

PCS Technical Document:

Setting Up For a Pipeline Compliance System (PCS)-Bullhorn (BAT) Interface

The **Bullhorn Super Extract** is an optional report that contains data from Bullhorn remote monitoring units so they can be imported into PCS program, and finally into any of its module facility types. The report transmits from a Bullhorn user's Bullhorn Asset Tracker (BAT) web account to an FTP (file transfer protocol) site for PCS import. Importing the report requires correct set-up in both PCS and BAT. This document explains how to setup and import Bullhorn Super Extract reports.

Topics covered in this document include:

- **Section 1:** Verifying FTP Settings
- **Section 2:** PCS System Settings
- **Section 3:** Bullhorn Asset Tracker (BAT) website – Unit Setup
- **Section 4:** Setting Up a BAT Unit Group
- **Section 5:** Setting Up the BAT Super Extract Report
- **Section 6:** PCS Bullhorn Interface Feature

***Note:** The Bullhorn Super Extract report now uses the .bul file extension. In previous versions of PCS, the report used the .dat file extension instead. PCS 7 supports both file extensions.*

Section 1: Verifying FTP Settings

PCS Version 7 allows the user to choose to FTP or Email settings for the Super Extract report within BAT. If users employ a FTP server other than American Innovations' FTP server, the following must be in place before setting up communication between PCS and BAT:

- The IT network administrator has setup the FTP server with “write” access privileges for the BAT website. This allows Bullhorn Super Extract reports to transfer to a folder on the FTP server.
- The IT network administrator has assigned the user “read/write” access privileges to the folder that stores Bullhorn Super Extract reports. This allows the user to import reports when running the PCS Bullhorn Interface command (read-only function). It also allows users to manage processed Bullhorn Super Extract reports, including deleting or moving processed reports.
- The IT network administrator has provided the user with the following information:
 - *FTP site URL.*
 - *The name of the folder on the FTP server that stores Bullhorn Super Extract reports.*
 - *The User Name and Password for the FTP site that allows the user to access the FTP server and folder designated for the report.*

In order to ease this process, American Innovations can host an FTP site for the customer for a one-time setup fee and will provide the above settings and permissions as noted above. Please contact a PCS or Bullhorn Technical Services for details.

Note: *FTP is an abbreviation for file transfer protocol. It is the protocol format used for exchanging files over the Internet. URL is an abbreviation for uniform resource locator. It refers to an address on the Internet, such as an FTP URL or FTP site address.*

Section 2: PCS System Settings

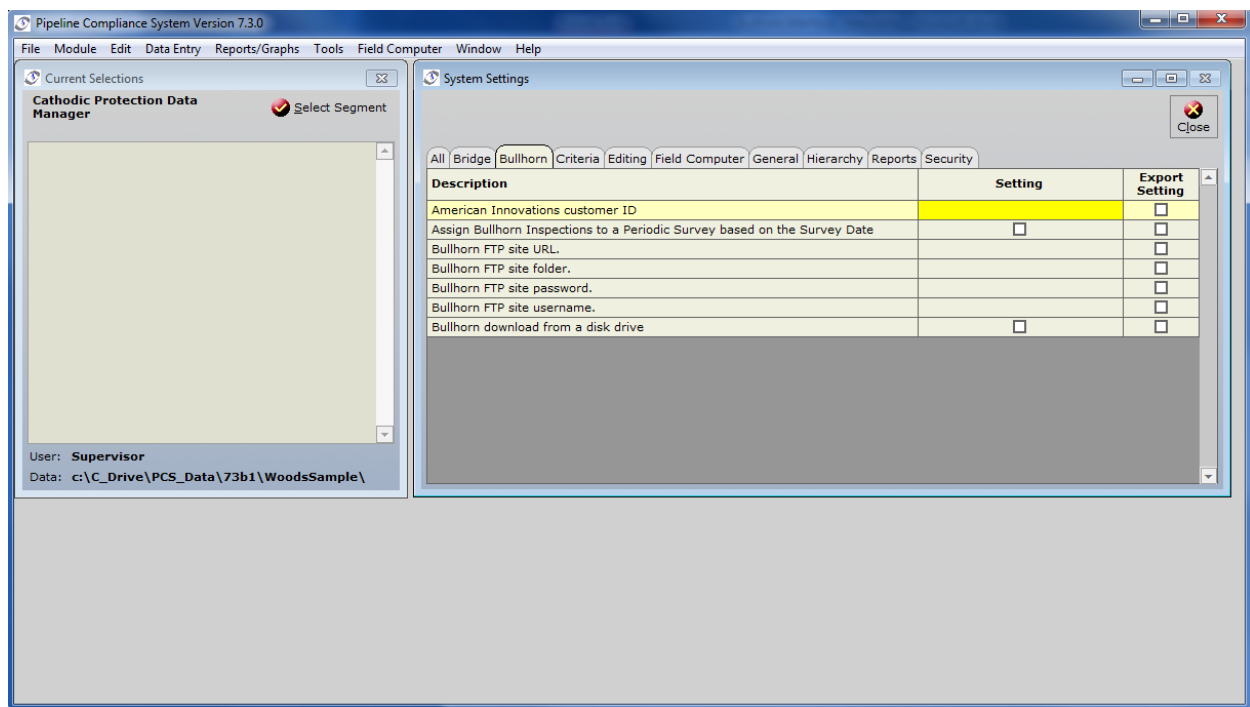
This section explains how to set up the PCS System Settings for importing Bullhorn Super Extract reports. Two methods are available for importing the report:

1. Import the report directly from the FTP server.
2. Import the report from a folder on a network drive or the user's computer hard drive.

To set up PCS System Settings: Bullhorn

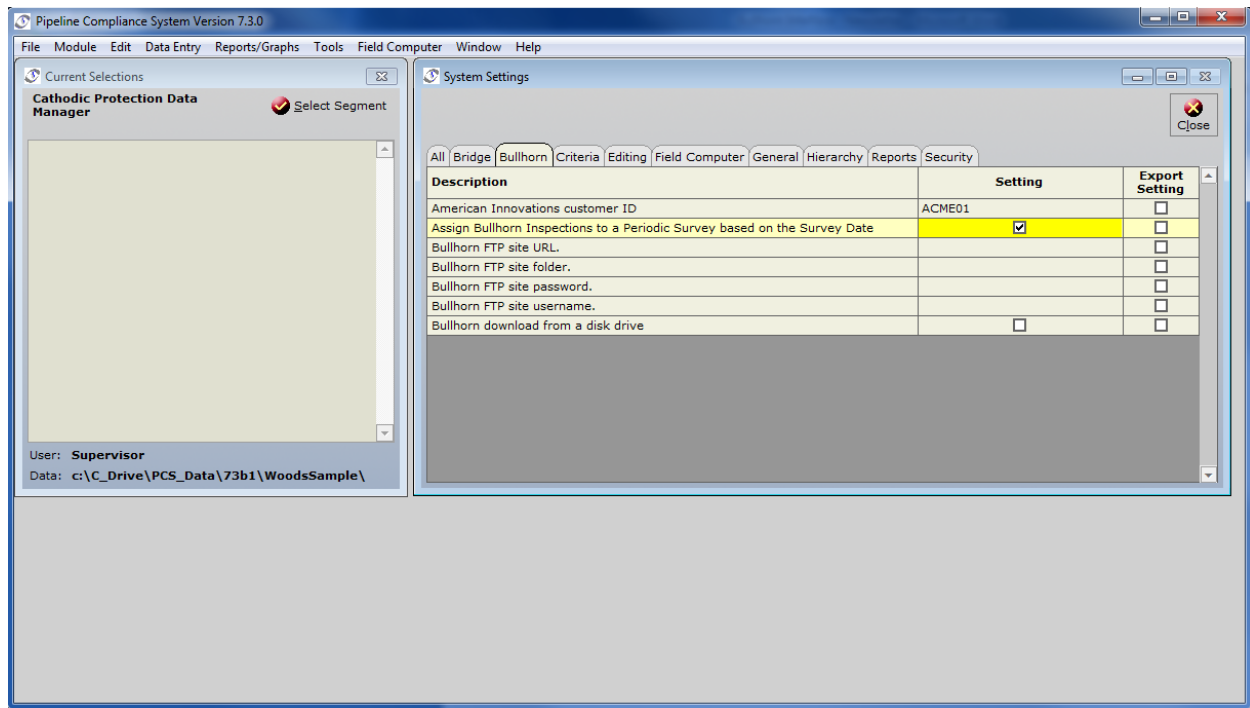
If PCS is not running, click **Start > Programs > Pipeline Compliance System** to start the software and login.

