



# Phoenix Release Notes

# 2011

---

Phoenix Release Notes on what is new in Phoenix Version x.4.2.0

x.4.2.0

©2011 BY ABM  
ALL RIGHTS RESERVED

ABM DATA SYSTEMS  
896 SUMMIT STREET, SUITE 107  
ROUND ROCK, TX 78664

(512) 388-3250

---

ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE REPRODUCED BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM ABM. THE INFORMATION IN THIS PUBLICATION IS BELIEVED TO BE ACCURATE IN ALL RESPECTS. HOWEVER, ABM CANNOT ASSUME RESPONSIBILITY FOR ANY CONSEQUENCES RESULTING FROM THE USE THEREOF. THE INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISIONS OR NEW EDITIONS TO THIS PUBLICATION MAY BE ISSUED TO INCORPORATE SUCH CHANGES

---

## Table of Contents

<b>TABLE OF CONTENTS.....</b>	<b>3</b>
<b>HOW TO CONTACT ABM DATA SYSTEMS .....</b>	<b>7</b>
CORRESPONDENCE AND BILLING ADDRESS.....	7
SALES .....	7
TECHNICAL SUPPORT .....	7
<b>I. GUIS .....</b>	<b>8</b>
A. ENHANCEMENTS .....	8
1. <i>All Applications</i> .....	8
a) [PUG #51;91/A0063;A0010] ALL GUIs: Access other GUI Apps from Menu Bar.....	8
2. <i>Alarm Processing and Data Entry</i> .....	8
a) [PUG #7/A0005] AP/DE: History Window can now be minimized.....	8
b) [PUG #1/A0079] AP/DE: NoAction wizard has a new check box .....	8
c) [PUG #11/A0015] AP/DE: NoAction wizard has a new button .....	9
d) [PUG #32/A0094] AP: Signal order has changed .....	9
e) New Alarm.ini entries .....	9
(1) [PUG #22/A0093] AP:.....	9
(2) [PUG #8;A0078] AP: .....	9
f) History lookups for Area Transmitters has been modified. ....	9
g) New Comment wizard .....	10
(1) In AP, it will be found in Activity Menu.....	10
(2) In Data Entry it can be found in Wizards Menu .....	10
h) There is a new tag.....	10
3. <i>Browser</i> .....	10
a) [PUG #45/A0082] BR: New columns have been added in Browser .....	10
4. <i>Alarm Processing</i> .....	11
a) Clear Pending has new selection criteria: Zip code.....	11
b) New system comments .....	11
c) New False Alarm Display.....	11
(1) False Alarm window.....	11
(2) Zone Listing .....	11
B. DEFECT FIXES.....	11
1. <i>Alarm Processing</i> .....	11
a) Auto Drop Feature .....	11
b) Logging Off.....	12
2. <i>Data Entry</i> .....	12
a) Appsrv Message.....	12
b) Hierarchy Tool .....	12
c) Schedules.....	12
3. <i>Data Entry and Alarm Processing</i> .....	13
a) No Action .....	13
(1) No Action Schedules .....	13
(2) No Action Component .....	13
b) Signal history lookup.....	13
<b>II. APPSRV .....</b>	<b>13</b>
A. ENHANCEMENTS .....	13
a) Branding Information .....	13
b) Error Messages .....	13
c) Licensing .....	13
(1) Displaying License Information in Log.....	13
(2) Desktop Editions of Phoenix .....	14

d)	Relatedinfo Column .....	14
e)	Site Processing .....	14
f)	RelatedInfo Field.....	14
g)	Shared Memory .....	14
h)	User PINS .....	14
i)	System Monitor changes .....	14
B.	DEFECT FIXES.....	15
a)	Multiple NIC Cards on Server.....	15
b)	Deleting from Signal Table.....	15
c)	Site Monitor .....	16
(1)	Schedule .....	16
(2)	HASP Security Key .....	16
d)	Processing Signals .....	16
<b>III.</b>	<b>ALARM FORWARDING .....</b>	<b>17</b>
A.	ENHANCEMENTS .....	17
a)	Temporary Contacts .....	17
b)	Message Table .....	17
B.	DEFECT FIXES.....	17
a)	Logging.....	17
<b>IV.</b>	<b>COLLECTS .....</b>	<b>17</b>
A.	ENHANCEMENTS .....	17
a)	Caller ID Data .....	17
b)	SIA – SDI Parsing INI addition.....	17
c)	Header/Terminating Characters .....	18
d)	TechConnect Collect .....	19
e)	Collect Logs.....	19
B.	DEFECT FIXES.....	19
a)	Collect Re-Connects .....	19
b)	NAT SIA Signals .....	19
c)	Line Card Limits.....	19
d)	MLR2000 Collect.....	19
e)	TCP Collect Connection.....	20
f)	Keltron Collect .....	20
g)	Safecom Data.....	20
h)	Collect Logs.....	20
i)	Collect INI's .....	20
<b>V.</b>	<b>MANAGER .....</b>	<b>20</b>
A.	ENHANCEMENTS .....	20
a)	False Alarm Process .....	20
B.	DEFECT FIXES.....	21
a)	Memory Issue - Manager.....	21
<b>VI.</b>	<b>REPORTS .....</b>	<b>21</b>
A.	ENHANCEMENTS .....	21
a)	Transmitter Detail Report.....	21
b)	Report Type .....	21
c)	Sort Option .....	21
d)	Print Option .....	21
e)	No Action Report Enhancements.....	22
f)	E-Mail Addresses .....	22
g)	TempData Report .....	22
h)	Transmitter Summary Report .....	22
i)	Dealer Summary Report .....	22

j)	Inventory Report.....	23
B.	DEFECT FIXES.....	23
a)	Signal Report.....	23
b)	Instruction Report.....	23
c)	Schedule Report .....	23
d)	Report Menus .....	23
e)	Report Setup.....	23
f)	Remote Data Entry/Reporting .....	23
g)	Report Criteria .....	23
h)	Year Information.....	24
i)	Contacts in Reports.....	24
j)	Page Breaks .....	24
k)	Carriage Returns .....	24
l)	Failed to Test Report .....	24
m)	Inventory Report.....	24
n)	No Activity Report .....	24
o)	Instruction Report.....	25
p)	Transmitter Detail Report.....	25
q)	Signal & Open/Close Reports.....	25
r)	Recurring Reports .....	25
VII.	OTHER .....	25
A.	DEFECT FIXES.....	25
a)	Manual Wizard .....	25
b)	Alarm Processing .....	26
c)	Data Entry.....	26
d)	OH2000 Collect.....	26
e)	Relay Client .....	26
f)	Counter Updates.....	26
g)	Andover Collect .....	26
h)	DMP Collect .....	26
i)	OH2000 Error Messages .....	27
j)	Service Ticket.....	27
(1)	Wizard.....	27
k)	New Installs .....	27
l)	Appsrv Log .....	27
m)	TempData Wizard .....	27
B.	ENHANCEMENTS .....	27
a)	Browser.....	27
b)	Wizards .....	27
c)	Relay .....	28
d)	Sort and Break by Option.....	28
e)	Installer .....	28
VIII.	SYSTEM MONITOR .....	29
A.	5 NEW TASKS ASSIGNED TO SYSTEM MONITOR .....	29
a)	COLLECT MONITORING.....	29
b)	DISK SPACE AVAILABLE MONITORING .....	30
c)	ABMSIGNAL TABLE MONITORING .....	30
d)	RELAY MONITORING.....	31
(1)	RELAY CLIENT - PART I.....	31
(2)	RELAY CLIENT - PART II.....	31
e)	ABMSIGNAL PURGE .....	32
B.	ITEMS OF INTEREST.....	32
a)	SYSTEM MONITOR CHECKS.....	32
b)	BENEFITS TO SYSTEM MONITOR GENERATING SIGNALS .....	33
c)	DATABASE TABLE REFERENCE.....	33

