finds the part in its local parts data base, this price in SAM is added to FIREMAN. You can also enter a price on the Update 2 screen.

2. Valid part quantity - any quantity greater than zero.



## New Statuses

We are adding five new CSO statuses to the FIREMAN CSO Status flow with the SAM Interface Release:

- PE (Parts Edit)
- SU (SUsuspended)
- UT (Unable to Transmit)

You may use any of these statuses to qualify a retrieval on the Work Assignment screen.

With the addition of the five new CSO statuses, your default and expanded CSO lists are changing as shown below.

Previous Default	RL,RA,IT,OS, NC,RC
Previous Expanded	MA,DC,PF,RE, OK,VO
New Default	RL,RA,IT,OS, NC,RC,PF, <u>PE</u> <u>SU</u>
New Expanded	MA,DC,RE, <u>UT</u> , OK,VO,CR,CL,

## FIREMAN CHANGES

### Send, Delete and Reroute CSOs

With the SAM Interface Release, you can use FIREMAN to send, delete and reroute your currently assigned CSOs. You may *not* send, delete or reroute unassigned CSOs or CSOs assigned to other CEs.

## Misc. Changes

The Send, Delete, and Reroute functions refer to the transmission of CSOs to your HCETS. When you Send a CSO, you place it in the HCETS transmission queue. The next time you connect to the HP3000 with your HCETS, that CSO is downloaded into your handheld terminal. Deleting a CSO removes it from the HCETS transmission queue. The CSO *isn't* deleted from the FIREMAN data base. When you Reroute a CSO, the status changes to !RL. Usually, an alarm is set for status !RL alerting the Dispatcher when you reroute a CSO.

You can perform all three functions on the Update 1 screen. First retrieve the CSO you wish to Send, Delete or Reroute by entering the CSO number at the top of the screen.

- Sending a CSO from the Update 1 screen

If you wish to send this CSO to your HP75, type "S" in the Msg Cntl field and press **ENTER**. You receive the CSO in your HP75 the next time you call in. You can send a CSO at the following statuses: RL, RA, IT, OS, NC, RC, and PF. However, you can't send a CSO if a CE B has been assigned to it.

- Deleting a CSO from the Update 1 screen

To delete CSOs from the HCETS transmission queue, type "D" in the Msg Cntl field and press **ENTER**. If the CSO is in the HCETS transmission queue, the following message appears: "CSO deleted from transmission queue". If the message, "CSO not found in transmission queue" displays, the CSO wasn't in the transmission queue. Perhaps you made an error when you typed in the CSO number, or the CSO was already deleted from the transmission queue.

- Rerouting a CSO from the Update 1 screen

To reroute a CSO, type "R" in the Msg Cntl field and a comment (who to reroute the CSO to and why) in the From CE Message field. Press **ENTER**. The CSO status automatically becomes !RL. You should remember that you remain assigned to the CSO until the Dispatcher assigns another CE to the CSO.

You can also send and delete CSOs from the HCETS Message Queue on the Work Assignment screen. To Send a CSO, type "S" to the left of your name on the CSO you want to send and press **ENTER**. To delete a CSO, type "D" in this column and press **ENTER**. (You can send and delete any number of CSOs at once.) You can't, however, reroute CSOs on the Work Assignment screen because there is no field to enter a comment to the Dispatcher.

### Multi-Item Changes

You can create multi-items for your CSOs on the Update 1 screen. This feature duplicates a capability you already have in HCETS.

To create a multi-item CSO, follow the steps below:

1. Retrieve the CSO to Update 1. If the CSO is closed, press **F3** to retrieve it from History.
2. Press **F1**. This brings up the second level of softkeys. Press **F1** again. This softkey copies important fields within the CSO, blanking out a majority of the other fields. (For a list of all the fields blanked out when you create a multi-item, see Appendix D.) The CSO item number increments to the next available item number. The status is set to RL, and the received date and time are set to the current date and time.
3. Change the information as needed, adding important details such as repair unit and serial number. Press **ENTER**.
4. Repeat Steps 2 and 3 for each item you want to create.

### HCETS CHANGES

#### Hotsite Notification

When you create a new CSO or modify an existing CSO in your HP75 and connect to FIREMAN, the hotsite status of that CSO is checked. If the repair is a hotsite, you see a message in the CSO message field of the CSO. During transmission, the handheld terminal beeps and displays the following warning message:

*CSO (cso key) is a HOTSITE:H\_\_*

The H\_\_ indicates what caused the hotsite. The possible codes are:

- HC - Control Number triggered Hotsite
- HN - Name of Customer triggered Hotsite
- HS - System Handle triggered Hotsite
- HU - Unit Serial number triggered Hotsite

#### General Messages

Blank general messages are now deleted from your handheld terminal when you transmit, and are not sent to the specified receiver.

## **Misc. Changes**

### **After Hours**

When you connect to the Response Center for after hours support, multi-items that you created from CSOs logged at the Area won't be loaded into the Response Center data base unless a matching multi-item exists in the Response Center data base. These multi-items are transferred to the Area data base the next time you log onto the Area data base with your real CE number.

