Working with Pipeline Records

This section explains how to work with folders and pipelines in the system hierarchy tree. The information is intended for users with *SysAdmin* user permissions unless noted otherwise.

Topics in section include those in the following list:

- Adding a Folder in the Hierarchy (page 139)
- Adding a Pipeline in the Hierarchy (page 141)
- Moving and Renaming a Pipeline (page 144)
- Deleting a Pipeline (page 145)
- Understanding Default Location Formats (page 146)
- Selecting a Default Location Format (page 149)
- Adding a Pipeline Information Record (page 150)
- Adding a Pipeline Maintenance Record (page 154)
- Attaching a Document to a Pipeline Record (page 158)
- Working with Themes and Filter Groups (page 167)
- Filtering Data in a Grid (page 183)

Adding a Folder in the Hierarchy

The hierarchy is an organizational structure of one or more folders. Folders are organized in a tree structure based on the number of hierarchy levels set up in the system. The top level of the hierarchy is the root level that identifies your company's name. All hierarchy folders are added below the root level. The lowest level of the hierarchy includes a folder with pipelines added in the system (Figure 4-1, page 140).

NOTE: The names of hierarchy folders as well as *ROW Code* and *ROW Name* support up to 100 characters.

To add a folder in the hierarchy, follow these steps:

1 Click File > Select ROWs to open the Select ROWs window (Figure 4-1).



Figure 4-1. Select ROWs

- 2 Select a level in the hierarchy to which you want to add a folder.
- 3 Click C Add to open the Add New Node dialog box (Figure 4-2, page 140).

NOTE: You can also open the *Add New Node* dialog box by right-clicking a selection in the hierarchy tree and selecting *Add* in the shortcut menu that opens.

- 4 Add information for the new hierarchy folder. Fields requiring information include a Sicon, such as *System* and *ROW Code* shown in the next figure.
- 5 Click the option **Expand After Adding** if you want to expand the selection tree after clicking *Apply*.
- 6 Click Apply. Repeat step 3 through step 5 as needed to add additional folders in the hierarchy tree.

Add New Node	
Region	TRANSMISSION
System	8
ROW Code	8
ROW Name	
	Expand After Adding
	🛃 Apply 📔 🚳 Cancel

Figure 4-2. Add New Node

Adding a Pipeline in the Hierarchy

To add a pipeline in the hierarchy, follow these steps:

1 If the Select ROWs window is not open, click File > Select ROWs (Figure 4-3).



Figure 4-3. Select ROWs

- 2 Select a folder in the hierarchy you want to add a pipeline. In the following example, another pipeline will be added in the *Mains* folder.
- **3** Click Add to open the *Add New Node* dialog box (Figure 4-4). Right-clicking the selected hierarchy folder and selecting *Add* in the shortcut menu also opens the *Add New Node* dialog box.

Add New Node	united interest	X
Region	Southwest Region	
System	MAINS	
ROW Code	8	
ROW Name		
	Expand After Adding	
	🛃 Apply 🛛 🚳	Cancel

Figure 4-4. Add New Node

4 Enter a pipeline code for the new pipeline in the **ROW Code** field. Fields requiring information include a [∞] red icon, such as *ROW Code* in the previous figure (Figure 4-4).

NOTE: The names of hierarchy folders as well as *ROW Code* and *ROW Name* support up to 100 characters.

- 5 Type a name for the pipeline in the **ROW Name** field.
- **6** Click the option **Expand After Adding** if you want to expand the selection tree after clicking *Apply*.
- 7 Click Apply. Repeat step 2 through step 6 as needed to add another pipeline in the selected hierarchy folder.
- **8** Continue with *Understanding Default Location Formats* (page 146) for information about setting this required field for all pipelines in the system.

Using Find in Select ROWs

Use the Find drop-down list in the *Select ROWs* window when searching for a particular pipeline segment in the hierarchy. The Find drop-down list includes the following options for locating and selecting a pipeline segment in the hierarchy:

- Code: searches the hierarchy by ROW Code.
- Name: searches the hierarchy by ROW Name.
- **Code and Name:** searches the hierarchy by ROW Code and Name. Using this option requires that you include the semi-colon separator between the ROW Code and ROW Name, *such as LG123A*; *NE Paddock LG123*.