(1)	ABMtransmitter Table .....	33
(2)	ABMzone Table.....	33
(3)	ABMsigtype Table .....	33

## How to Contact ABM Data Systems

### Correspondence and Billing Address

**ABM Data Systems**

896 Summit Street, Suite 107  
Round Rock, TX 78664  
(512) 388-3250

### Sales

ABM Sales hours are Monday through Friday, 8:00 a.m. to 5:00 p.m.  
Central Standard Time.

Sales Phone: **(800) 767-7067**

Sales Fax: **(512) 215-4110**

Sales Email: [sales@abmsystemsllc.com](mailto:sales@abmsystemsllc.com)

World Wide Web Address: [www.abmsystemsllc.com](http://www.abmsystemsllc.com)

### Technical Support

ABM Support hours are Monday through Friday, 8:00 a.m. to 5:00  
p.m. Central Standard Time.

Support Phone: **(800) 729-4226**

**(512) 388-3250**

Support Fax: **(512) 215-4110**

Support Email: [support@abmsystemsllc.com](mailto:support@abmsystemsllc.com)

Please contact our Technical Support Department if we can help in any way.

This documentation outlines the newest Enhancements and Fixes for Phoenix Automation Software. The items showing like [PUG #xx/Axxxx] mean items that were discussed and wanted by the Phoenix User Group (PUG) that were included into this latest release. These are the latest notes REVISED 04/11/2011.

## I. GUIs

### A. Enhancements

#### 1. All Applications

**a) [PUG #51;91/A0063;A0010] ALL GUIs: Access other GUI Apps from Menu Bar.**

Clicking on one will open that application. If logged into an application that requires a password, password will not be required to open other applications. The manager application can only be opened from the Data Entry App.

Alarm Processing	-> can open Data Entry, Search & Browser
Data Entry	-> can open Alarm Processing, Search, Browser & Manager
Search	-> can open Alarm Processing, Data Entry & Browser
Browser	-> can open Alarm Processing, Data Entry & Search

**Items of note:**

ClassAuth is still validated, so if user is not authorized to run Data Entry, clicking on Data Entry from Alarm Processing will display message stating that fact.

**The menu items for other GUI client Apps will be disabled when running Remote Data Entry.**

#### 2. Alarm Processing and Data Entry

**a) [PUG #7/A0005] AP/DE: History Window can now be minimized.**

History Window was previously always on top, meaning other windows would appear behind the History Window. That feature cannot be turned OFF, because there would be no way to get focus (control) of the History Window without minimizing all other windows. Instead, the History Window can now be minimized.

**b) [PUG #1/A0079] AP/DE: NoAction wizard has a new check box**

The new box is labeled "Zone Restoral Verification". This feature only works for on demand (scheduled NA not supported at this time) NA applied at the Site or Transmitter level. If this item is checked, when the



End NA signal is generated, appsrv will check signal history to see if the Zones with non-restoral type signals received during the NA have received a restoral. If not, then appsrv will generate a 'NA Restoral Failure' type of signal (a signal with sigcat = 57). It does not matter whether the transmitter is on file or not.

**c) [PUG #11/A0015] AP/DE: NoAction wizard has a new button**

The button when clicked will display all NoActions in the system that is currently in effect. The list is sorted by transmitter name and includes hierarchy information. NA that use schedules will display if the 'delete date' of the schedule has not expired, however the schedule has to be viewed to determine if the NA is currently in effect or not.

**d) [PUG #32/A0094] AP: Signal order has changed**

The signal list which appears when processing an event (under Event ID/Date) is now sorted so that the most recent signals attached to the event are listed first. This is opposite of previous releases, but it now mimics the sorting that is done when doing a History lookup.

**e) New Alarm.ini entries**

**(1) [PUG #22/A0093] AP:**

Alarm.INI now accepts a new entry in the [INIT] section, AUTO\_HISTORY. If this is set to 1, as in

**AUTO\_HISTORY = 1**

When an event drops in AP, the History window will automatically open. To turn this feature off, set it equal to 0 or remove it completely from the INI. Since the INI is read once during startup, if the setting is modified, AP must be exited completely and restarted for the change to take effect.

**(2) [PUG #8;A0078] AP:**

Alarm.INI now accepts a new entry in the [INIT] section, AUTO\_ATTACHMENTS. If this is set to 1, as in

**AUTO\_ATTACHMENTS = 1**

When an event drops in AP, the attachment dialog will appear if there are attachments for the transmitter. Set it equal to 0 or remove from the INI to turn it OFF.

**f) History lookups for Area Transmitters has been modified.**

If the Base Transmitter column in the ABMtransmitter table is populated, when a history lookup is performed, signals for the base transmitter and area transmitters will be displayed.

**How does this work?** The standard SQL statement for a History lookup is in the form of

“...transmitter = ‘<transmitterID>’...”

But if Base Transmitter column is populated, the SQL statement will change to

“...transmitter like ‘<base transmitterID>%’...”

**For example**, suppose a central station wants to see all history for transmitter 1234:, regardless of area partition. When doing a history look up for transmitter 1234:01, if it’s Base Transmitter column contains 1234, history will display signals for transmitters 1234, 1234:01, 1234:02, 1234:03 and so on. If Base Transmitter is blank, history will only display for transmitter 1234:01.

**g) New Comment wizard**

The wizard is available in Alarm Processing and Data Entry.

**(1) In AP, it will be found in Activity Menu**

**(2) In Data Entry it can be found in Wizards Menu**

This allows comments to be added to transmitters. The comment column has a length of 500 characters. Think of this as adding action items to a transmitter without the need of an event. If this wizard is open while processing an event, all comments for that transmitter will be available.

**To control the access to the wizard and table options (add, update and delete) is component 129.**

**h) There is a new tag**

The new tag, ~name~, can be used with setting up the instructions. In Alarm Processing the tag will be replaced with the value found in ABMtransmitter site\_name.