Answer the following questions, the answers are on the next page.

1. Before a CSO can be sent to SAM it must pass \_\_\_\_\_ edits.
2. DC edits are now known as \_\_\_\_\_ edits.
3. The CSO stays in your terminal until you can pass SAM edits. True or False? \_\_\_\_\_
4. What does an "\*" in the first character of a SAM edit error indicate?  
\_\_\_\_\_
5. How do you Suspend a CSO to manager your workload?  
\_\_\_\_\_
6. How do you Suspend a CSO that is at RC status and cannot pass SAM edits?  
\_\_\_\_\_
7. What does a dispatcher need to know to make you unavailable?  
\_\_\_\_\_
8. Describe the following statuses?
  - a. PF \_\_\_\_\_
  - b. ?SU \_\_\_\_\_
  - c. SU \_\_\_\_\_
9. How can you send a CSO that is currently assigned to you?  
\_\_\_\_\_
10. How are you now notified of a Hotsite? \_\_\_\_\_

# QUIZ

## Answers:

1. HCET Controller Edits, these are the equivalent of FIREMAN PE edits. (old DC edits)
2. PE
3. False. It is always removed from your terminal. However, if you fail SAM edits it is downloaded back into your terminal with the error message and possibly with any unconsumed parts. This may happen during your original connection or at a later time.
4. An error message that is undefined in FIREMAN. You have to check your *SAM User Guide*.
5. Change the status to RL, then type "SUSPEND" in the first seven characters of the Message field.
6. Type "SUSPEND" in the first seven characters of the Message field.
7. Reason why, date and time unavailable, and date and time available again.
8. \*PF - failed SAM part edits and placed in HCETS Transmission Queue. It will be updated to NC when you connect. ?SU - Suspended with repair details complete. SU - Suspended without repair details complete.
9. From the WA screen, place a "S" next to your CSO and press enter. From the U1 screen, type "S" in the Msg Cntl field and press enter.
10. Your terminal will beep and *CSO (cso key) is a HOTSITE:H\_\_* will be placed in the CSO message field for the CSO.



# NEW ERROR MESSAGES

APPENDIX

A

## NEW HCETS ERROR MESSAGES

ERROR CODES	FIELD TO CORRECT	DESCRIPTION OF ERROR
669	Pts 1-8	PART NUMBER not found on PRIME.
680	Pts 1-8	5th character of OFFICE LOCATION must be S, T, O, C, or K.
698	Pts 1-8	USE CODE must be Y, N, or U.
823	Pts 1-8	'C' cannot be coded without an OFFICE and LOCATION.

## NEW SAM ERROR MESSAGES

ERROR CODES	FIELD TO CORRECT	DESCRIPTION OF ERROR
461	0	SAM shows unconsumed parts for this CSO.
462	Pts 1-8	PART NUMBER does not exist on PRIME or SAM for local parts file.
463	Pts 1-8	LIST PRICE must be positive and less than \$1,000,000.00.
464	0	Another CE is assigned to this CSO on SAM.
465	Pts 1-8	Pool-ID does not exist on SAM data base.
466	Pts 1-8	There are not this many unconsumed parts assigned to this CSO.
467	Pts 1-8	Part quantity must be a positive integer.

NOTE: A zero in the "FIELD TO CORRECT" column means that the error applies to the entire CSO.

## NEW ERROR MESSAGES

### NEW SAM ERROR MESSAGES

ERROR CODES	FIELD TO CORRECT	DESCRIPTION OF ERROR
468	0	CSO does not exist on SAM data base.
469	Pts 1-8	PART QUANTITY exceeds the quantity assigned to CSO on SAM.
470	0	Can't move part from CSO - Part matches two or more lines on CSO.
471	Pts 1-8	Part is an expense part only--it can't be issued to a CSO.
472	0	REPAIRING OFFICE entered is not tracked on the SAM data base.
473	0	EMPLOYEE NUMBER entered is not found on ESS data base.
474	0	PRIME data base cannot be opened by SAM.
475	Pts 1-8	Part owning office is not in this region.
478	0	This CSO has been made unavailable for additional parts activity.
479	0	Repairing office must match transaction office.
480	Pts 1-8	There is not enough of the part in this pool for this transaction.
481	Pts 1-8	This part has been SIS validated and can't be changed.
482	0	CSO is not complete--there are outstanding orders or requests.
483	Pts 1-8	There is not enough orders to satisfy the quantity specified.

NOTE: A zero in the "FIELD TO CORRECT" column means that the error applies to the entire CSO.

Shift I/O

265-9805  
6  
7  
8

sysa

Pause

CONNECT

: Hello X265xxxx, USER, FMN

ACCT. PASSWORD : Gallant

USER Password : Stars

CO 05R

WA 02H - 02N

IN 02L

PM 05Q

TR 01

sysc

: Hello x265xxxx, User. FMN

Mini

Watch

Emp #

Pw

APP: SAM

PR - Prime (parts description & pricing)

IR - Inv. Stock Rep.

CR - CSO Reporting

LR - Pool Rep.

OR - Order Review

UR - Over/Understock Rep.

KR - Kit Review