1. Click **Tools > System Settings**.
2. Click the **Bullhorn** tab.

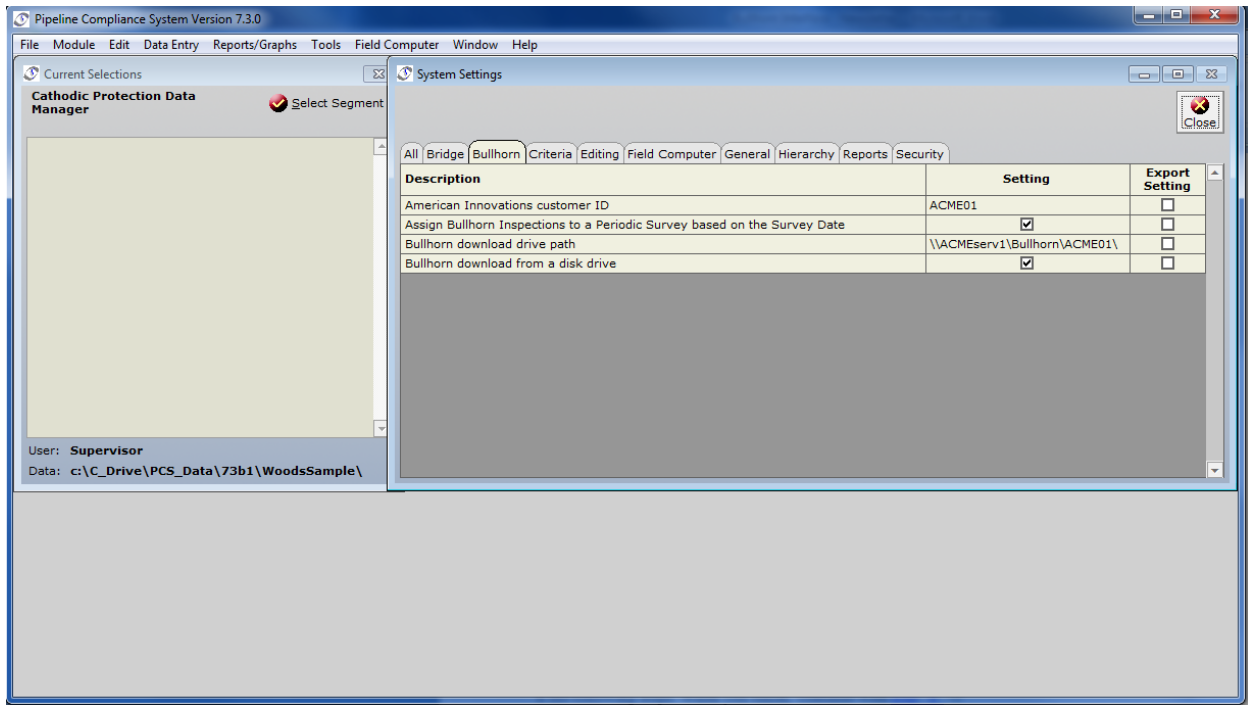


3. In the **Setting** column for the field "American Innovations customer ID", enter the Bullhorn Client ID. This information is assigned to a user by American Innovations for logging in to BAT. If this information is not available, please contact Technical Services for assistance.
4. In the **Setting** column for the field "Assign Bullhorn Inspections to a Periodic Survey based on the Survey Date", click the check box if inspection readings automatically linked to a periodic survey based on the inspection survey date are desired.

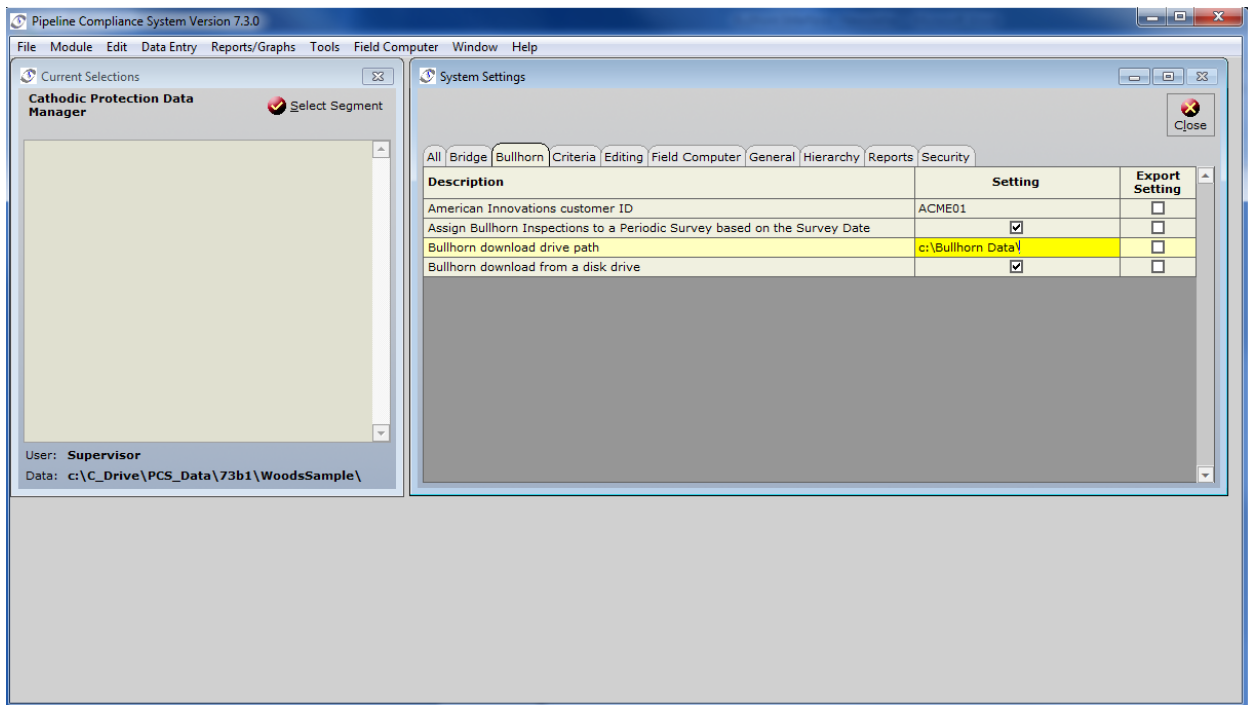
Note: A check mark inside the check box indicates a selection. To cancel a selection, clear the check mark by clicking the check box again.



5. In the **Setting** column for the field "Bullhorn download from a disk drive", complete one of the following steps:
 - a. Type the network path of the shared folder in the form of **\\server name\shared folder** to import Bullhorn Super Extract reports from a shared folder on a company network.



- b. Type the drive letter and folder path in the form of **c:\folder name** to import Bullhorn Super Extract reports from a folder to a user's computer hard drive.



Importing Bullhorn Super Extract reports from an FTP server

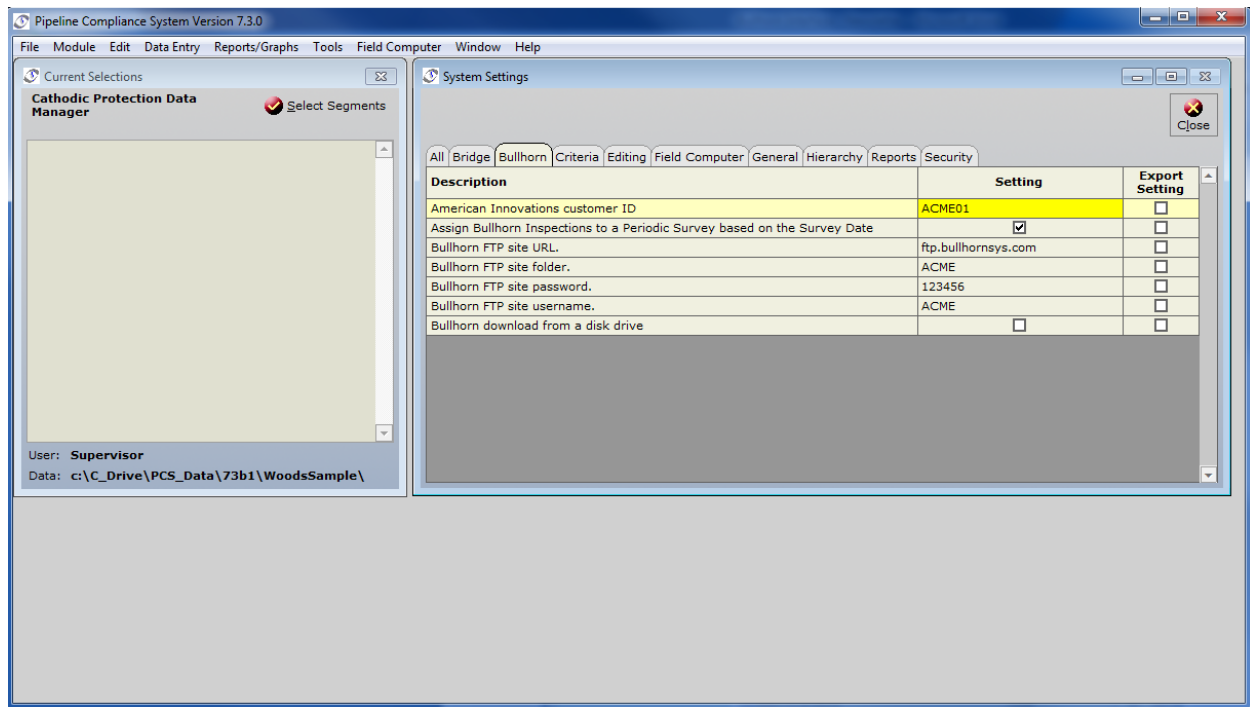
To import the Bullhorn Super Extract Reports, following these steps:

1. In the **Setting** column for the field "Bullhorn FTP site URL", type the address of the FTP site where Bullhorn Super Extract reports will be stored in the form of **ftp site: ftp.servername.com**. The address is either the AI FTP site at ftp.bullhornsys.com or the address of the user's company FTP site.
2. In the **Setting** column for the field "Bullhorn FTP site folder", type the name of the folder on the FTP server where Bullhorn Super Extract reports will be stored.
Note: If using the AI FTP site, use the folder name provided by AI. If using a company FTP server, use the folder name provided by the company's IT network administrator.
3. In the **Setting** column for the field "Bullhorn FTP site password", type the password required to access files on the FTP server.
Note: Use the password provided by AI if you are using the AI FTP site. If planning on using the company's FTP server, use the password provided by the company's IT network administrator.
4. In the **Setting** column for the field "Bullhorn FTP site username", type the user name required to access files on the FTP server.