### 3. Browser

**a) [PUG #45/A0082] BR: New columns have been added in Browser**

*Columns added to the Active, Pending and Wait Event queues:*

transmitter_name	(site_name from ABMtransmitter)
zone_name	(label from ABMzone)
zip	(zip from ABMtransmitter)

*Columns added to the History, Event and Wait Signal queues:*

transmitter_name	(site_name from ABMtransmitter)
zone_name	(label from ABMzone)
pin	(userabbrv from ABMcontacts)
relatedinfo	(parsed into ABMsignal.relatedinfo)

## 4. Alarm Processing

### a) *Clear Pending has new selection criteria: Zip code*

Clear Pending can now clear signals by zip codes of the events that are in the pending queue. When zip code doesn't matter, select Any of the Above to include all zip codes.

### b) *New system comments*

The following comments are now flagged as system comments

*They will begin with the \$ symbol*

*Start processing signal...*

*Stop processing signal...*

*Close signal...*

This was changed to work in conjunction with the new System Comments prompt in Phoenix Reporting.

### c) *New False Alarm Display*

#### (1) **False Alarm window**

Now displays counts for 24 months, Jan – Dec of current year and Jan – Dec of Last year. This works in conjunction with a new Manager option that has to be run manually at the start of a new calendar year which resets the false alarm counts. This process, which should be run only once per year, will move Current Year counts to Last Year counts and clear out Current Year.

#### (2) **Zone Listing**

An additional change was made to the drop-down zone listing. Previously, the drop-down zone listing displayed all zones defined for that transmitter, whether or not there were false alarms. Now the drop-down zone listing only displays zone which have a false alarm activity. The blank Zone ID is a total of all false alarms for the transmitter. If a zone is selected, and queried, false alarms counts for that specific zone are displayed.

## B. Defect Fixes

### 1. Alarm Processing

#### a) *Auto Drop Feature*

Release X.4.1.3 introduced the AutoDrop feature for AP. When the event auto drops, the operator should acknowledge the receipt of event by clicking on the blinking phone. If the operator did not acknowledge the event, but did close out of the event, every 30 seconds the

operators get a message that an event has not been acknowledged. Only way to stop the message is to exit AP completely. This has been fixed. If the operator by-passes acknowledging the event by closing the event, the acknowledge message will also stop.

**b) *Logging Off***

There was an issue if more than one Alarm Processing client was logging off and AP clients were at the “log out – Assign Pending and Wait Events” dialog. If all Alarm Clients are at this dialog, they can click on “OK” and no client will get the “You are the last User to logout of Alarm Processing” dialog. This has been corrected.

## 2. Data Entry

**a) *Appsrv Message***

Every time a Data Entry or Search client shuts down, a message would appear in the appsrv.log after 1 minute. The message read

```
ERROR: maint.c ExitMaint(), Failed Messenger shutdown.  
Unable to Close Message Queue...
```

This has been resolved.

**b) *Hierarchy Tool***

Now deletes ABMAction items if the History option is selected. Previously, only events and signals were deleted. We should have all customers go through and clear out old unattached action items as to not cause confusion if ever the Event ID counter is restarted.

A SQL statement below should clear out the unlinked action items.

```
DELETE FROM ABMAction WHERE action_id NOT IN (SELECT  
event_id FROM ABMEvent)
```

**c) *Schedules***

When making changes to schedules, all transmitters which use that schedule must have the next\_openclose\_data column NULLED out so that open/close monitoring can work properly. Phoenix was also NULLING out the same column found in ABMzone table, however Phoenix does not do open/close monitoring by zones. When updating the ABMzone rows, there could be instances of system performance issues, pauses greater than 20 seconds. Now is no longer updating column at the zone level.

### 3. Data Entry and Alarm Processing

#### a) *No Action*

##### (1) **No Action Schedules**

Release X.4.1.3 introduced NA schedules as cyclical. In order for the NA to take effect, the NA schedule must have the Delete Date populated. This column is now a required field. The monitor flags are also now grayed out since they have no impact on NA schedules.

##### (2) **No Action Component**

Component #127 (NoAction 8 Hr Component) was added during a previous release but it was never implemented. For X.4.2.0, turning this component ON for a ClassAuth will limit NoActions to a max of 8 hrs in NoAction wizard.

#### b) *Signal history lookup*

The Lookup would perform sorting of row by 'identifier desc'. However, if the signal identifiers were not in sequence for whatever reason, history look up would not be giving an accurate picture of received signals. Now history lookup sorts by 'signal\_date desc, identifier desc' which display all signals received regardless of signal identifier.

## II. APPSRV

### A. Enhancements

#### a) *Branding Information*

Collects, Relay, Manager, Watchdog and AlarmForwarding clients when logged in appsrv will now display the brand information in the ClientQ, which is viewable with Manager.

#### b) *Error Messages*

When appsrv returns a 'DBRequest error', the appsrv.log will now print the SQL statement which caused the error. This should aid in troubleshooting issues.

#### c) *Licensing*

##### (1) **Displaying License Information in Log**

[PUG #35/A0042] Appsrv now tracks license usage separately between Collects, Users, AlarmForwarding, FieldTechAccess and RemoteDataEntry. On appsrv starts, the appsrv.log will print the max allowed license counts for each type.

### (2) **Desktop Editions of Phoenix**

There are now 3 flavors of DE systems, with the only difference being how many transmitters are supported.

Phoenix DE Systems    - support 1500 transmitters  
Phoenix 100 Systems    - support 100 transmitters  
Phoenix Demo Systems - support 3 transmitters

#### **d) *Relatedinfo Column***

Relatedinfo column for Begin/End NA signals now contain the effective/expiration dates of the NA item. This column also now displays in Browser.

#### **e) *Site Processing***

Site Processing flag found in ABMsite now has an additional option. The Site Processing flag now supports these options

- 1 – all transmitters for the site share an event for new signals
- 2 – all transmitters for the site always generate a new event for new signals

***If the field is blank then Site Processing is not in effect, ABM default.***

#### **f) *RelatedInfo Field***

When appsrv generates a Wait Signal for Delay, Rwait or Redundant processing, the 'relatedinfo' column of the wait signal will contain the signal/zone data from the signal which initiated the wait condition. The 'decision\_group' column still contains the signal identifier of the initial signal.

#### **g) *Shared Memory***

Appsrv will now reload the most recent signals into History Queue on restarts. The number of signals reloaded is based on how the History Queue size defined in appsrv.ini. Default is 100 signals, but if the appsrv.ini has History Queue size of 250, then the most recent 250 signals are reloaded.

#### **h) *User PINS***

When user PIN is parsed from a received signal, the contact name will always be read from the ABMcontacts table and loaded into relatedinfo of the signal record. Previously this was done only for open/close type signals, but it has come to our attention that certain SIA non-open/closed type signals can also send in PIN data.

#### **i) *System Monitor changes***

See [System Monitor](#), page 29

## B. Defect Fixes

### a) *Multiple NIC Cards on Server*

On a multi-homed server (a server with more than 1 NIC installed), there was a possibility that appsrv broadcasts were not being sent to the NIC which appsrv bond to, so clients were not receiving new event messages. The problem occurred because the message broadcast always selected the faster NIC, which may not be the one appsrv is accepting client connections. This issue has been resolved. FYI, when more than 1 NIC is in use, appsrv will bind to the first NIC listed in the binding order which can be found by going to Network Connections -> Advanced-> Advanced Settings. The Adapters and Bindings tabs list Connections. The first one listed is the one appsrv will bind to.