To search the hierarchy for a particular pipeline segment in the *Select ROWs* window, follow these steps:

	-	Select O Clear Selectio	ns, rind and select			and Disp
Find ROW	Code	Enter Search Text		×	00 Find	
4 🔲 🏠	My Pipeline					
	Northeast					
	Northwest Southeast	-				
	Southwest	-				
	_	-				

1 Click **File** > **Select ROWs** to open the *Select ROWs* window (Figure 4-5).

Figure 4-5. Select ROWs

- 2 Choose an option in the *Find Now* drop-down list to search for a pipeline segment in the hierarchy. Click the down arrow in **Find ROW** and select **Code**, **Name**, or **Code and Name**.
- **3** Based on the selected search option, type the *ROW Code*, *ROW Name*, or the *ROW Code and Name* of the pipeline segment in the field **Enter Search Text**.
- 4 Select one of the following options to choose how search results are handled: Find Only, Find and Select, Clear Selections, Find and Select. Hovering the mouse over an option displays a tooltip with a description of option.
- **5** Click the check box **Expand Display** if you want PCS Axis to expand the hierarchy when a search match is located.
- 6 Click 🚳 Find.

Moving and Renaming a Pipeline

Complete the following steps to move or rename a pipeline in the hierarchy:

1 If the *Select ROWs* window is not open, click **File** > **Select ROWs** and then select a pipeline in the hierarchy (Figure 4-6).



Figure 4-6. Move Pipeline

- 2 To move the selected pipeline to a different hierarchy folder, right-click the pipeline and select **Cut** in the shortcut menu that opens. Right-click the hierarchy folder you want to move the pipeline to and then select **Paste** in the shortcut menu that opens (Figure 4-6).
- **3** To rename the selected pipeline, follow these steps:
 - a Click *P* **Rename** to open the *Rename* dialog box (Figure 4-7). Right-clicking the selected pipeline and selecting *Rename* in the shortcut menu also opens the dialog box.

Rename R	light Of Way	X
Region	Southwest Region	
System	MAINS	
ROW Code	D1234	
ROW Name	Central N to Green	
		🛃 Save 🛛 🔞 Cancel

Figure 4-7. Rename Pipeline

b Type a name for the pipeline in the pipeline *Code* field. In the following example, *D-1234* has been entered in the *ROW Code* field. Click **Save** to apply the change and close the dialog box.

Deleting a Pipeline

The procedure in this section explains how to delete a pipeline in the hierarchy. Deleting a pipeline also deletes all facilities and history records associated with the pipeline.

IMPORTANT: Instead of deleting a pipeline, consider creating a new hierarchy folder labeled *Sold*, *Abandoned*, or something similar and then moving the pipeline to that folder. Another option is to change the operational status of the pipeline by disabling the *Active* check box in *Edit ROW Detail* (Data Entry > Edit ROW Detail). Using either of these methods will preserve data for future references.

To delete a pipeline, follow these steps:

1 Click **File** > **Select ROWs** to open the *Select ROWs* window. Select a pipeline in the hierarchy you want to delete (Figure 4-8).



Figure 4-8. Select ROWs

2 Click X Delete to open the *Confirm Delete* dialog box (Figure 4-9, page 146). Or, right-click the selected pipeline in the hierarchy tree and select Delete in the shortcut menu to open the *Confirm Delete* dialog box.

Note: The *Confirm Delete* dialog box identifies the pipeline and number of associated facilities to be deleted in the *Count* column (Figure 4-9, page 146).

3 Click \nearrow Delete to delete the pipeline or \bigcirc Cancel to cancel the operation.



Figure 4-9. Confirm Delete

Understanding Default Location Formats

The following table (Table 4-1) identifies milepost formats available for selection when setting the *Default Location Format* for a pipeline in *Edit ROW Detail*. Choosing a *Default Location Format* allows PCS Axis to automatically apply the correct formatting to milepost values you enter for a facility location on a pipeline.

Location Format	Format Example	Description
Metric Milepost	1.234AB, 1,234AB, or 1+234AB	Measurements are in metrics. This format can include two alpha characters at the end of the milepost and can also be graphed. Measurements are in kilometers and meters. Based on the metric delimiter set in system <i>Options</i> , this format supports a Period, Comma, or Plus sign. For example, 1.234AB is 1 kilometer (km) and 234 meters (m).
Milepost (3 Decimals)	12345.567	Format supports two alpha characters at
	-or-	the end of the milepost and can also be graphed. This format uses the U.S.
	1234.567AB	Standard measurement system.
Milepost (4 Decimals)	123.5678	Format supports one alpha character at the end of the milepost and can also be
	-or-	graphed. This format uses the U.S.
	1234.5678A	Standard measurement system.

Table 4-1. Description of Default Location Formats

Location Format	Format Example	Description
Reading Number	12345678AB	This is an alphanumeric format with support for two alpha characters at the end. It is typically used for stations. The format also uses the U.S. Standard measurement system.
		This format cannot be graphed and the <i>CP Compliance Report</i> does not calculate total feet, total miles, or miles below criteria.
Location ID	1234567891 -or-	Note: Location ID cannot be changed once it is set up.
	ABCDEFGHIJ	Use <i>Location ID</i> when footages are not applicable. This format is typically used in distribution systems. Other features include those in the following list:
		 Uses the U.S. Standard measurement system; accepts alphanumeric characters; and cannot be graphed.
		• <i>CP Compliance Report</i> does not calculate total feet, total miles, or miles below criteria when using this format.
Station Number	12345+67AB	Measurements are in feet. This format can be graphed; supports two alpha characters at the end of the milepost; and uses the U.S. Standard measurement system.