Note: If using the AI FTP site, enter the username provided by AI. If using a company FTP server, use the folder name provided by the company's IT network administrator.

5. In the **Export Setting** column, click the check box for each setting to include in a PCS export file (**File > Export Data**).

Note: If using the optional two-way synchronization feature, settings also export during replication with other PCS users.



Verifying PCS Facility ID and Bullhorn-Engineering Unit

Certain fields in PCS must match certain fields in BAT to successfully populate a PCS data grid with data in a Bullhorn Super Extract report. They include the fields identified in the following list:

- The "Facility ID" field in a PCS data grid must match the "Serial" field on the BAT. The PCS facility type (Test Point, Rectifier, Inhibitor, etc.) for a location with the field called "Facility ID" has to match on the BAT **Unit>Unit Details>Settings** and the field called "Serial". **Note: Fields are not case-sensitive.**
- "Bullhorn-Engineering Unit" in the PCS Field and UDF (User Defined Field) Customization must match the "Channel Engineering Unit Label". The description in the "Bullhorn-Engineering Unit" field of the **PCS>Tools>Data Utilities>Field and UDF Customizations** grid must match the description in the Unit **Admin>Channel>Engineering Unit Label** field of the BAT website for **EACH** channel appropriately. These fields are not case-sensitive but are required to have the same punctuation such as underscores and hyphens.

Measurement data populates a PCS data grid based on the "Facility ID" and the data attribute based on the Bullhorn-Engineering Unit description. The Bullhorn-Engineering Unit description identifies the data grid such as "Rectifier Inspections" for the field "Rectifier Output Current Found" or "Rectifier Volts Found", while the "Facility ID" identifies the milepost or station number.

When the import completes, PCS adds "Bullhorn Inspection in the Survey Remarks" column of

the data grid to identify which inspection readings were imported from a Bullhorn Super Extract report.

A list of default PCS descriptions for Bullhorn-Engineering Unit are identified in the next table, along with the corresponding facility type and data grid column.

Facility Type	Data Grid Column	Bullhorn-Engineering Unit
Test Point	Casing IRF	CASING IOX
	Casing P/S	CASING
	Foreign IRF	FOREIGN IOX
	Foreign P/S	FOREIGN
	Insulator IRF	INSUL IOX
	Insulator P/S	INSUL
	Structure IRF	P/S IOX
	Structure P/S	P/S
Rectifier	Rectifier Output Current Found	AMP
	Rectifier Output Volts Found	VOLT
	Negative Current Found	NEG
Foreign Bond	Bond Current Found	BOND
Probe	Probe Corr. Rate	PROBE RATE
Inhibitor Injector	Quantity	INJECTOR RATE

To view or edit default Bullhorn-Engineering Unit descriptions

If part of a PCS two-way system, only PCS administrators can do some of the following steps on the master database. Users may only have the ability to view these settings, not change them.

Note: It is important that two-way users and all the field techs use the same naming convention for all components below for each of their BAT website accounts.

PCS v6 was designed to look only for rectifier channel Engineering Units set to "DC_Volts" for "Rectifier Volts Found" and "DC_Amps" for "Rectifier Volts Found". All other field defaults in the above table are the same. For this reason, most customers that have migrated to PCS v7 have had to Edit the "Rectifier Output Volts Found" and "Rectifier Output Volts Left" from "Volt" to "DC_Volts". This also applies to editing the "Rectifier Output Current Found" and "Rectifier Output Current Left" from "Amp" to "DC_Amps".

Original Caption	Caption	Data Type	Bullhorn - Engineering Unit	Field Computer - AC/DC	Field Computer - Available	Field mpu - DVM
AC Power	AC Power	C+ N (6,0)				Use
Efficiency	Efficiency	C+ N (2,0)				Use
Ground Bed Resistance	Ground Bed Resistance	C N (5,2)				Use
KWH Meter	KWH Meter	N (6,0)				Use
Rect A.C.V	Rect A.C.V	U C (10,0)			Yes	Use
Rect IRF	Rect IRF	U N (7,3)		DC	Yes	Use
Rect P/S	Rect P/S	U N (7,3)		DC	Yes	Use
Rectifier Current Adjusted	Rectifier Current Adjusted	L (1,0)				Use
Rectifier Output Current Found	Rectifier Output Current Found	C+ N (6,2)	AMP	DC		Use
Rectifier Output Current Left	Rectifier Output Current Left	C+ N (6,2)		DC		Use
Rectifier Output Shunt Reading Found	Rectifier Output Shunt Reading Found	N (7,3)		DC		Use
Rectifier Output Shunt Reading Left	Rectifier Output Shunt Reading Left	C+ N (7,3)		DC		Use
Rectifier Output Volts Found	Rectifier Output Volts Found	N (6,2)	VOLT	DC		Use
Rectifier Output Volts Left	Rectifier Output Volts Left	C+ N (6,2)		DC		Use
RemainingAnodes	RemainingAnodes	U C (10,0)			Yes	Use
Revolutions	Revolutions	N (5,2)				Use
Seconds	Seconds	N (5,1)				Use
Tap Settings	Tap Settings	C (10,0)				Use
Total Anode Current	Total Anode Current	C N (6,2)				Use
Total Negative Current	Total Negative Current	C N (6,2)				Use

Update the Bullhorn - Engineering Unit field for each as indicated below.

Original Caption	Caption	Data Type	Bullhorn - Engineering Unit	Field Computer - AC/DC	Field Computer - Available	Field mpu - DVM
AC Power	AC Power	C+ N (6,0)				Use
Efficiency	Efficiency	C+ N (2,0)				Use
Ground Bed Resistance	Ground Bed Resistance	C N (5,2)				Use
KWH Meter	KWH Meter	N (6,0)				Use
Rect A.C.V	Rect A.C.V	U C (10,0)			Yes	Use
Rect IRF	Rect IRF	U N (7,3)		DC	Yes	Use
Rect P/S	Rect P/S	U N (7,3)		DC	Yes	Use
Rectifier Current Adjusted	Rectifier Current Adjusted	L (1,0)				Use
Rectifier Output Current Found	Rectifier Output Current Found	C+ N (6,2)	DC_Amps	DC		Use
Rectifier Output Current Left	Rectifier Output Current Left	C+ N (6,2)	DC_Amps	DC		Use
Rectifier Output Shunt Reading Found	Rectifier Output Shunt Reading Found	N (7,3)		DC		Use
Rectifier Output Shunt Reading Left	Rectifier Output Shunt Reading Left	C+ N (7,3)		DC		Use
Rectifier Output Volts Found	Rectifier Output Volts Found	N (6,2)	DC_Volts	DC		Use
Rectifier Output Volts Left	Rectifier Output Volts Left	C+ N (6,2)	DC_Volts	DC		Use
RemainingAnodes	RemainingAnodes	U C (10,0)			Yes	Use
Revolutions	Revolutions	N (5,2)				Use
Seconds	Seconds	N (5,1)				Use
Tap Settings	Tap Settings	C (10,0)				Use
Total Anode Current	Total Anode Current	C N (6,2)				Use
Total Negative Current	Total Negative Current	C N (6,2)				Use

The user can change any default description in the Bullhorn-Engineering Unit column as needed. However, use the same description in the BAT website for the **Unit Admin>Channel>Engineering Unit Label** field when setting up the BAT web site for **EACH** channel.

Creating Custom User Defined Fields in PCS for Bullhorn monitored sites

With PCS running, **Click Tools > Data Utilities > Field and UDF Customizations.**

When the grid opens, expand the **CPDM** folder and then select the name of a data grid. For example, **click CPDM > Test Point > Test Point Inspections.** For example, see the image below for User Defined Fields for **Coupon Test Station** at which Bullhorn is monitoring AC mitigation point data. The Bullhorn – Engineering Unit field for each of the new fields are **NOT** populated but users can enter a name (15 characters in width) that AI Technical Services has confirmed for each of the fields being monitored by Bullhorn channel(s).

	Original Caption	Caption	Data Type	Bullhorn - Engineering Unit	Field Computer - AC/DC	Field Computer - Available
	AC P/S	AC P/S	N (7,3)		AC	
	Average P/S	Average P/S	N (7,3)		DC	
	Casing IRF	Casing IRF	N (7,3)	CASING IOX	DC	
	Casing P/S	Casing P/S	N (7,3)	CASING	DC	
	Casing Status	Casing Status	C (6,0)			
		Coupon TS - AC Current	U N (9,4)		AC	Yes
		Coupon TS - AC Current Density	C N (9,5)			Yes
		Coupon TS - AC DeCoupling Drain	U N (9,4)		AC	Yes
		Coupon TS - DC Current	U N (10,4)		DC	Yes
		Coupon TS - DC Current Density	C N (9,5)			Yes
		Coupon TS - Native P/S	U N (7,3)		DC	Yes
		Coupon TS - OFF P/S DC	U N (7,3)		DC	Yes
		Coupon TS - ON P/S AC	U N (7,3)		AC	Yes
		Coupon TS - ON P/S DC	U N (7,3)		DC	Yes
	Effective IR Correction	Effective IR Correction	C N (7,3)			
	Effective IR Correction Date	Effective IR Correction Date	C D (8,0)			

If the Bullhorn-Engineering Unit column does not provide a description that the user would like to use as a data point from a Remote Monitor Unit (RMU) for a reading field, then the user can add a description for as many reading fields as needed. See the example below, where UDFs were called "Coupon TS – ON P/S AC", "Coupon TS – AC Current Density", and "Coupon TS – AC DeCoupling Drain". The Engineering Unit Label field in the BAT website will also need to be set up with the same description used in PCS.