### b) *Deleting from Signal Table*

For Release X.4.1.3, the process to delete signals from ABMSignal was moved to a SQL stored procedure which was initiated by a SQL job process. The SQL job process is not valid for SQL Express systems, so the deletion of signals was moved back to an appsrv process. There are 2 parameters which control this functionality in the appsrv.ini, section [SYSTEM\_MONITOR].

**SIGNAL\_PURGE\_DAYS =**  
**SIGNAL\_PURGE\_FREQ =**

The first parameter tells appsrv how many days to keep in the ABMSignal table (recommended setting is 60 or greater). The second, tells appsrv how often to delete the signals from ABMSignal table, expressed in minutes. A 20 would indicate to delete signals every 20 minutes. Each time this process runs and signals are deleted, a signal is generated listing how many signals were deleted. ***Transmitter is 'PHOENIX', sigtype of 'systemLog', zone of '20'. This signal is strictly for logging purposes.***

The question arises as to what should SIGNAL\_PURGE\_FREQ should be set too. ***Default for DAYS is 60 days; default for FREQ is 60 minutes.*** That may be good enough for most customers. We do notice performance issues with collects dropping off if appsrv tries to delete too many signals at once. Every customer is different just like every machine is configured differently, so there is no exact number, but we probably don't want appsrv deleting more than a 2000 signals at a time. Running this SQL statement:

```
SELECT DATEPART(HOUR, signal_date) 'Hour ', COUNT(*)  
'Signal Cnt' FROM ABMSignal WHERE signal_date >
```

***DATEADD(DAY,-1, GETDATE()) GROUP BY DATEPART(HOUR, signal\_date) ORDER BY DATEPART(HOUR, signal\_date)***

The result will give a rough approximation on how many signals they get per hour for a day. If an hour indicates more than 2000 signals, set FREQ value to delete around 2000 or less per run.

***For example, if they receive on around 6000 signals per hour, setting FREQ to 15, should delete around 1500 signals for each run (15 mins = 1/4<sup>th</sup> of an hour, so 6000 / 4 = 1500). Not exact, but something to start with.***

**c) Site Monitor**

**(1) Schedule**

The issue with SiteMonitor not generating a Failed-to-Close signal when performing the first check on Sunday morning even if the premise has a status of 'open'. This issue is resolved.

**(2) HASP Security Key**

When SystemMonitor checks for a HASP key, if the key is present but the serial number is incorrect, the message written to the appsrv.log indicates that the HASP key is missing or defective. Now if the serial number is incorrect, a proper message is written to the appsrv.log.

**d) Processing Signals**

When a problem condition is encountered, Alarm Processing clients will be notified with a message, "APPSRV.LOG contains information regarding Signal processing. Call ABM for assistance!". Depending on the problem, appsrv will try and process the signal again, but on occasion, it cannot. You must look at the appsrv.log to know how to handle the problem. Locate the error and if it also states that "SIGNAL IS NOT PROCESSED", the signal will have to be handled manually. The easiest way to do that is to open Manual Wizard and enter the signal information. The appsrv.log should show the raw packet as well as transmitter, signal, zone, and packet type for the signal that cannot be processed. If the appsrv.log indicates that the signal will be processed again, and there are no more errors then the signal was able to be processed on the second attempt.



### III. ALARM FORWARDING

#### A. Enhancements

*a) Temporary Contacts*

Alarm Forwarding now respects Temporary contacts entered into the ABMTempData table through TempData Wizard. TempData effective/expiration datetime must be entered based on the Transmitter's time zone. Alarm Forwarding will use the dates stored in the TempData record not the dates which are in the TempContactlink record, to decide whether the contacts are in effect or not.

*b) Message Table*

Message Line 1 from ABMmessage table is now the subject of the e-mails sent. This allows users to configure a more descriptive subject line of the e-mail. Line 2 and Line 3 are still part of the body of the e-mail. The last line of the body of the e-mail is hard coded to print "EventID: #####, TransmitterID: #####".

#### B. Defect Fixes

*a) Logging*

Alarm Forwarding now logs to the \phoenix\tmp\log folder. This also fixes the issue where the .MAIL items were also being written to the C:\phoenix\temp\mail folder, even if Phoenix was installed on a different drive.

### IV. COLLECTs

#### A. Enhancements

*a) Caller ID Data*

[PUG #15/A0092] OH2000, Surgard, MLR2000, RAD6500, RAD-SIA collects now combine CallerID data with signal data. Previously, appsrv would create a signal for just the CallerID signal and a separate one for the actual signal. They are combined which should reduce network traffic and data in the ABMsignal table.

*b) SIA - SDI Parsing INI addition*

Collects which parse out SIA type signals can parse out a value for SDI (Serial Device Interface?). Multiple SDIs on a panel may send in the same zone value. For example, SDI 30 and SDI 33 can both send in data for zone 8; each referring to a different zone 8. There is a new INI flag which will case the zones, in the above example, to be parsed out as

zone 308 and zone 338, that way they can be treated as two unique zones for that transmitter.

To turn this feature ON, in the collect's INI, under the [COMMON] section enter this tag

**MERGE\_SDI\_ZONE = 1**

When set to 1, the values parsed out for SDI and Zone will be concatenated to create unique zones.

### c) *Header/Terminating Characters*

Some receivers have the ability to add a header character or change the terminating character for signals sent to automation. Our collects are hard coded to use receiver defaults. If a customer has turned on the header character or changed the terminating character, an entry in the collect's INI can now account for the change.

In the collect's INI, under the [COMMON] section use the labels.

**HEADER =**  
**TERMINATOR =**

Both take the Dec ASCII value of the header & terminating characters. **For example**, if the terminating character in the receiver is set to 0D (zeroD), Carriage Return, enter