 Table 4-1. Description of Default Location Formats

Location Format	Format Example	Description
Miles+100 Feet	12345+12 -or-	Format uses miles plus two digits to the right to indicate hundreds of feet. For
	12345+12AB	example, 110+12 indicates 110 miles and 1,200 feet. Do not enter values greater than 53 feet; doing so indicates
		another mile.
		Other characteristics include:
		• Format can be graphed.
		• Two alpha characters can be used after the first 3 numbers.
		• <i>CP Compliance Report</i> does not calculate total feet, total miles, or miles below criteria.
		Uses the U.S. Standard measurement system.
Miles/Station Number	123A 45+67	Format uses Miles < space > Station
	-or-	Number with Milepost (3 Decimals) in graphs. This format uses the U.S.
	123A 12+34	Standard measurement system.

Table 4-1. Description of Default Location Formate
--

Selecting a Default Location Format

Information in this section explains how to set up *Default Location Format* and other pipeline information. A *Default Location Format* must be set for each pipeline added in the system hierarchy.

Complete the following steps:

1 Click File > Select ROWs to open the Select ROWs window (Figure 4-10).



Figure 4-10. Select ROWs

- 2 Select one or more pipelines and then click 💾 Save to close the window.
- **3** Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-11, page 149).

1	PCS Au	ris										×
	_		Data Entry P N Detail X	leports / Graphs To	ols Field C	omputer Help	😲 PCS Axi	is		Welcome John S	Smith 😬 🔀 Le	og Out
		_	mation Main	tenance		IPCS) R	OW Information	K (PCS) ROW inform			ions 📌 Custon	
		85 F	ind ROW Code	ROW Name	Pipe	Pipeline Name	Pipeline Size	Total Footage	Default Location Format	Add X Delete	ROW Active	Palent
		-	A1234	My Pipeline-1	1	A1234-1	24.000	15435		26534	×	6
			A4567 A7890	My Pipeline-2 My Pipeline-3	1	A4567+2 A7890-3	24.000		Miles/Station Number Metric Milepost	512345	×.	
Click the Selected ROWs	Selected ROWs		Illy Location ID Facility Type Atmospheric Coopen Foreign Bond Galvaria: Ance Inhibito Tipes Inhibito Tipes Incohe	Facility Local Miles/Station Miles/Station Miles/Station Miles/Station	Number Number Number Number Number Number					đ	E Row Court: 12	3

Figure 4-11. Edit ROW Detail

- 4 If you want to collapse the *Selected ROWs* panel to view more of the *Edit ROW Detail* grid, click **Selected ROWs**. To expand the panel, click **Selected ROWs** again.
- **5** Select a pipeline in the *Information* grid.
- 6 Select the field **Default Location Format** to display a drop down arrow. Click the arrow and select a location format in the selection list. (See *Understanding Default Location Formats* (page 146) for a description of available choices.)
- 7 Click Add in the *Facility Location ID Formats* mini-grid. A list of all facility types display in the mini-grid with the location format selected in **step 6**. If you want to change the location format for a particular facility type listed in the mini-grid, follow these steps:
 - **a** Select a row of records in the mini-grid with the facility type you want to change the location format.
 - **b** Select the field **Facility Location Format** to display a drop down arrow. Click the arrow and select a location format in the selection list.
- 8 Set up other pipeline information as needed then click **S Refresh**. When you finish, click the **x** close icon to close the *Edit ROW Detail* window.

Adding a Pipeline Information Record

Use the *Information* grid in *Edit ROW Detail* to add an information record for a pipeline selected in the *Select ROWs* window. Adding an information record allows you to maintain history records when important permanent information changes, such as when a pipeline is taken out of service or is sold to another business.

NOTE: If you are working with the optional *Telluric Compensation* feature, the required field labeled *Telluric Compensation Required* must be added in the *Information* grid and enabled for each pipeline segment requiring telluric compensation. For more information refer to *Adding a Layout Theme* (page 168).