Pipeline Compliance System Version 7.3.0

File Module Edit Data Entry Reports/Graphs Tools Field Computer Window Help

Field and UDF Customizations

Search For Field Caption Containing: Search

View New Delete Close

	Original Caption	Caption	Data Type	Bullhorn - Engineering Unit	Field Computer - AC/DC	Field Computer - Available
Facility Surveys						
Common to All Facilities						
CPDM						
Test Points						
Test Point Information	AC P/S	AC P/S	N (7,3)		AC	
Test Point Inspections	Average P/S	Average P/S	N (7,3)		DC	
Test Point Maintenance	Casing IRF	Casing IRF	N (7,3)	CASING IOX	DC	
Rectifiers	Casing P/S	Casing P/S	N (7,3)	CASING	DC	
Foreign Bonds	Casing Status	Casing Status	C (6,0)			
Galvanic Anodes	Coupon TS - AC Current	Coupon TS - AC Current	U N (9,4)		AC	Yes
Tanks	Coupon TS - AC Current Density	Coupon TS - AC Current Density	C N (9,5)	CTS AC DENSITY		Yes
VM	Coupon TS - AC DeCoupling Drain	Coupon TS - AC DeCoupling Drain	U N (9,4)	CTS AC DRAIN	AC	Yes
ACM	Coupon TS - DC Current	Coupon TS - DC Current	U N (10,4)		DC	Yes
ILIM	Coupon TS - DC Current Density	Coupon TS - DC Current Density	C N (9,5)			Yes
ICM	Coupon TS - Native P/S	Coupon TS - Native P/S	U N (7,3)		DC	Yes
PCM	Coupon TS - OFF P/S DC	Coupon TS - OFF P/S DC	U N (7,3)		DC	Yes
PLSM	Coupon TS - ON P/S AC	Coupon TS - ON P/S AC	U N (7,3)	CTS ON AC	AC	Yes
LSM	Coupon TS - ON P/S DC	Coupon TS - ON P/S DC	U N (7,3)		DC	Yes
PIM						
Continuous Surveys	Effective IR Correction	Effective IR Correction	C N (7,3)			
Segment Level	Effective IR Correction Date	Effective IR Correction Date	C D (8,0)			
	Effective Native Date	Effective Native Date	C D (8,0)			

Section 3: Bullhorn Asset Tracker (BAT) website – Unit Setup

This section outlines a typical Bullhorn RMU unit configuration for the Bullhorn Interface. The following process explains how to set up the Bullhorn "Unit Admin Serial" field to match up with the PCS "Facility ID" in the appropriate facility type and location based on the "Channel Engineering Unit Label" field.

To begin the process, go to the BAT website at: <http://www.bullhornsys.com> and login. View the account and select a Bullhorn unit that needs to be edited to support the Super Extract report settings needed for a Bullhorn Interface. Users may have to go through multiple pages to locate the unit.

The screenshot displays the Bullhorn Asset Tracker (BAT) website interface. The top navigation bar includes links for Assets, Units, Admin, My Profile, Reports, SYSA, Billing, News, and Help. The main content area is divided into several sections:

- Unit Status:** A search bar and a list of filters: All Units (12), Normal (10), Not Installed (1), In Repair (1), and Not Reporting [10 Days] (2). A Filter button is located below the list.
- System Status:** A donut chart showing the distribution of unit statuses.
- Unit Detail:** A table listing units with columns for Unit, ID, Unit Type, Last Packet, and INT. The table shows 12 items, with the first few rows visible.
- Current Alerts:** A table with columns for Date, Alert, Unit, Serial, and Ack. It currently displays "No data to display".

Unit	ID	Unit Type	Last Packet	INT
Mag Tech HH-144 off CR 190	38475	APM4AMCP-ORB	5/18/2011 1:22:51 AM	
New Unit 32224	168	ICP	4/23/2010 11:56:00 AM	
New Unit in Hobbs, NM.		APM4AMCP-ORB	10/27/2010 1:19:20 PM	
Rect. KG-1	100260	RM4020	6/10/2011 2:54:19 AM	
Rect. KG-2	100232	RM4020	6/10/2011 4:15:43 AM	
Rect. TP-24, Inside Ranch by River	100255	RM4020	6/10/2011 1:47:14 AM	
Rect. TP-30, Off Road O, Behind Red House	100244	RM4020	6/9/2011 1:50:17 AM	
Rect. TP-30-A, Fenceline off CR I	100243	RM4020	6/9/2011 3:25:48 AM	

Setting Up the BAT Serial field to match PCS Facility ID

This section will be based on the selection of "New Unit in Hobbs, NM" from the previous screen.

BULLHORN Asset Tracker

Assets Units Admin My Profile Reports SYSA Billing News Help

Unit Status
 Search by Name, ID, Type, Serial, or System Serial
 All Units (12)
 Normal (10)
 Not Installed (1)
 In Repair (1)
 Not Reporting [10 Days] (2)

System Status

Unit Detail
New Unit in Hobbs, NM.
 APM4AMCP-ORB
 Status: **Not Installed**
 ID:
 Serial: 43555
 System Serial: 43555
 MIN: AIUNIT18254
 ESN: 100013401474
 Last Packet: 10/27/2010 1:19:20 PM

Notes:
 Details Settings Back

Current Readings

Accumulator	0
Active Digital	OFF
Active Digital	OFF
Active Digital	OFF
Active Digital	OFF
Analog	0.0000 (DC_AMP)
Analog	0.0000 (DC_VOLT)
Analog	0.0000
Analog	0.0000
Battery Status	Ok/Restored
Battery Voltage	12.0161

Current Alerts

Date	Alert	Unit	Serial	Ack.
No data to display				

<< < Page 1 of 1 (0 Items) > >>

After selecting the desired BH unit, click "Settings".

BULLHORN Asset Tracker

Assets Units Admin My Profile Reports SYSA Billing News Help

Unit Admin
 Selected: Accurate Inspections & Monitoring > All Units > New Unit in Hobbs, NM.

Units Search by Name, ID, Type, Serial, or System Serial
 Add Toggle Active Show Inactive Sort
 New Unit in Hobbs, NM. | 43555 | APM4AMCP-ORB
 Battery Status [Battery Status]
 Battery Voltage [Battery Voltage]
 Channel 1.Active Digital [Active Digital]
 Channel 1.Analog [Analog]
 Channel 2.Active Digital [Active Digital]
 Channel 2.Analog [Analog]
 Channel 3.Active Digital [Active Digital]
 Channel 3.Analog [Analog]
 Channel 4.Active Digital [Active Digital]
 Channel 4.Analog [Analog]
 Channel 5.Accumulator [Accumulator]
 Channel 5.Digital [Digital]
 Channel 6.Digital [Digital]

New Unit in Hobbs, NM.
 APM4AMCP-ORB Details Replace Unit

Info Settings Alerts Location Journal Template

ID:
 Name:
 Serial:
 System Serial: 43555
 Local Time Zone: Central US, Canada
 Observe Daylight Savings
 Current Status: **Not Installed** Clear Status
 Notes:

 Save
 Group History Unit History

Populate "Name" with appropriate location information and any other fields. The "Serial" field has to match the "Facility ID" from PCS. Click "Save" when finished.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [All Units](#) > [Rectifier on Hwy 18 North of Hobbs, NM.](#)

Units Search by Name, ID, Type, Serial, or System Serial

Rectifier on Hwy 18 North of Hobbs, NM. | LS-130 MP 123.4 | API

- Battery Status [Battery Status]
- Battery Voltage [Battery Voltage]
- Channel 1.Active Digital [Active Digital]
- Channel 1.Analog [Analog]
- Channel 2.Active Digital [Active Digital]
- Channel 2.Analog [Analog]
- Channel 3.Active Digital [Active Digital]
- Channel 3.Analog [Analog]
- Channel 4.Active Digital [Active Digital]
- Channel 4.Analog [Analog]
- Channel 5.Accumulator [Accumulator]
- Channel 5.Digital [Digital]
- Channel 6.Digital [Digital]

New Unit in Hobbs, NM.