**TERMINATOR = 13**

**DEC – HEX – OCT – CHAR Table**

Dec	Hex	Oct	Char	Dec	Hex	Oct	Html	Char	Dec	Hex	Oct	Html	Char	Dec	Hex	Oct	Html	Char
0	0	0	NUL (null)	32	20	40	&#32;	Space	64	40	100	&#64;	@	96	60	140	&#96;	`
1	1	1	SOH (start of heading)	33	21	41	&#33;	!	65	41	101	&#65;	A	97	61	141	&#97;	a
2	2	2	STX (start of text)	34	22	42	&#34;	"	66	42	102	&#66;	B	98	62	142	&#98;	b
3	3	3	ETX (end of text)	35	23	43	&#35;	#	67	43	103	&#67;	C	99	63	143	&#99;	c
4	4	4	EDT (end of)	36	24	44	&#36;	\$	68	44	104	&#68;	D	100	64	144	&#100	d
5	5	5	ENO (enquiry)	37	25	45	&#37;	%	69	45	105	&#69;	E	101	65	145	&#101	e
6	6	6	ACK (acknowledge)	38	26	46	&#38;	&	70	46	106	&#70;	F	102	66	146	&#102	f
7	7	7	BEL (bell)	39	27	47	&#39;	'	71	47	107	&#71;	G	103	67	147	&#103	g
8	8	10	BS (backspace)	40	28	50	&#40;	(	72	48	110	&#72;	H	104	68	150	&#104	h
9	9	11	TAB (horizontal tab)	41	29	51	&#41;	)	73	49	111	&#73;	I	105	69	151	&#105	i
10	A	12	LF (NL line feed, new	42	2A	52	&#42;	*	74	4A	112	&#74;	J	106	6A	152	&#106	j
11	B	13	VT (vertical tab)	43	2B	53	&#43;	+	75	4B	113	&#75;	K	107	6B	153	&#107	k
12	C	14	FF (NP form feed,	44	2C	54	&#44;	,	76	4C	114	&#76;	L	108	6C	154	&#108	l
13	D	15	CR (carriage return)	45	2D	55	&#45;	-	77	4D	115	&#77;	M	109	6D	155	&#109	m
14	E	16	SO (shift out)	46	2E	56	&#46;	.	78	4E	116	&#78;	N	110	6E	156	&#110	n
15	F	17	SI (shift in)	47	2F	57	&#47;	/	79	4F	117	&#79;	O	111	6F	157	&#111	o
16	10	20	DLE (data link escape)	48	30	60	&#48;	0	80	50	120	&#80;	P	112	70	160	&#112	p
17	11	21	DC1 (device control 1)	49	31	61	&#49;	1	81	51	121	6481;	Q	113	71	161	&#113	q
18	12	22	DC2 (device control 2)	50	32	62	&#50;	2	82	52	122	&#82;	R	114	72	162	&#114	r
19	13	23	DC3 (device control 3)	51	33	63	&#51;	3	83	53	123	&#83;	S	115	73	163	&#115	s
20	14	24	DC4 (device control 4)	52	34	64	&#52;	4	84	54	124	&#84;	T	116	74	164	&#116	t
21	15	25	NAK (negative	53	35	65	&#53;	5	85	55	125	&#85;	U	117	75	165	&#117	u
22	16	26	SYN (synchronous idle)	54	36	66	&#54;	6	86	56	126	&#86;	V	118	76	166	&#118	v
23	17	27	ETB (end of trans.	55	37	67	&#55;	7	87	57	127	&#87;	W	119	77	167	&#119	w
24	18	30	CAN (cancel)	56	38	70	&#56;	8	88	58	130	&#88;	X	120	78	170	&#120	x
25	19	31	EM (end of medium)	57	39	71	&#57;	9	89	59	131	&#89;	Y	121	79	171	&#121	y
26	1A	32	SUB (substitute)	58	3A	72	&#58;	:	90	5A	132	&#90;	Z	122	7A	172	&#122	z
27	1B	33	ESC (escape)	59	3B	73	&#59;	;	91	5B	133	6491;	[	123	7B	173	&#123	{
28	1C	34	FS (file separator)	60	3C	74	&#60;	<	92	5C	134	6492;	\	124	7C	174	&#124	
29	1D	35	GS (group separator)	61	3D	75	&#61;	=	93	5D	135	&#93;	]	125	7D	175	&#125	}
30	1E	36	RS (record separator)	62	3E	76	&#62;	>	94	5E	136	&#94;	^	126	7E	176	&#126	~
31	1F	37	US (unit separator)	63	3F	77	&#63;	?	95	5F	137	6495;	_	127	7F	177	&#127	DEL

- d) **TechConnect Collect**  
TechConnect is a new collect that allows technicians to connect through a hosted Cloud web site, so they can check signal history, insert, update and delete NoActions for transmitters.  
**\*\* ABM only provides the collect \*\*Contact ABM for further details\*\***
- e) **Collect Logs**  
Collects now use the value found for RECV\_ID as the file name for the serial/tcp log that gets created when the collect starts.

## B. Defect Fixes

- a) **Collect Re-Connects**  
When collects re-connect, usually due to timeout issues caused by the database being extremely busy, the collect license is freed so that collect can re-connect. However, the original connection is still attached from the appsrv end (it's just not responding which is why the collect has to re-connect) and when it stops, it also frees a collect license. For example, a system with 3 collect licenses where all 3 collects re-connect would show 0 collect license in use when it should show 3. This issue has been resolved.
- b) **NAT SIA Signals**  
Release X.4.1.3 fixed issues with parsing signals such as 'Nri001AT', but that broke the parsing of signals such as 'NAT'. Both signals now parse out correctly.
- c) **Line Card Limits**  
Collects were limited to only 33 line cards when defining Prefix in the collect INIs. The collect INIs can now accept up to 99 line card definitions.
- d) **MLR2000 Collect**  
MLR2000 collect now accepts a new option for the SIGNAL\_TRUNCATE parameter in the collect INI. This option effects parsing for format 1 signals (basic Surgard). Turn on option by entering in the collect INI file,

***SIGNAL\_TRUNCATE = S***

Signals will parse in the following manner:

	With Option OFF	With Option ON
	-----	-----
EX #1	Signal = blank	Signal = 1
	Zone = 1	Zone = blank

EX #2    Signal    = blank  
         Zone      = 32

Signal    = 3  
Zone      = 2

This option was done to resolve some parsing issues, not certain if other sites can make use of this or not. This option is per collect running, so it is entered in the [SECTION] for com port/tcp.

**e)    *TCP Collect Connection***

Collects when connected to receivers via TCP would not send proper ACK/NAK to receivers on the receipt of signals. This issue has been resolved.

**f)    *Keltron Collect***

Keltron collect was not recognizing @ type of heartbeat signals. Keltron now recognizes both OKAY and @ as heartbeats.

**g)    *Safecom Data***

Radionics/SIA format is receiving Safecom data, but not in native Safecom. In other words, type is 'p' but data looks like SIA not Safecom. X.4.1.3 added Safecom parsing which broke systems already receiving Safecom format in non-native Safecom format. Issue is fixed for SIA mode. May or may not be an issue with 6600 mode.

**h)    *Collect Logs***

The annoying line in the collect logs that printed when INFO was set is now fixed. The 'naddr' now prints proper IP address.

**i)    *Collect INI's***

Collects ignored the INI entry for LOG\_FILE\_MODE. Would always default to a+. Now the value for LOG\_FILE\_MODE is respected, with the default still being a+.

## V.    **MANAGER**

### A.    **Enhancements**

**a)    *False Alarm Process***

There is a new end-of-year process that must be run ideally on January 1<sup>st</sup>. The purpose is to move current year false alarm counts to prior year and then clear our current year counts.

The goal is to offer 24 month false alarm counts so that the date a transmitter came online will not be a factor when resetting false alarm counts.