To add a pipeline information record, follow these steps:

1 Click the **Select ROWs** button *P* to open the *Select ROWs* window (Figure 4-12).

Select ROWs	×
🛛 🧈 Clear	r 🔾 Add 🏋 Delete 🥖 Rename
◯ Find Only ◯ Find and Select ◎ Clear Selections, Fi	ind and Select 🛛 📝 Expand Display
Find ROW Code Enter Search Text	× Ø0 Find
🔺 🔲 🏠 My Pipeline Company	
🔺 📝 🚞 Northeast Region	
4 🔽 🗁 LG123	
✓ LG123-A ; NE Paddock #1	
✓ LG123-B ; NE Paddock #2	
LG123-C ; NE Paddock #3	
Image: Northwest Region	
Southeast Region	
🕨 🔲 🧯 Southwest Region	
	🛛 💾 Save 🛛 🚳 Cancel

Figure 4-12. Select ROWs

2 Select one or more pipeline segments you want to work with by clicking the check box for each pipeline segment. Click 📑 Save to close the window.

NOTE: A check mark inside a check box indicates a selection. To clear a selection, click the check box again to remove the check mark. A shaded check box indicates selection of some, not all, child folders, ROWs, and pipelines.

3 Open the *Edit ROW Detail* grid. Click **Data Entry** > **Edit ROW Detail** (Figure 4-13).

Infe	ormation Mai	ntenance		🍸 🔠 My Ed	it ROW Detail Lay	out_1 🛚 🐁 My Edit R	OW Detail Sort Layo	ut_1	Options	🕂 Custo
	Find							🛛 🔿 Ada	d 🕅 🕅 Delete 🛛 😘 I	Refresh 😸
	ROW Code	ROW Name	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Starting Milepost	ROW Ending Milepost	Surface Area	ROW Acti
	LG123-A	NE Paddock #1	LG123A	12.00	23123	Station Number	0+00	0+50	513344	V
	LG123-8	NE Paddock #2	LG1238	24.00		Station Number	1+00	1+50	1523431	
	LG123-C	NE Paddock #3	LG123C	12.00	513412	Station Number	2+00	2+50	5723452	¥
حا										Rew Cour
						ant			đ	Row Cour
	acility Location II) Formats		_	_			_	Ē	

Figure 4-13. ROW Detail Information Grid

- 4 If you want to collapse the *Selected ROWs* panel to view more of the grid, click the **Selected ROWs** bar. Clicking the bar again expands the panel.
- 5 If the *Information* grid is not visible, click the **Information** tab **Information**.
- 6 Click 🛟 Add to open the Add Record dialog box (Figure 4-14).

HINT: Alternatively, you can use a keyboard shortcut key to add records. Press **F4** to add an information record for an existing pipeline in the grid.

î	Add Record		X
C	ROW Facility Co	mponent Informatio	on
	ROW Code	Pipe	
F	LG123-A	1	^
	LG123-B	1	
	LG123-C	1	
			•
			Row Count: 3

Figure 4-14. Add Record

- **7** Select the pipeline in the dialog box that you want to add an information record. For example, pipeline *IS-0767-01* is selected in Figure 4-14.
- 8 Click 💾 Save to display required field(s) for data entry (Figure 4-15).

Add Record				×
ROW Code	LG123-A			
ROW Effective Date	2/6/2014	-		
			💾 Save 🛛 🄇	Cancel

Figure 4-15. Add Record

9 Type a date in the **Effective Date** field using the format MM/DD/YYYY to indicate the month, day, and year. Or click the down arrow in the field and select a date using a calendar.

Effective Date is the date a history record becomes effective, such as when a pipeline becomes inactive or is taken out of service. See *Creating History Records Using an Effective Date* (page 245) for more information.

10 Click **Save** to close the *Add Record* dialog box and add the new information record in the grid for the existing pipeline (Figure 4-15).

	Find	aintenance		Ŷ	My Edit ROW D	Detail Layout_1 🐁	My Edit ROW Det	ail Sort Layout_1	Add	Coptions	
	ROW Code	ROW Name	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Starting Milepost	ROW Ending Milepost	ROW Effective Dat		ROW Active
	LG123-A	NE Paddock #1	LG123A	12.00		Station Number	0+00	0+50		513344	V
,	LG123-A	NE Paddock #1	LG123A	12.00	23123	Station Number	0+00	0+50	2/6/2014	513344	×.
	LG123-8	NE Paddock #2	LG1238	24.00	411344	Station Number	1+00	1+50		1523431	V
	LG123-C	NE Paddock #3	LG123C	12.00	513412	Station Number	2+00	2+50		5723452	V
-											
فل										G	Row Count
	aciiity Location	ID Formats								đ	

Figure 4-16. ROW Detail Information Grid - New Record

- **11** Provide other pipeline data in the grid as needed, such as *Permanent Comments*.
- 12 Click 🔄 Refresh to update the grid.

Adding a Pipeline Maintenance Record

Use the *Maintenance* grid in *Edit ROW Detail* to add a maintenance record for a pipeline selected in the *Select ROWs* window. Adding pipeline maintenance records allows you to examine the effectiveness of a maintenance program. You can either view data in the maintenance grid of *Edit ROW Detail* or run a ROW maintenance report.