APM4AMCP-ORB Details Replace Unit

Info	Settings	Alerts	Location	Journal	Template
ID:	<input type="text"/>	MIN:	AIUNIT18254		
Name:	<input type="text" value="Rectifier on Hwy 18 North of Hobbs,"/>	ESN:	100013401474		
Serial:	<input type="text" value="LS-130 MP 123.4"/>	Service Status:	Installed (Notifications ON) <input type="button" value="v"/>		
System Serial:	43555	Provider Status:	Active		
Local Time Zone:	<input type="button" value="v"/> Central US, Canada				
Observe Daylight Savings	<input type="checkbox"/>				
Current Status:	<input type="button" value="Normal"/> <input type="button" value="Clear Status"/>				
Notes:	<input type="text"/>				
<input type="button" value="Save Successful"/>					
<input type="button" value="Save"/>					
<input type="button" value="Group History"/> <input type="button" value="Unit History"/>					

BAT Channel Engineering Unit Label Configuration

Click the **Template** tab and choose a template from the list. If no templates have been created, please contact Bullhorn Technical Services for assistance.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [All Units](#) > [Rectifier on Hwy 18 North of Hobbs, NM.](#)

Units Search by Name, ID, Type, Serial, or System Serial

Rectifier on Hwy 18 North of Hobbs, NM. | LS-130 MP 123.4 | API

- Battery Status [Battery Status]
- Battery Voltage [Battery Voltage]
- Channel 1.Active Digital [Active Digital]
- Channel 1.Analog [Analog]
- Channel 2.Active Digital [Active Digital]
- Channel 2.Analog [Analog]
- Channel 3.Active Digital [Active Digital]
- Channel 3.Analog [Analog]
- Channel 4.Active Digital [Active Digital]
- Channel 4.Analog [Analog]
- Channel 5.Accumulator [Accumulator]
- Channel 5.Digital [Digital]
- Channel 6.Digital [Digital]

Rectifier on Hwy 18 North of Hobbs, NM.

APM4AMCP-ORB Details Replace Unit

Info	Settings	Alerts	Location	Journal	Template
<p>Apply Apply a template to the current unit. Template: <input type="button" value="v"/> APM4MCP-ORB: ORB 50-75A Rect</p> <p>Save As Save current unit settings as a template. Name: <input type="text"/></p>					

After selecting the template from the list check to see if the items are correct. Click **Apply**. An **Apply Template** message displays, asking to apply these settings. Click **Yes**. The channels in red will be disabled.

The screenshot shows the Bullhorn Asset Tracker interface. At the top, the navigation bar includes 'Assets', 'Units', 'Admin', 'My Profile', 'Reports', 'SYSA', 'Billing', 'News', and 'Help'. The main header is 'Unit Admin' with a breadcrumb trail: 'Selected: > Accurate Inspections & Monitoring > > All Units > > Rectifier on Hwy 18 North of Hobbs, NM.'

The central panel is titled 'Rectifier on Hwy 18 North of Hobbs, NM.' and shows the unit ID 'APM4AMCP-ORB' with options for 'Details' and 'Replace Unit'. Below this are tabs for 'Info', 'Settings', 'Alerts', 'Location', 'Journal', and 'Template'. The 'Template' tab is active, displaying an 'Apply' dialog.

The 'Apply' dialog has two main sections:

- Apply:** A message 'Apply a template to the current unit.' with a dropdown menu showing 'Template: APM4CP-ORB: ORB 50-75A Rect'.
- Save As:** A section for saving current unit settings as a template, with a 'Name:' input field.

On the right side of the dialog is a 'Select Items to Apply' list with radio buttons for 'Append Alerts' (selected) and 'Replace Alerts'. The list includes:

- Select All
- APM4CP-ORB: ORB 50-75A Rect - [Base Settings]
- Alerts
- Battery Voltage [Voltage]
- Battery Status [Battery Status]
- Channel 1.Active Digital [Channel 1] (text is red)
- Channel 2.Active Digital [Channel 2] (text is red)
- Channel 3.Active Digital [Channel 3] (text is red)
- Channel 4.Active Digital [Channel 4] (text is red)
- Channel 5.Digital [Channel 5] (text is red)
- Channel 6.Digital [Channel 6] (text is red)
- Channel 1.Analog [Rectifier Total Amps]

At the bottom of the dialog is an 'Apply' button, which is highlighted with a red box in the image.

On the left side of the interface, there is a 'Units' sidebar with a search bar and a list of unit components for 'Rectifier on Hwy 18 North of Hobbs, NM. | LS-130 MP 123.4 | API':

- Battery Status [Battery Status]
- Battery Voltage [Battery Voltage]
- Channel 1.Active Digital [Active Digital]
- Channel 1.Analog [Analog]
- Channel 2.Active Digital [Active Digital]
- Channel 2.Analog [Analog]
- Channel 3.Active Digital [Active Digital]
- Channel 3.Analog [Analog]
- Channel 4.Active Digital [Active Digital]
- Channel 4.Analog [Analog]
- Channel 5.Accumulator [Accumulator]
- Channel 5.Digital [Digital]
- Channel 6.Digital [Digital]

After applying the template, the user will get an "Applied" confirmation and the channels on the left will be updated with how the template was setup.

The screenshot displays the Bullhorn Asset Tracker interface. At the top, the navigation menu includes Assets, Units, Admin, My Profile, Reports, SYSA, Billing, News, and Help. The main header reads "Unit Admin" with a breadcrumb trail: "Selected: Accurate Inspections & Monitoring > All Units > Rectifier on Hwy 18 North of Hobbs, NM." Below this, a search bar and a list of units are visible. The selected unit is "Rectifier on Hwy 18 North of Hobbs, NM." The left sidebar shows a list of channels for this unit, with "Channel 1.Analog [Rectifier Total Amps]" and "Channel 2.Analog [Rectifier Volts]" highlighted. The main area shows the "Apply" dialog for a template. The dialog has tabs for Info, Settings, Alerts, Location, Journal, and Template. The "Apply" tab is active, showing "Apply a template to the current unit." with "Template: APM4CP-ORB: ORB 50-75A Rect" selected. Below this is a "Save As" section with a "Name:" field. To the right is a "Select Items to Apply" section with radio buttons for "Append Alerts" and "Replace Alerts". A "Select All" button is present, and a list of items to apply is shown, including "Alerts", "Battery Voltage [Voltage]", "Battery Status [Battery Status]", "Channel 1.Active Digital [Channel 1]", "Channel 2.Active Digital [Channel 2]", "Channel 3.Active Digital [Channel 3]", "Channel 4.Active Digital [Channel 4]", "Channel 5.Digital [Channel 5]", "Channel 6.Digital [Channel 6]", and "Channel 1.Analog [Rectifier Total Amps]". At the bottom of the dialog, there are "Apply" and "Applied" buttons, with the "Applied" button highlighted in red.

The template in the example below was setup to monitor a rectifier for "Channel 1 Analog - Rectifier Total Amps" and "Channel 2 Analog – Rectifier Volts". The user can have more channels (depending on Bullhorn model) setup for different data such as Negative(s), or channels for Bond data where Bond Current could be coming in on Channel 1, Structure P/S on Channel 3 and Foreign P/S on Channel 4. A buried permanent reference cell is required to read and monitor pipe-to-soils.

The channel setup can be accessed by clicking the "Channel 1 Analog [Input 1]" or in the case of the example below "Channel 1 Analog [Rectifier Total Amps]".

The **Data Point** tab shows the user can update the **Alias** field to "Rectifier Total Amps" to better describe the channel at that location. The Engineering Unit Label can be set to "DC_Amps", which matches PCS Bullhorn Engineering Unit setting for the "Rectifier Output Current Found" field.

The screenshot shows the Bullhorn Asset Tracker interface. At the top, there is a navigation bar with the Bullhorn logo and the text 'Asset Tracker'. Below this, there are menu items: Assets, Units, Admin, My Profile, Reports, SYSA, Billing, News, and Help. The main content area is titled 'Unit Admin' and shows a breadcrumb trail: 'Selected: Accurate Inspections & Monitoring > All Units > Rectifier on Hwy 18 North of Hobbs, NM. > Channel 1.Analog [Rectifier Total Amps]'. On the left, there is a 'Units' sidebar with a search bar and a list of units. The main area displays the configuration for 'Rectifier on Hwy 18 North of Hobbs, NM.' with a 'Data Point' tab selected. The configuration form includes fields for 'Alias' (set to 'Rectifier Total Amps'), 'Data Point Name' (set to 'Channel 1.Analog'), 'Display As' (set to 'As Is (Value as Decoded)'), 'Decimal Places' (set to '4'), and 'Offset' (set to '0'). The 'Engineering Unit Label' is set to 'DC_Amps'. Below these fields is a table for 'Value Descriptions' with columns for 'Value' and 'Description', which is currently empty. At the bottom, there are 'Add Description' input fields, 'Save', and 'Reset' buttons, and a 'History' link.

The channel 2 setup can be accessed by clicking the "Channel 2 Analog [Input 2]" or in the case of the example "Channel 2 Analog [Rectifier Volts]".

The **Data Point** tab shows the user can update the **Alias** field to "Rectifier Volts" to better describe the channel for the user at that location. The Engineering Unit Label can be set to "DC_Volts", which matches PCS Bullhorn Engineering Unit setting for the "Rectifier Output Volts Found" field.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [All Units](#) > [Rectifier on Hwy 18 North of Hobbs, NM.](#) > [Channel 2.Analog \[Rectifier Volts\]](#)

Units

+ Add | - Toggle Active | ☐ Show Inactive | ↓ Sort

- Rectifier on Hwy 18 North of Hobbs, NM. | LS-130 MP 123.4 | API
- Battery Status [Battery Status]
 - Battery Voltage [Voltage]
 - Channel 1.Analog [Rectifier Total Amps]
 - Channel 2.Analog [Rectifier Volts]

Rectifier on Hwy 18 North of Hobbs, NM.
 APM4AMCP-ORB Details

Data Point Settings

Rectifier Volts
 Channel 2.Analog

Alias:

Data Point Name: Channel 2.Analog

Display As:

Decimal Places:

Offset:

Engineering Unit Label:

Value	Description
No data to display	

Add Description:

📅 History

As indicated, the user can set up more than two channels for rectifiers and can have channel 3 monitor negative current, as pictured in the screen shot below.