The option to reset false alarm counts in Manager is select Option 2-Database Functions then Option 1-Reset False Alarm Counts

## **B. Defect Fixes**

### **a) *Memory Issue - Manager***

The memory issue that could cause Manager to crash when running the option to Delete Expired On Demand NoActions has been fixed

## **VI. REPORTs**

### **A. Enhancements**

#### **a) *Transmitter Detail Report***

Transmitter Detail Report will now print data, if data is present, for new columns User Column1, User Column2, User Column3 and Report Type.

#### **b) *Report Type***

The new ABMtransmitter column Report Type allows a new selection in reporting by Report Type. For example, if customers have certain transmitters that require monthly reports, and they can flag those transmitters by populating the Report Type column with 'monthly' (or whatever code they wish to use). Then they can then run a Signal Report with report type set to 'monthly' and all transmitters that were flagged as 'monthly' for report type will be selected regardless of hierarchy.

#### **c) *Sort Option***

Option to sort by Transmitter ID or Transmitter Name has been given to the following reports:

- Inventory Report
- No Action Report
- No Activity Report
- Open/Close Report
- Signal Report
- Temp Data Report
- Transmitter Report
- Transmitter Detail Report
- Transmitter Status Report
- Transmitter Summary Report

#### **d) *Print Option***

The option to print or not print system comments (action items that begin with the symbol \$) has been given to the following reports

Event Report  
Failed to Test Report  
Not On File Report  
Open/Close Report  
Selected Events Report  
Signal Report  
(UL Reports which print actions comments to not print system comments)

**e) No Action Report Enhancements**

- Format changes to minimize text wrapping
- Add Schedule ID, Name and Delete Date with printing Scheduled NoActions
- Fix issues with minutes not displaying/printing correctly when less than 10
- Print hierarchy values for NoActions placed a level above transmitter
- New selection of transmitters in system, not in system or both

**f) E-Mail Addresses**

Multiple E-mail addresses are now supported when e-mailing reports, however the length is maxed out at 80 characters. As many e-mail address that can be entered in 80 characters is the limit. Separate the e-mail address with a semicolon. If over 80 character limit, an error message will display.

**g) TempData Report**

The new Temp Data Report now prints 'all' Temp Data rows on file.

User selects Status to print:

<b>Active</b>	- All TempData items currently in effect
<b>Inactive</b>	- All TempData items not yet in effect (future effective dates)
<b>Expired</b>	- All TempData items which have expired
<b>All</b>	- All TempData items

**h) Transmitter Summary Report**

The report is a basic report that only prints Transmitter ID/Name with a total transmitter count at the end of the report.

**i) Dealer Summary Report**

Report that prints Dealer Id/Name with column display total number of transmitters on file for each dealer. It can be sorted by Dealer ID or Dealer Name.

- j) *Inventory Report***  
Report prints transmitter by Inventory name with subtotal transmitter count by name, a total transmitter count at end of report. It can also print inventory detail if requested.

## **B. Defect Fixes**

- a) *Signal Report***  
Signal Report could abort or print garbage if 'Print Action Comments' was select and there were comments which were 120 characters in length. The problem was a memory issue so the result of running report was unpredictable.
- b) *Instruction Report***  
Instruction Report has prompts for Sigcat and Sigtype. Sigcat is not used for Instruction logic and Sigtype prompt was being ignored. Report no longer prompts for Sigcat and Sigtype is now part of the selection criteria.
- c) *Schedule Report***  
Schedule Report did not print out status flag for 'Monitor Failed To Close'. This has been resolved.
- d) *Report Menus***  
Report Menus should be in Alphabetical order. Daily Summary Report was at the bottom, now at top.
- e) *Report Setup***  
Forcing a line feed character after the page number prints. This may have fixed the creeping page issue on reporting. Using the default Pagesetup.INI values, along with IE text size set to medium, the reports no longer experienced the creeps.
- f) *Remote Data Entry/Reporting***  
If a user with multiple Remote Group records logged into reporting, only the first group record was respected. Now when a report is run, all items which fall into the hierarchies defined in the Group will be selected. This is a bit different than Remote Data Entry because RDE still only respects only one group, but the user when logging into RDE, gets to select which group. Reporting does not allow that selection so all Groups are used.
- g) *Report Criteria***  
Reports were not recognizing code 'LDPY' for Last Day Prior Year. This has been resolved.

- h) Year Information**  
Replaced calls to `getYear()` with `getFullYear()` which is supported by all major web browsers, we came across some issues with Firefox.
- i) Contacts in Reports**  
Event and Signal Reports no longer look for a name in the `ABMcontacts` table when a PIN is present and there is no name in the `relatedinfo` of the `ABMsignal` record. This preserves the PIN/name relationship as it was when the signal was processed.
- j) Page Breaks**  
When using the Break-on option for reports, the report would treat Upper and Lower case differently, so a page break would occur. Problem is that the database does not treat them differently so page breaks would sometime happen which they should not. Now reports ignore case of breaking criteria.
- k) Carriage Returns**  
Both `ABMinstructions` and the new `ABMcomment` take hard carriage return-line feed as part of data entry, problem is that when running reports that print out this data, the paging on the report gets messed up (report begins to creep and paging gets off). Now when Transmitter Detail Report prints out this information it will replace with hard carriage return-line feed with the value `\\`. This will also help the report to page correctly.
- l) Failed to Test Report**  
Failed-to-Test report now pulls from the `ABMsignal` table instead of the `ABMevent` table. This will allow the report to select items even if the Failed-To-Test signal has been flagged to be a non-event generating signal.
- m) Inventory Report**  
If the inventory item did not have any name, the report would print garbage where it would normally print the name. This has been corrected.
- n) No Activity Report**  
There is a prompt for selecting discontinued transmitters. This selection is now based on the ***discontinued\_date column*** (not `current_status` as previous), as follows:  
  
If radio button is **YES** for discontinued transmitter, selection will be  
***"discontinued\_date <= GETDATE()"***



GETDATE() is the same as current system time. So, any transmitter with a discontinued date less than right now is discontinued.

If radio button is **NO**, selection will be

***"discontinued\_date > GETDATE() or discontinued\_date IS NULL"***

To not be flagged as discontinued, the discontinued\_date should be in the future or blank.

If radio button is **IGNORE**, then no discontinued\_date selection is used.

***o) Instruction Report***

The fix to keep Transmitter Detail Report paging correctly was also made to the Instruction Report. The fix is to replace the cartridge return-line feed characters with "\\\" characters. This change is made for the reports only, the database still has the actual cartridge return-line feed characters, so they will continue to display as entered.

***p) Transmitter Detail Report***

Transmitter Detail Report might crash if user selected to print Instructions and there was a row with a "Greeting Msg" over 120 characters. That column supports up to 500 characters, but report did not account for more than 120. This has been fixed.

***q) Signal & Open/Close Reports***

Report Signal/Report Open-Close for open/closes was not printing the user name from the contacts table; it was only printing the CallerID data. This has been fixed and now user name is printed along with the CallerID data.

***r) Recurring Reports***

Issue with recurring reports assigned to users which make use of the Remote Group tables. Any recurring reports setup before upgrading to X.4.2.0 would not run. This has been corrected.