To add a pipeline maintenance record, follow these steps:

- 1 Click the **Select ROWs** button page 151). Select one or more pipeline segments you want to work with by clicking the check box for each pipeline segment. Then click **Save** to close the window.
- 2 Open Edit ROW Detail. Click Data Entry > Edit ROW Detail (Figure 4-17).

	Find	internarice		1		and Builton	ROW Detail Sort Layo	-	🗘 Options	_
	ROW Code	ROW Name	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Starting Milepost	ROW Ending Milepost	Surface Area	ROW Active
•	LG123-A	NE Paddock #1	LG123A	12.00	23123	Station Number	0+00	0+50	513344	1
	LG123-8	NE Paddock #2	LG123B	24.00	411344	Station Number	1+00	1+50	1523431	1
	LG123-C	NE Paddock #3	LG123C	12.00	513412	Station Number	2+00	2+50	5723452	1
									E	Row Count
	acility Location II) Formats						_		

Figure 4-17. Row Detail Information Grid

- **3** If you want to collapse the *Selected ROWs* panel to view more of the grid, click the **Selected ROWs** bar. Clicking the bar again expands the panel.
- **4** Click the **Maintenance** tab **Maintenance** to open the *Maintenance* grid (Figure 4-17).

	ormation M	aintenance			Y 🔜 My Maintenan	ice Layout Theme	_1 🐁 My Sortin	g Theme_1	1	Options of C
••	Find ROW Code	Pipe	ROW Active	ROW Effective Date	ROW Repair Code	ROW Repair Found Date	ROW Repair Initiated Date	ROW Repair Corrected Date	ROW Reference Number	🗙 Delete 🧐 Refresh ROW Repair Remarks
•	LG123-A	1	1		10	9/10/2013	9/10/2013	9/10/2013	Ref#010123	Recoated section A-25
	LG123-8	1	J		10	10/15/2013	10/15/2013	10/15/2013	Ref#011323	Recoated section A-26
	LG123-C	1	¥.							

Figure 4-18. ROW Detail Maintenance Grid

5 Click 🛟 Add to open the Add Record dialog box (Figure 4-14).

HINT: Alternatively, you can use a keyboard shortcut key to add records. Press **F4** to add a maintenance record for an existing pipeline in the grid.

1	Add Record		×	
6	ROW Facility Compo	nent Information		
	ROW Code	Pipe		
Þ	LG123-A	1	-	
	LG123-B	1		
	LG123-C	1		
				-
			Row Count: 3	
			💾 Save 🚳 Cance	ł

Figure 4-19. Add Record

- **6** Select the pipeline in the dialog box that you want to add an information record. For example, pipeline *IS-0767-01* is selected in Figure 4-14.
- 7 Click **Save** to display required field(s) for data entry (Figure 4-15). Required fields are identified with the Si icon, such as *ROW Repair Code*.

Add Record				×
ROW Code	IS-0767-01			
ROW Effective Date	3/3/2015	*		
ROW Repair Code	8			
ROW Repair Found Date	a/3/2015	-		

Figure 4-20. Add Record

- 8 Type a repair code in the field **ROW Repair Code**. Repair code is a designation used by your company to identify the type of repair. The field accepts up to 15 alphanumeric characters including special characters such as the pound sign (#), asterisk (*), or hyphen (-).
- **9** Type a date in the field **ROW Repair Found Date** using the format MM/DD/YYYY to indicate the month, day, and year. Or click the down arrow in the field and select a date using a calendar.

Add Record	×
ROW Code	LG123-C
ROW Effective Date	-
ROW Repair Code	\otimes
ROW Repair Found Date	2/7/2014 -
	💾 Save 🚳 Cancel
Į	

Figure 4-21. Add Record

- **10** Click **Save** to close the *Add Record* dialog box and add a pipeline maintenance record in the grid (Figure 4-22).
- **11** Provide other maintenance data in the grid as needed. For example, provide a date in the fields *ROW Repair Initiated Date* and *ROW Repair Corrected Date*; a maintenance reference number in the field *ROW Reference Number*; and remarks about the repair in the field *ROW Repair Remarks*.
- **12** Click **5 Refresh** to update the grid.