Units

+ Add | - Toggle Active | ☐ Show Inactive | ↓ Sort

- BLGD-MP-283 | BLGD-MP-283 | ICP
- ⚡ Analog Channel 1 [DC_Volts]
 - ⚡ Analog Channel 1 Instant Off [Analog Channel 1 Instant Off]
 - 💡 Analog Channel 1 Status [Analog Channel 1 Status]
 - ⚡ Analog Channel 2 [DC_Amps]
 - ⚡ Analog Channel 2 Instant Off [Analog Channel 2 Instant Off]
 - 💡 Analog Channel 2 Status [Analog Channel 2 Status]
 - ⚡ Analog Channel 3 [Blue]
 - ⚡ Analog Channel 3 Instant Off [Analog Channel 3 Instant Off]
 - 💡 Analog Channel 3 Status [Analog Channel 3 Status]
 - ⚡ Analog Channel 4 [P80]
 - ⚡ Analog Channel 4 Instant Off [Analog Channel 4 Instant Off]
 - 💡 Analog Channel 4 Status [Analog Channel 4 Status]
 - ⚡ Analog Channel 5 [Gold]
 - ⚡ Analog Channel 5 Instant Off [Analog Channel 5 Instant Off]
 - 💡 Analog Channel 5 Status [Analog Channel 5 Status]
 - Battery Status [Battery Status]
 - Battery Voltage [Battery]
 - 💡 Digital Channel 1 [Iso>Status]
 - 💡 Digital Channel 2 [Dig AC Present]
 - 💡 Digital Channel 3 [Int 1 Status]

BLGD-MP-283
 ICP Details Admin Command

Data Point Settings

Blue
 Analog Channel 3

Alias:

Data Point Name: Analog Channel 3

Display As:

Decimal Places:

Offset:

Engineering Unit Label:

Value	Description
No data to display	

Add Description:

📅 History

Alias is set to what the user calls one of the negatives, and the Engineering Units Label is set with the word negative "Blue". During the Bullhorn Interface process, PCS looks for keywords such as "NEG" or "negative" and looks for the 8 characters after the space. If the user has NEG CRUDE 10 in BAT, PCS should have a Negative called "CRUDE 10" and the data from the Super Extract report would be populated at a Rectifier "Facility ID" called "BLGD-MP-283" during the Bullhorn Interface process.

Other channel settings can be configured depending on the application and Bullhorn product. Refer to the table in **Section 1**.

Configure all unit channels as indicated above before moving on to the next step.

Section 4: Setting Up a BAT Unit Group

The BAT website dashboard view defaults to an "All Units" group where all unit types are visible upon login. Users can setup groups as needed by Systems, Tech Area and more. Different permissions can be set for each user and the corresponding Unit Groups as indicated by the account administrator. The following process explains how to create a new unit group with Bullhorn units to include in the Bullhorn Super Extract report. Users can select the All Units default group or create additional groups specifically for the Super Extract report.

To Create a New Unit Group

After BAT login, click **Units>Unit Admin**

BULLHORN Asset Tracker

Assets **Units** Admin My Profile Reports SYSA Billing News Help

Unit Status

Search by Name, ID, Type, Serial, or System Serial

- All Units (12)
- Normal (11)
- In Repair (1)
- Not Reporting [10 Days] (3)

Filter

System Status

Unit Detail

Unit	ID	Unit Type	Last Packet	INT
Mag Tech HH-144 off CR 190	38475	APM4AMCP-ORB	5/18/2011 1:22:51 AM	
New Unit 32224	168	ICP	4/23/2010 11:56:00 AM	
Rect. KG-1	100260	RM4020	6/10/2011 2:54:19 AM	
Rect. KG-2	100232	RM4020	6/10/2011 4:15:43 AM	
Rect. TP-24, Inside Ranch by River	100255	RM4020	6/10/2011 1:47:14 AM	
Rect. TP-30, Off Road O, Behind Red House	100244	RM4020	6/9/2011 1:50:17 AM	
Rect. TP-30-A, Fenceline off CR I	100243	RM4020	6/9/2011 3:25:48 AM	
Rectifier on Hwy 18 North of Hobbs, NM.		APM4AMCP-ORB	10/27/2010 1:19:20 PM	

Page 1 of 1 (12 Items)

Current Alerts

Date	Alert	Unit	Serial	Ack.
No data to display				

<< < Page 1 of 1 (0 Items) > >>

Unit Admin

Selected: [Accurate Inspections & Monitoring](#)

Units

Add | Toggle Active | Show Inactive | Sort

- Accurate Inspections & Monitoring
 - All Units
 - SUN-Fears
 - SUN-Hensley
 - SUN-Inman
 - SUN-Smith
 - New Unit 32224 | ICP

Accurate Inspections & Monitoring

Unit Group

Info Security

Group Info

Name:

Color:

Save

Group History

Unit Admin

Selected: [Accurate Inspections & Monitoring](#)

Units

Add | Toggle Active | Show Inactive | Sort

- Accurate Inspections & Monitoring
 - All Units
 - SUN-Fears
 - SUN-Hensley
 - SUN-Inman
 - SUN-Smith
 - New Unit 32224 | ICP

Accurate Inspections & Monitoring

Unit Group

Info Security

Group Info

Name:

Color:

Save

Group History

Then, click **Add** for the units to add to the group.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#)

Units

Add | Toggle Active | Show Inactive | Sort

- Accurate Inspections & Monitoring
 - All Units
 - SUN-Fears
 - SUN-Hensley
 - SUN-Inman
 - SUN-Smith
- New Unit 32224 | ICP

Accurate Inspections & Monitoring

Unit Group

Info Security

Group Info

Name: Accurate Inspections

Color:

Save

Group History

Add Unit/Group

Add Under: Accurate Inspections & Monitoring

Add Group:

OR

Select Units:

Units To Add Add Units

Add Units to the "Units To Add" list, then click "Add Units". Double-Click to Add/Remove Units. You can also use Ctrl-Click or Shift-Click to select multiple Units then use the or to Add/Remove Units.

Type in the name of the group, such as "Southern Region", and click the green + sign.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#)

Units

Add | Toggle Active | Show Inactive | Sort

- Accurate Inspections & Monitoring
 - All Units
 - SUN-Fears
 - SUN-Hensley
 - SUN-Inman
 - SUN-Smith
- New Unit 32224 | ICP

Accurate Inspections & Monitoring

Unit Group

Info Security

Group Info

Name: Accurate Inspections

Color:

Save

Group History

Add Unit/Group

Add Under: Accurate Inspections & Monitoring

Add Group:

OR

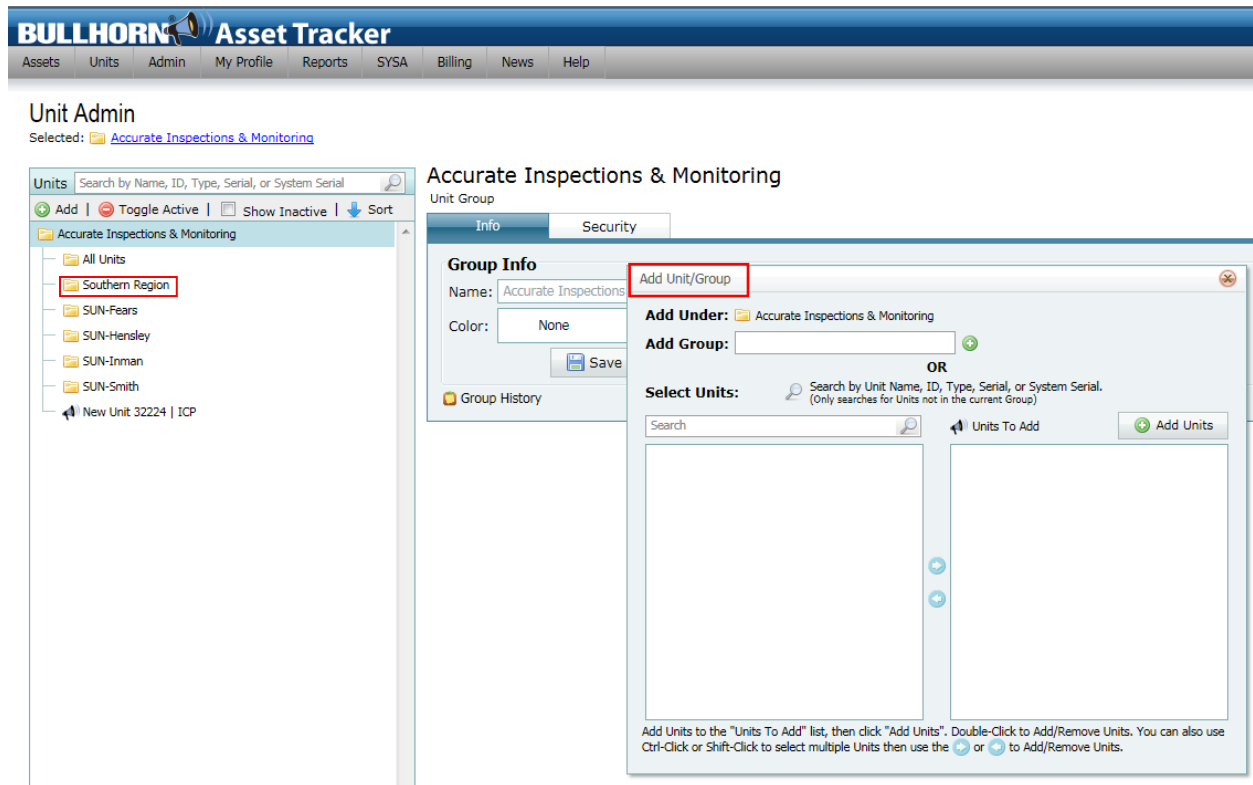
Select Units:

Units To Add Add Units

Add Units to the "Units To Add" list, then click "Add Units". Double-Click to Add/Remove Units. You can also use Ctrl-Click or Shift-Click to select multiple Units then use the or to Add/Remove Units.