## VII. Other

### A. Defect Fixes

***a) Manual Wizard***

Noticed that if multiple Manual Wizards are opened, the collect license usage count (showing how many collects are currently running) is decreased by 1 for each Manual Wizard opened after the initial one is opened. If you have Manual Wizard opened, close it and open it again,

there is no problem. It is only a problem if Manual Wizard is opened and another one the same machine is opened.

- b) *Alarm Processing***  
The sorting of the signal list when processing an event and the event has more than 1 signal attached is now sorting by “signal\_date desc, identifier desc”, which mimics the sorting of signals in the History Tool. Prior to this beta, the sorting was based on only “signal\_date”.
- c) *Data Entry***  
The new Comment table was not included in the table list when deleting transmitter related items using the Hierarchy Tool. It is now.
- d) *OH2000 Collect***  
Parsing for OH2000 (SIA format- type ‘Y’ and ‘y’) now parses out up to a 4 digit zone. Previously a max of 3 digits was parsed out, but we have been made aware that some panels can send in 4 digit zones.
- e) *Relay Client***  
If the Relay Client was running and appsrv connection is lost, relay would get caught in a loop writing to the RELAY.LOG file. This would continue until disk space was used up. This has been corrected.
- f) *Counter Updates***  
On upgrades, we insert items in ABMcontacts and ABMinstructions. The items have identifiers beginning with 10000000. By doing this, if the “Update Counters” option is selected in Manager, the counters will get set to a number below this value. We expected customers never to reach these identifiers, which is why we selected them. Made changes to the Update Counters process. Now the counters do the following SQL statement; “select max(identifier) where identifier < 10000000”. This will keep the counters in line with current values.
- g) *Andover Collect***  
Andover collect would get caught in a loop doing nothing but allocating memory, when the message on the signal was over 99 characters in length. This has been corrected.
- h) *DMP Collect***  
There have been some DMP parsing changes. When receiving system message of type 7, the collect will append to the zone value additional information, if present, such as ‘LB’ or ‘DP’. So, instead of zone value being set at ‘007’, it will be set as ‘007LB’ or ‘007DP’. The ‘LB’ indicates Cell Backup and the ‘DP’ indicates Digital Dialer Primary. This will be the only way to tell which device actually transmitted the signal.

**i) OH2000 Error Messages**

The collect was not parsing out the line card, therefore the matching CallerID data was not combined with the error messages. We now parse out line card for the error types so now CallerID data is attached the error signal.

**j) Service Ticket  
(1) Wizard**

*(a) Service Tickets created with the Service Ticket wizard did not store the 'Transmitter Name' or 'Zone Name' in the ABMServiceTicket table. This has been fixed.*

*(b) Entering a new Service Ticket with the wizard and specifying a 'Zone ID' would save the 'Zone ID' when tabbing to another page of the wizard. This has been fixed.*

**k) New Installs**

For new installs, the identifier for items in the ABMSigcontrol table will start at 10000. This will allow the lower value identifiers to be used to load default ABMSigcontrol default conversion items. Manager has been modified to start at 10000 or greater if the Update Counter option is selected.

**l) Appsrv Log**

Appsrv.log would print a bogus error message when a Relay client was stopped.

The error message was:

***"ERROR: MsgRelay.c ExitMsgRelay(), Broadcasting Shutdown to ReceiveMSG"***

This has been fixed.

**m) TempData Wizard**

TempData Wizard would allow users to enter an "expiration date" older than the "effective date". This has been fixed.

## **B. Enhancements**

**a) Browser**

On new installs, we no longer display the "sigtype\_class" column for the event queues.

**b) Wizards**

Opening up Comment, Reminder, Service Ticket, or Temp Data Wizards from Alarm Processing while processing an event, will list the items with

the most recent at the top; if the current transmitter has corresponding items to view. This feature is new.

**c) Relay**

Relay has been modified so that in the instances where there are more than 1 NIC installed on the server; Relay started on a client machine will be able to send/receive messages. **For example**, an Appsrv that is running on a computer connected to both a LAN and WIFI network. Appsrv binds to the LAN interface (since most of the clients are on the LAN), but if some clients need the WIFI connection to connect to Appsrv, they can also start Relay to receive the new Event messages. This feature is new.

**d) Sort and Break by Option**

*(a) Reports run with a 'Sort and Break by' option. Now the report will print the name of the 'break by' option selected on each page.*

**For example**, when running a report and selecting 'Sort and Break by Dealer' will print the Dealer name on each page that prints. This feature is new.

*(b) Reports run with a 'Sort and Break by' option, will restart pages numbers at 1 after each break.*

**e) Installer**

*(a) Installer includes latest Apache (v 2.2.17). When Phoenix Reporting is installed, the 'httpd.conf' file will be updated with the proper information so that Phoenix Reporting can run.*

*(b) If the customer has any of the add-ons, there now is a license prompt to accept the license values and update license files for Alarm Forwarding, Remote Data Entry and Field Tech Access.*

## VIII. System Monitor

System Monitor is an APPSRV process that runs every minute. This is the same process that is responsible for moving expired Wait Events back to Pending, alerting operators regarding old events, HASP key is missing messages and so on.

### A. 5 new tasks assigned to System Monitor

If System Monitor finds an issue with any of these items, a signal will be generated and submitted for processing to alert operators of the problem situations. The signals that are created will always have a Transmitter of PHOENIX (with exception of Zone 1 signals). The Zone ID indicates the type of problem System Monitor has uncovered.

<u>Signal ID</u>	<u>Zone ID</u>	<u>Problem</u>
<recv ID>	1	Receiver Comm Failure, collect has stopped sending signals
system	2	Low Disk Space, a drive has less and 20% free space
system	3	ABMSignal not purging, old signals in signal table
system	4	Relay Client not found, relay client has not connected
system	5	Relay Comm Failure, relay client stopped communicating
systemLog	20	ABMSignal purge success, shows number of rows deleted

#### a) **COLLECT MONITORING**

When System Monitor runs, it will check the Client Queue for collects which are connected to APPSRV. System Monitor will find the difference between the 'LastActionTime' and the current time. If the difference between the 2 values is greater than the value found for COLLECT\_POLLING\_INTERVAL (expressed in minutes) found in APPSRV.ini, a signal will be populated as follows and sent for processing:

Transmitter ID: PHOENIX

Signal ID: <recv ID> from collect.ini (user\_name seen in Client Queue)

Zone ID: 1

Relatedinfo: Last signal received on <mm/dd/yyyy hh:mm:ss>,  
Polling interval: <mm>

The 'Polling Interval' is taken from the APPSRV.ini setting for COLLECT\_POLLING\_INTERVAL.

If the problem persists after the COLLECT\_POLLING\_INTERVAL has elapsed again, another signal will be generated.

Currently, there is only 1 polling interval value used for all collects, so the best value for polling interval should be based on the receiver which

has the least activity. In the future, this feature may have to be expanded to provide different polling intervals for each collect.