Info	rmation Ma	aintenance		1	My Maintenan	ice Layout Theme	_1 🐁 My Sorting	g Theme_1		Options of C
85	Find								🗘 Add	🗡 Delete 😘 Refresh
	ROW Code	Pipe	ROW Active	ROW Effective Date	ROW Repair Code	ROW Repair Found Date	ROW Repair Initiated Date	ROW Repair Corrected Date	ROW Reference Number	ROW Repair Remarks
	LG123-A	1	4		10	9/10/2013	9/10/2013	9/10/2013	Ref#010123	Recoated section A-25
	LG123-B	1	1		10	10/15/2013	10/15/2013	10/15/2013	Ref#011323	Recoated section A-26
1	LG123-C	1			10	12/19/2013				

Figure 4-22. ROW Detail Maintenance Grid - New Record

Attaching a Document to a Pipeline Record

Attaching a document to a pipeline record in *Edit ROW Details* is similar to attaching a document to a record in a data entry grid. Use the *Attached Document* field in the *Information* and *Maintenance* grid of *Edit ROW Details* to link or embed a file or webpage address to a pipeline record. Supported file types include image, video, HTML, XML, music, and text files (such as Microsoft Word, WordPad, Notepad, or PowerPoint files).

As an example, you can attach an image of a pipeline; a document describing your company's safety procedures; or a document identifying a manufacturer's specification for a piece of equipment.

Linking a document identifies the file location on a local computer, company network, FTP site, or webpage on the Internet. Linking documents stored on a local computer are accessible only from that computer. Embedding a document stores a copy of the file in the PCS Axis database.

NOTE: Storing copies of documents in the PCS Axis database increases the size of the database.

If the file type of an attached document is associated with a default software program on the local computer, you can preview the file in the *Preview Attached Documents* window. Additionally, clicking *Open* opens the attached document for editing or viewing purposes.

Editing an embedded document applies changes only to the copy stored in the PCS Axis database; changes do not apply to the source file stored outside of PCS Axis. Likewise, editing a source file applies changes only to the source file, not the copy stored in PCS Axis.

Topics in this section include those in the following list:

- Adding the Attached Document Field in the Grid
- Attaching a Document to a Pipeline Record (page 160)
- Viewing an Attached Document (page 165)

NOTE: For information about how to attach a document to a record in a data entry grid, *Using Data Entry Grids and Forms* (page 221).

Adding the Attached Document Field in the Grid

If the *Attached Document* field is not present in the *Information* or *Maintenance* grid of *Edit ROW Details*, complete the following steps to add the field:

- 1 Select one or more pipeline segments you want to work with in the *Select ROWs* window. Click easily save to close the window.
- 2 Click **Data Entry** > **Edit ROW Details** to open the *Edit ROW Detail* window (Figure 4-23).

-	mation Maintena	ince		[PCS] ROW	V Information 🧏 [PCS] R	OW Information	🕸 Op	otions 🦨 Cu
6 S	Ind						🛛 🔿 Add 🕅 🗡 Delete	😏 Refresh
T	ROW Code	ROW Name	Pipe	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Active
•	LG123-A	NE Paddock #1	1	LG123-A	12.00	3221234	Station Number	V
	LG123-B	NE Paddock #2	1	LG123B-2	6.00	655667	Station Number	1
	LG123-C	NE Paddock #3	1	LG123C-3	12.00		Station Number	V
	LG123-D	NE Paddock #4	1	LG123A-1	12.00	42311	Station Number	1
								E Row Co
	Situ Location ID Form		_		****]		
	ility Location ID Form		rmat					
Fac	Facility Type	nats Facility Location For Station Number	rmat					
Fac		Facility Location For	rmat					
Fac	Facility Type Atmospheric	Facility Location For Station Number	rmat		****]		
Fac	Facility Type Atmospheric Circuit Breakers	Facility Location For Station Number Station Number	rmat		****			Row Co
Fac	Facility Type Atmospheric Circuit Breakers Coupon	Facility Location For Station Number Station Number Station Number	rmat	•				

Figure 4-23. Edit ROW Detail

- **3** If you want to collapse the *Selected ROWs* panel to view more of the *Edit ROW Detail* grid, click **Selected ROWs**. To expand the panel, click **Selected ROWs** again (Figure 4-23, page 159).
- **4** Based on the grid you want to add the *Attached Document* field, click the **Information** Information or **Maintenance** Maintenance tab if either of these grids is not visible.
- **5** Click the **Customize** tab **Customize** to view the *Layouts* page (Figure 4-24, page 160).
- **6** Choose a grid layout theme. Click the down arrow in **Select Layout Theme** and select a layout theme in the selection list.
- 7 Double-click **All Fields** in the left pane of the window to view a list of fields available for selection.

- 8 Add the field *ROW Attached Documents* in the layout theme. Double-click **ROW Attached Documents** in the left pane of the *Layouts* page to move it to the right pane. Add other fields as required. The layout theme includes all fields listed in the right pane (Figure 4-24).
- 9 To change the order of fields listed in the right pane and subsequently in the grid, click and drag a field to a new position in the list. Or, select a field and then click the up or down button.
- **10** Click **P** Save and Close to save changes and return to the grid.