The group is created, and the user can continue with another group name or close the **Add Group** dialog box.

After closing the **Add Group** dialog box, double-click the new group called: "Southern Region" and click the **Add** button.



At the Add Unit/Group dialog, the user can create sub-groups or Select Units for the designated group ("Southern Group"). Users can search for units to add by using the **Search** function. Search can only locate units by Unit Name, ID, Type, Serial, or System Serial not in current group. In the example below, the user searched for "RM4020" and received the following results.

BULLHORN Asset Tracker

Assets Units Admin My Profile Reports SYSA Billing News Help

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [Southern Region](#)

Units Search by Name, ID, Type, Serial, or System Serial

[Add](#) | [Toggle Active](#) | [Show Inactive](#) | [Sort](#)

Southern Region

Southern Region

Unit Group [Delete From Group](#)

Info Security

Group Info

Name: Southern Region

Color: None

[Save](#)

[Group History](#)

Add Unit/Group

Add Under: Southern Region

Add Group:

OR

Select Units: Search by Unit Name, ID, Type, Serial, or System Serial.
(Only searches for Units not in the current Group)

RM4020
Rect. KG-1 R-KG-1 RM4020
Rect. KG-2 R-KG-2 RM4020
Rect. TP-24, Inside Ranch by River R-TP-24 RM4020
Rect. TP-30, Off Road O, Behind Red House R-TP-30 RM4020
Rect. TP-30-A, Fenceline off CR I R-TP-30-A RM4020

Units To Add [Add Units](#)

Add Units to the "Units To Add" list, then click "Add Units". Double-Click to Add/Remove Units. You can also use Ctrl-Click or Shift-Click to select multiple Units then use the [←](#) or [→](#) to Add/Remove Units.

Double-click the units to include in the group, which will move the selections to the right-side, or highlight the unit(s) by using holding down the CTRL key and multi-selecting the units on the left side and then click the right arrow in the middle to move these units to the right side. When finished selecting units, click the **Add Units** button.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [Southern Region](#)

Southern Region
Unit Group Delete From Group

Group Info
Name: Southern Region
Color: None
Save

Add Unit/Group
Add Under: Southern Region
Add Group:

Select Units: Search by Unit Name, ID, Type, Serial, or System Serial. (Only searches for Units not in the current Group)

Units To Add Add Units

Rect. TP-30-A, Fenceline off CR I | R-TP-30-A | RM4020
Rect. KG-1 | R-KG-1 | RM4020
Rect. KG-2 | R-KG-2 | RM4020
Rect. TP-24, Inside Ranch by River | R-TP-24 | RM4020
Rect. TP-30, Off Road O, Behind Red House | R-TP-30 | RM4020

Double click to move units from this box to the next

Add Units to the "Units To Add" list, then click "Add Units". Double-Click to Add/Remove Units. You can also use Ctrl-Click or Shift-Click to select multiple Units then use the or to Add/Remove Units.

The "Southern Region" group is updated with the selected units. If correct, click the "X" to exit the Add Unit/Group dialog box.

Unit Admin

Selected: [Accurate Inspections & Monitoring](#) > [Southern Region](#)

Southern Region
Unit Group Delete From Group

Group Info
Name: Southern Region
Color: None
Save

Add Unit/Group
Add Under: Southern Region
Add Group:

Select Units: Search by Unit Name, ID, Type, Serial, or System Serial. (Only searches for Units not in the current Group)

Units To Add Add Units

Rect. KG-1 | R-KG-1 | RM4020
Rect. KG-2 | R-KG-2 | RM4020
Rect. TP-24, Inside Ranch by River | R-TP-24 | RM4020
Rect. TP-30, Off Road O, Behind Red House | R-TP-30 | RM4

X

Add Units to the "Units To Add" list, then click "Add Units". Double-Click to Add/Remove Units. You can also use Ctrl-Click or Shift-Click to select multiple Units then use the or to Add/Remove Units.

Setting Up the BAT Super Extract Report

The following process explains how to setup the Bullhorn Super Extract report with a unit group.

From the BAT home page, click on the menu tab called **Reports>Extract**.

The screenshot shows the Bullhorn Asset Tracker interface. The top navigation bar includes 'Assets', 'Units', 'Admin', 'My Profile', 'Reports' (highlighted), 'SYSA', 'Billing', 'News', and 'Help'. Below the navigation bar, there are two main sections: 'Unit Status' and 'Unit Detail'.

Unit Status

Search by Name, ID, Type, Serial, or System Serial

- All Units (12)
- Normal (11)
- In Repair (1)
- Not Reporting [10 Days] (3)

Filter

System Status

Unit Detail

Unit	ID	Unit Type	Last Packet	INT
Mag Tech HH-144 off CR 190	38475	APM4AMCP-ORB	5/18/2011 1:22:51 AM	
New Unit 32224	168	ICP	4/23/2010 11:56:00 AM	
Rect. KG-1	100260	RM4020	6/17/2011 2:56:23 AM	
Rect. KG-2	100232	RM4020	6/17/2011 4:12:41 AM	
Rect. TP-24, Inside Ranch by River	100255	RM4020	6/17/2011 1:31:55 AM	
Rect. TP-30, Off Road O, Behind Red House	100244	RM4020	6/23/2011 2:00:48 AM	
Rect. TP-30-A, Fenceline off CR I	100243	RM4020	6/23/2011 4:17:49 AM	
Rectifier on Hwy 18 North of Hobbs, NM.		APM4AMCP-ORB	10/27/2010 1:19:20 PM	

Page 1 of 1 (12 Items)

Current Alerts

Date	Alert	Unit	Serial	Ack.
No data to display				

<< < Page 1 of 1 (0 Items) > >>

If the user has already created Extract report(s), they will be listed. If none have been created, it should look like the following:

The screenshot shows the Bullhorn Asset Tracker interface. The top navigation bar includes 'Assets', 'Units', 'Admin', 'My Profile', 'Reports', 'SYSA', 'Billing', 'News', and 'Help'.

Extracts

Extract Name	FTP URL	FTP Folder		
No data to display				
+ Add New Report				

Click the **Add New Report** button.

Extracts

Extract Name	FTP URL	FTP Folder		
No data to display				
Add New Report				

Extract Configuration

TimeZone: Central US, Canada

Extract Name Version

UnitGroup To Use Destination Type

Default Folder Name

Records to Include Re-run the Extract Every

Initial Run Date Initial Run Time

Time Zone

PCS 6 PCS Generic
 Email FTP
 FTP Destination:
 User ID:
 Password:
 Observe Daylight Savings Time

Populate the "Extract Name" field and choose the "UnitGroup To Use". If this Extract report is for an FTP site hosted by American Innovations (AI), an AI representative would have sent you the following settings, which are the same settings used in the PCS System settings:

ACME Oil – User Name	
PCS Bullhorn Interface Setup	
American Innovations customer ID	ACME01
Bullhorn FTP site URL	ftp.bullhornsys.com
Bullhorn FTP site folder	ACME
Bullhorn FTP site password	123456
Bullhorn FTP site username	ACME

The fields for the FTP will need to be populated using these settings:

- **Default Folder Name** – Bullhorn FTP site folder (ACME)
- **FTP Destination** - Bullhorn FTP site URL (<ftp.bullhornsys.com>)
- **User ID** – Bullhorn FTP Site username (ACME)
- **Password** – Bullhorn FTP site password (123456)

Other Extract report settings include:

- **PCS 6 or PCS Generic.** This setting will be dependent on the PCS version. For PCS

version 6 choose "PCS 6". For PCS version 7 and later, choose "PCS Generic".

- **Email or FTP.** A user can have the report emailed to him if PCS is setup for this option. The FTP option requires all the settings mentioned above. To select both options, the user must set up two Extracts, one for email and one for FTP. **Note:** *The BAT Super Extract report(s) will charge the user account \$20 for each report based on the frequency chosen in the setup.*
- **Records to include.** This option sets a filter or queries the data stored on BAT website for the account and designated group as indicated below in the drop-down box. A typical choice is "Latest Non-Alarm Record per unit in period".



Extracts

Extract Name	FTP URL	FTP Folder
No data to display		
Add New Report		

Extract Configuration

TimeZone : Central US, Canada

Extract Name: ACME FTP Version: PCS 6 PCS Generic

UnitGroup To Use: Southern Region Destination Type: Email FTP

Default Folder Name: ACME

FTP Destination: ftp.bullhornsys.com

User ID: ACME

Password:

Records to Include: [Dropdown menu open showing options: All Records, All Non-Alarm Records, All Alarm Records, Earliest Record per Unit in period, Latest Record per Unit in period, Earliest Non-Alarm Record per Unit in period, Latest Non-Alarm Record per Unit in period]

Re-run the Extract Every: [Dropdown menu]

Initial Run Date: [Text input]

Initial Run Time: [Text input]

Observe Daylight Savings Time

- **Initial Run Date.** This setting has to be set sometime in the future on the day of the month desired. Based on the "Records to Include" setting, the report will have the latest non-alarm reading for each unit of "Southern Region" group. Depending on when each Bullhorn unit was set up to transmit (typically weekly for rectifiers), the report should have a reading for each unit in the last week of June 2011.