**b) *DISK SPACE AVAILABLE MONITORING***

APPSRV on each startup, and once every 24 hrs, will run a System Monitor check to select disk drives and check for available disk space. If a drive has less than 20% available, a signal will be populated as follows and sent for processing:

```
Transmitter ID: PHOENIX
Signal ID:      system
Zone ID:        2
Relatedinfo:    [Threshold <x>%] C: <y>% free
```

The value in [ ] is the threshold APPSRV is using to decide with a problem exists or not. Any value equal or less than the threshold will generate a signal. The default value is 20%. This value can be changed with an entry to the APPSRV.ini.

In the [SYSTEM\_MONITOR] section of APPSRV.ini, set MINIMUM\_DISK\_SPACE equal to the percentage override. For example, if a user wants to be notified when available disk space is equal or less than 10% - enter the following:

```
MINIMUM_DISK_SPACE = 10
```

APPSRV would have to be stopped and restarted for this value to take effect.

**c) *ABMSIGNAL TABLE MONITORING***

ABMsignal table is purged automatically on regular bases. APPSRV on each startup, and once every 24 hours, will run a System Monitor check to do a count of the ABMsignal table. If there are more than 100 rows with a signal\_date older than the number of days set for SIGNAL\_PURGE\_DAYS + 25%, a signal will be populated as follows and sent for processing:

```
Transmitter:  PHOENIX
Signal:        system
Zone:          3
Relatedinfo:    <x> rows older than <y> days in ABMsignal table
```

The default setting for SIGNAL\_PURGE\_DAYS is set at 60. When System Monitor performs this check and finds over 100 rows with a 'signal\_date' older than 75 days (60 + 25%), the signal will be created.

This check was added because APPSRV was modified in X.4.1.3 to not purge ABMsignal table. There were no checks to see of the SQL job,

which purged ABMSignal, was running on regular bases. Now that APPSRV is purging ABMSignal table, this System Monitor check is less important.

**d) RELAY MONITORING**

**(1) RELAY CLIENT - PART I**

If the network setup requires a Relay Client to run so that remote sites can receive and send messages, System Monitor can warn operators if a Relay Client has not connected to APPSRV. This feature can be activated or de-activated without having to stop/restart APPSRV. To activate this feature, insert an entry into the ABMzone table with the following data:

Zone ID: 4  
Transmitter ID: PHOENIX  
Sigtype ID: -1  
Zone Name: Relay Client Not Found

Adding this entry into the ABMzone table will alert System Monitor to check for a Relay Client in the Client Queue. The first check for a Relay client will begin 10 minutes after APPSRV has started to allow the remote clients' time to log on. If no Relay client is found to have connected, then a signal is populated as follows and sent for processing:

Transmitter ID: PHOENIX  
Signal ID system  
Zone ID: 4  
Relatedinfo: ABMzone flagged for relay, a Relay client connection is required

This signal will be generated each time System Monitor runs (which is once a minute) until a Relay client connects, or the entry from the ABMzone table is deleted.

**(2) RELAY CLIENT - PART II**

Whether or not the ABMzone entry is present, when Relay Client makes a connection to APPSRV, it inserts an entry into the Client Queue. When System Monitor comes across this entry it will find the difference between the 'LastActionTime' and the current time. If this difference is greater than 1 minute, a signal will be populated as follows and sent for processing:

Transmitter ID: PHOENIX  
Signal ID: system  
Zone ID: 5  
Relatedinfo: Start Relay process on <hostname>

There may have been a network issue which may have prevented the Relay Client from keeping constant communication with APPSRV. Stopping and restarting process on the remote machine will re-establish a connection between the Relay Client and APPSRV.

**e) *ABMSIGNAL PURGE***

ABMSignal table is purged a regular bases to keep collects and reporting processes running smoothly. The system defaults for purging are set to purge at every 60 minutes and keeping 60 days of signals in the ABMSignal table. However, these values can be overridden in the [SYSTEM\_MONITOR] section of the APPSRV.ini.

SIGNAL\_PURGE\_DAYS = <number of days to keep in ABMSignal table>

SIGNAL\_PURGE\_FREQ = <how often to run a purge, expressed in minutes>

If any rows are deleted when System Monitor performs the purging process, a signal will be populated as follows and sent for processing:

Transmitter ID: PHOENIX  
Signal ID: systemLog  
Zone ID: 20  
Relatedinfo: cutoff [ <x> ] days; Elapsed time[ <mm:ss> ];  
rows [ <y> ]

Cutoff refers to the value set for SIGNAL\_PURGE\_DAYS; elapsed time is how long the purge took, and rows display how many items were deleted. The 'systemLog' signal should be a non-event generating signal.

## B. ITEMS OF INTEREST

**a) *SYSTEM MONITOR CHECKS***

The checks for Disk Space Monitoring and purging of ABMSignal are only performed at each APPSRV startup and only once a day thereafter. There did not seem to be a need to perform these checks more than once per day; however as in everything else, this can be overridden.

In the [SYSTEM\_MONITOR] section of APPSRV.ini, set DISC\_CHECK\_INTERVAL = to the number of minutes between checks.

***DISC\_CHECK\_INTERVAL =***



Default is 1440 minutes (1440/60 = 24 hrs). To check every 12 hours set value equal to 720, to check every 48 hours set value 2880. If this value is modified, APPSRV will have to be stopped and restarted.

**b) BENEFITS TO SYSTEM MONITOR GENERATING SIGNALS**

1. The benefit of logging the information for future reference.
2. Users can setup specific system wide instructions for the specific zones to advise the operators on how they should handle the system errors being received for the Phoenix Messages.

**For example:**

- a. Set up an 'instruction/contact' Class with Classifier ID of 'internal'.
- b. Then create a contact for Transmitter ID 'PHOENIX' and classifier of 'Internal'.
- c. The Contact can be a shift supervisor.
- d. Next create instructions for Transmitter ID of 'PHOENIX', sigtype of '-1', Call Classifier of 'internal', with more detailed explanation of error and what should be done.

**c) DATABASE TABLE REFERENCE**

**(1) ABMtransmitter Table**

<u>TransmitterID</u>	<u>DealerID</u>	<u>OrganizationID</u>	<u>SubscriberID</u>	<u>SiteID</u>	<u>Name</u>
PHOENIX	-1	-1	-1	-1	Phoenix System

**(2) ABMzone Table**

<u>ZoneID</u>	<u>Transmitter</u>	<u>SigtypeID</u>	<u>ZoneName</u>
1	PHOENIX	-1	Receiver Comm Failure
2	PHOENIX	-1	Low Disk Space
3	PHOENIX	-1	ABMsignal not purging
4	PHOENIX	-1	Relay Client not found
5	PHOENIX	-1	Relay Comm Failure
20	PHOENIX	-1	ABMsignal purge count

**(3) ABMsigtype Table**

<u>SignalID</u>	<u>Event Flag</u>	<u>Description</u>
system	Y	Phoenix generated signal
systemLog	N	Phoenix generated signal - log only