Figure 4-24. Layouts

Attaching a Document to a Pipeline Record

Complete the following steps to attach a document to a pipeline record in the *Information* or *Maintenance* grid of *Edit ROW Detail*:

- 1 Select one or more pipeline segments you want to work with in the *Select ROWs* window. Click **Save** to close the window.
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-25).
- **3** If you want to collapse the *Selected ROWs* panel to view more of the *Edit ROW Detail* grid, click **Selected ROWs**. To expand the panel, click **Selected ROWs** again.

4 If you want to attach a document to a pipeline record in the *Information* grid, click the **Information** tab if the grid is not visible.

To attach a document to a pipeline record in the *Maintenance* grid, click the **Maintenance** tab to display the *Maintenance* grid.

5 Click the edit icon *P* in the **ROW Attached Document** field for the pipeline record you plan to attach a document (Figure 4-25).

lł	Info					-		-				
	_	mation Main	tenance	my inform	mation Grid Layo	out Theme_1 1	My Information Grid Sorting			_	tions 🦨 Cust	
	55	Find						1	O A	dd 🔀 Delete	😏 Refresh 😸) Pr
		ROW Code	ROW Name	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Attack Document		Surface Area	ROW Active	
	•	LG123-A	NE Paddock #1	LG123-A	12.00	3221234	Station Number	4	0	5124322	V	
		LG123-B	NE Paddock #2	LG123B-2	6.00	655667	Station Number	1	J Click	o edit attachmen		٦
		LG123-C	NE Paddock #3	LG123C+3	12.00	51527	Station Number	/		83426	1	
		LG123-D	NE Paddock #4	LG123A-1	12.00	42311	Station Number	1		127456	1	
	۹ 🗆				8							•
	٩ [III Row Cour	► 10:4
		cility Location ID	Formats								E Row Cour	
****		cility Location ID Facility Type	Formats Facility Loca	ation Format					_			
			Facility Loca			10101						
		Facility Type	Facility Loca Station Num	iber								•
		Facility Type Atmospheric Circuit Breake Coupon	Facility Loca Station Num Station Num Station Num	iber iber iber								•
		Facility Type Atmospheric Circuit Breake Coupon Electric Meter	Facility Loca Station Num Station Num Station Num rs Station Num	iber iber iber iber								0
		Facility Type Atmospheric Circuit Breake Coupon	Facility Loca Station Num ers Station Num Station Num station Num Station Num	iber ber ber ber ber ber								•

Figure 4-25. Edit ROW Detail

- **6** When the *Maintain Attached Documents* dialog box opens, click **• Attach** and then select one of the following options (Figure 4-26, page 162):
 - **Link Document**: Select *Link Document* if you plan to link to a document on a local computer or company network, or want to add a link to a webpage on the Internet. Then continue with **step 7** (page 162) or **step 8** (page 163).
 - **Embedded Document**: Select *Embedded Document* if you want to store a copy of an attached document in the PCS Axis database. Then continue with **step 9** (page 164).

NOTE: Storing copies of attached documents in the database increases the size of the database.

- 7 If you selected *Link Document* in **step 6** and want to link to a file on a local computer or company network, follow these steps (Figure 4-26):
 - a Click the ellipsis button ... in the **Document** field to open the *Link File* dialog box. Then navigate to the file and select it. Click **Open** to link to the file and close the dialog box.
 - **b** Type a description for the linked file in the **Description** field of the *Maintain Attached Documents* dialog box. When a description is not provided, PCS Axis uses the filename of the linked document as the description.

NOTE: A list of attached documents display in the dialog box. Selecting an item in the list displays its location in the *Document* field.

		💾 Save and Close 💾 Save 🗡 Dele
Link Document	Document	
Embedded Document	C:\Users\John.Smith\Desktop\My	Attached Document_4.pdf
escription		
/ly linked document_4.		
Document	Document Type	
My Attached Document_1.pdf	Link	
My Attached Document_2.pdf	Link	
My Attached Document_3.pdf	Link	

Figure 4-26. Maintain Attached Documents

c Click **Save and Close** to save changes and close the dialog box. When the following message displays click **OK**:

Linked Document won't be replicated. Do you want to continue?

NOTE: Linked documents are not copied and stored in the PCS Axis database as noted in the previous message. To store a copy of an attached document in the database, use the *Embedded Document* option instead.

- **8** If you selected *Link Document* in **step 6** and want to add a link to a webpage on the Internet, follow these steps (Figure 4-27):
 - **a** Type an Internet address in the **Document** field. For example, type http://www.aiworldwide.com in the field.
 - **b** Type a description for the link in the **Description** field. When a description is not provided, PCS Axis uses the Internet address in the *Document* field as the description.