Extract Configuration

TimeZone : Central US, Canada

Extract Name: ACME FTP Version: PCS 6 PCS Generic

UnitGroup To Use: Southern Region Destination Type: Email FTP

Default Folder Name: ACME FTP Destination: ftp.bullhorns.com

User ID: ACME

Password:

Records to Include: Latest Non-Alarm Record per Unit in period Re-run the Extract Every: [Dropdown]

Initial Run Date: [Dropdown] Initial Run Time: [Dropdown]

Time Zone: [Dropdown] Observe Daylight Savings Time

[Add]

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	26	27	28	29	30	1	2
27	3	4	5	6	7	8	9
28	10	11	12	13	14	15	16
29	17	18	19	20	21	22	23
30	24	25	26	27	28	29	30
31	31	1	2	3	4	5	6

[Today] [Clear]

- **Re-run the Extract Every.** This setting tells BAT to run the report starting with "every hour" to "every two months".
- **Initial Run Time.** This setting tells BAT the time of day to run the report. Note: Users can choose an "off time", such as 1am, to minimize network traffic.
- **Time Zone.** This is to account for the user's time zone.
- **Observe Daylight Savings Time.** This adjusts the time for states that observe Daylight Savings Time.

Extract Configuration

TimeZone : Central US, Canada

Extract Name: ACME FTP Version: PCS 6 PCS Generic

UnitGroup To Use: Southern Region Destination Type: Email FTP

Default Folder Name: ACME FTP Destination: ftp.bullhorns.com

User ID: ACME

Password:

Records to Include: Latest Non-Alarm Record per Unit in period Re-run the Extract Every: Every Month

Initial Run Date: 7/1/2011 Initial Run Time: 01:00AM





Time Zone: Central US, Canada Observe Daylight Savings Time

[Add] [Cancel]

Click the **Add** button to create this extract report. To Edit the report, the user can click the pencil icon to modify the settings. To create another report, click on the **Add New Report**.



Extracts

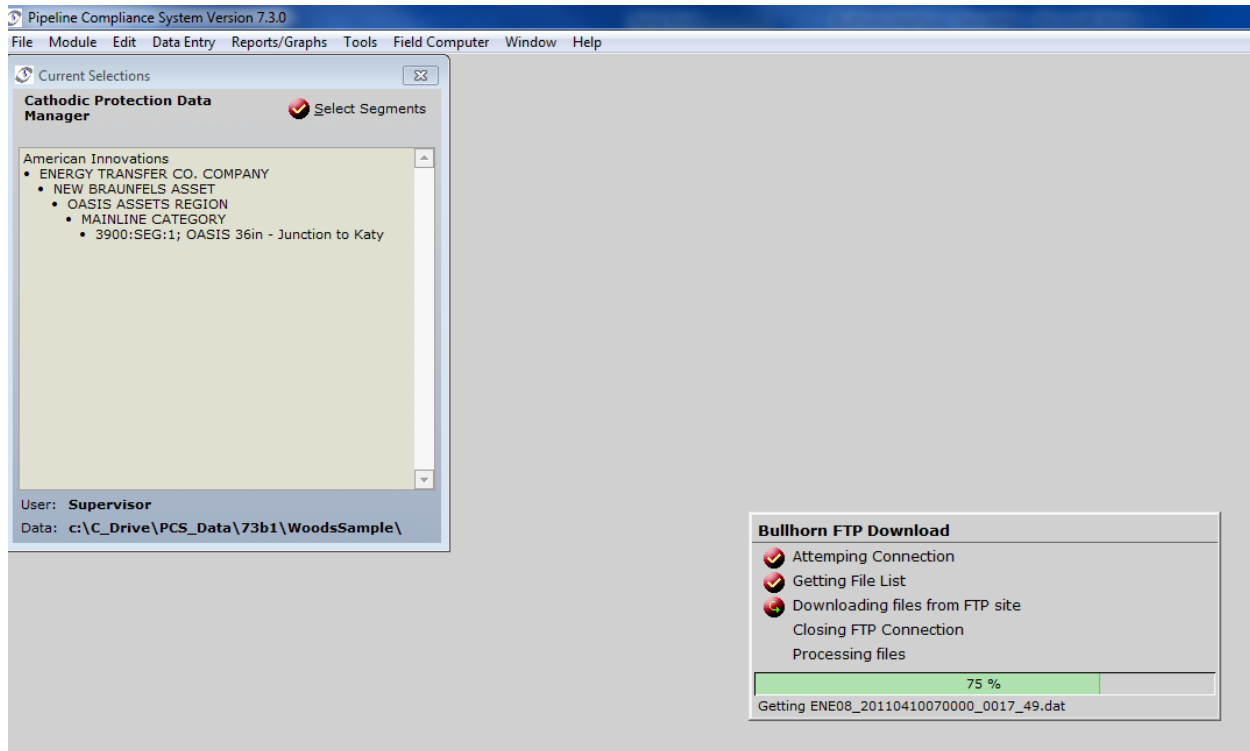
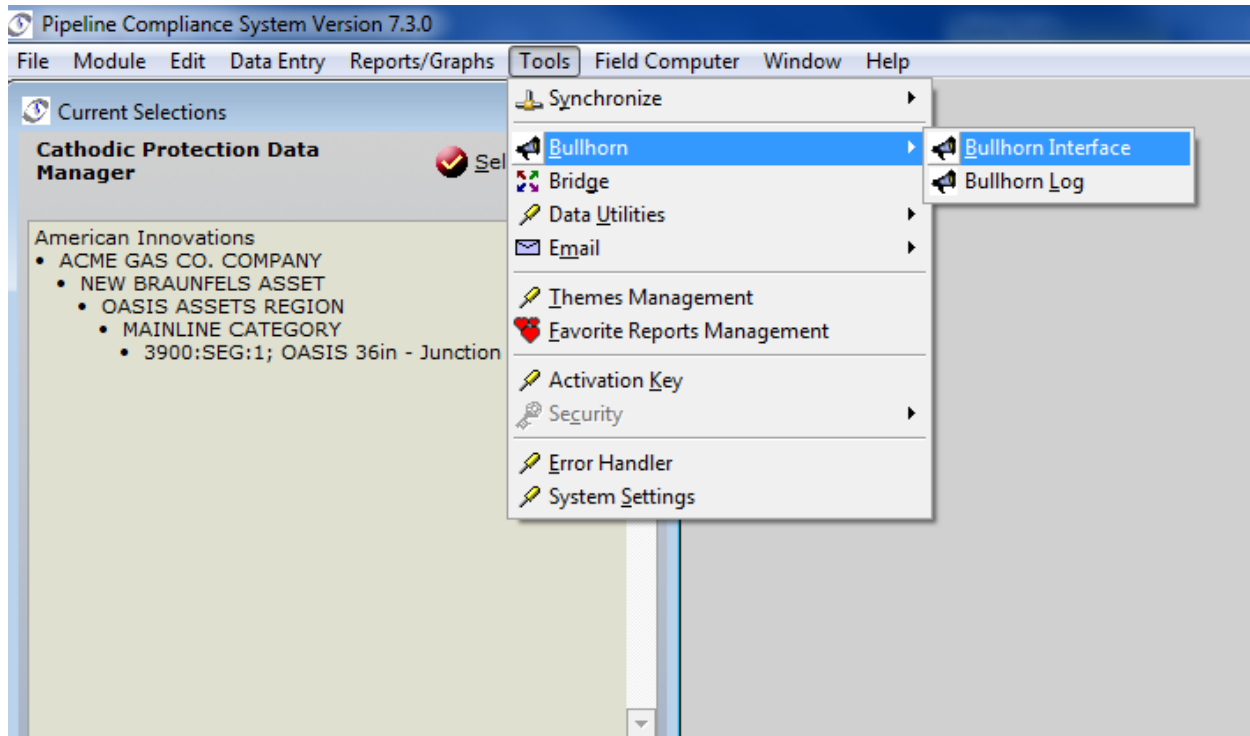
Extract Name	FTP URL	FTP Folder		
ACME FTP	ftp.bullhornsys.com	ACME		 
 Add New Report				

The user can also run the report as **On-Demand** by clicking the right arrow next the pencil. The user can also delete the report by clicking the minus sign.

Section 6: Performing the PCS Bullhorn Interface

Once the earlier steps are complete the user can test and run the Bullhorn Interface. AI suggests that first-time users contact PCS Technical Support to assure everything is set up correctly before running reports. Users should always perform a PCS backup prior to running the Bullhorn Interface to ensure all settings are correct and the expected data is processed correctly. There is a Bullhorn Log that will help the user determine what was processed and what was not (under "Tools" tab).

To perform the Bullhorn Interface in PCS, click **Tools>Bullhorn Interface**. Based on the system settings configured in PCS, the software will make the connection, read the files that have yet to be processed in the database from the location selected, close the connection and start processing the files from BAT into the PCS database.



The user can view the "Bullhorn Log" to see how many records were processed and what locations were not in the PCS database.

For questions and assistance with PCS or BAT setup, contact American Innovations Technical Service at 512-249-3400.