🕽 Attach 🛛 🚳 Cancel 🗎		🔐 Save and Close 💾 Save 🏹 Dele
Link Document	Document	
Embedded Document	http://www	aiworldwide.com
escription		
merican Innovations web	site.	
_		1
Document	Document Type	
My Attached Docu	Link	
My Attached Docu	Link	
My Attached Docu My linked docume	Link	
My linked docume	LINK	

Figure 4-27. Maintain Attached Documents

c Click **Save and Close** to save changes and close the dialog box. When the following message displays click **OK**:

Linked Document won't be replicated. Do you want to continue?

NOTE: Linked documents are not copied and stored in the PCS Axis database as noted in the previous message. To store a copy of an attached document in the database, use the *Embedded Document* option instead.

- **9** If you selected *Embedded Document* in **step 6**, complete the following steps (Figure 4-28):
 - **a** Click the ellipsis button ... in the **Document** field to open the *Embed File* dialog box. Then navigate to the file and select it. Click **Open** to embed a copy of the file and close the dialog box.
 - **b** Type a description for the embedded file in the **Description** field. If a description is not provided, PCS Axis uses the filename of the embedded file as the description.

NOTE: A list of attached documents display in the dialog box. Selecting an item in the list displays its location in the *Document* field.

Attach 🛛 🚳 Cancel		💾 Save and Close 💾 Save 🗡 De
Link Document	Document	
Embedded Document	My Embedded Document_2.png	
scription		
Document	Document Type	
My Attached Document_1.pd		
My Attached Document_2.pd		
My Attached Document_3.pd		
My linked document_4.	Link	
American Innovations websit		
My Embedded Document_1.p	ng Embedded	

Figure 4-28. Embedded Document

c Click **Save and Close** to save changes and close the dialog box. When the following message displays click **OK**:

Local changes made to embedded documents won't be saved into PCS. Do you want to continue?

NOTE: Editing an embedded document applies changes only to the copy stored in the PCS Axis database; changes do not apply to the source file stored outside of PCS Axis. Likewise, editing a source file applies changes only to the source file, not the copy stored in PCS Axis.

Viewing an Attached Document

If the file type of an attached document is associated with a default software program on the local computer, you can preview the file in the *Preview Attached Documents* window. Additionally, clicking *Open* opens the attached document for editing or viewing purposes.

To view or open an attached document, follow these steps:

- 1 Select one or more pipeline segments you want to work with in the *Select ROWs* window. Click **Bave** to close the window.
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-29).
- **3** If you want to collapse the *Selected ROWs* panel to view more of the *Edit ROW Detail* grid, click **Selected ROWs**. To expand the panel, click **Selected ROWs** again.
- 4 Open the grid that includes the pipeline record with the attached document by clicking either the **Information** Information or **Maintenance** tab.
- **5** Click the preview icon of for the pipeline record with the attached document you want to view.

	Sec. Com	mation Main		In the Inform	antion Cold Laur	Thomas 1 We	My Information Grid Sorting	Thoma 1		the course	s 📌 Custo	
h	_		Itenance		nation Grid Layo	ut ineme_1 3	wy information Grid Sorting	-				-
	55	Find							Add	🗡 Delete 😘	Refresh 😸	
		ROW Code	ROW Name	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Attached Documents		Surface Area	ROW Active	
	•	LG123+A	NE Paddock #1	LG123-A	12.00		Station Number	7 Attached 🥜	2	5124322	1	
П		LG123-B	NE Paddock #2	LG123B-2	6.00	655667	Station Number	1	2	lick to preview at	1.0	
П		LG123-C	NE Paddock #3	LG123C-3	12.00	51527	Station Number	1		83426	V.	
П		LG123-D	NE Paddock #4	LG123A-1	12.00	42311	Station Number	1	6	127456	1	
												•
	•									l	TRow Count	* ti
	4									E	Row Count) Its
		acility Location ID	Formats							Į	TRow Count	
		scility Location ID Facility Type		tion Format					_	Į		
84000			Facility Local Station Numb	ber						[- 0	
		Facility Type Atmospheric Circuit Break	Facility Local Station Numbers Station Numbers	ber ber						E	- 0	0
		Facility Type Atmospheric Circuit Breake Coupon	Facility Local Station Numb Station Numb Station Numb	ber ber ber							- 0	0
		Facility Type Atmospheric Circuit Break Coupon Electric Meter	Facility Local Station Numbers Station Numbers Station Numbers Station Numbers	ber ber ber ber							- 0	0
8001		Facility Type Atmospheric Circuit Breake Coupon	Facility Local Station Numb ers Station Numb Station Numb station Numb Station Numb	ber ber ber ber ber						5	- 0	0

Figure 4-29. Edit ROW Detail

- **6** Select a file in the list on the left side of the window to view the file in the *Preview Attached Documents* window (Figure 4-30).
- 7 If the file type of the attached document is associated with a default software program on the local computer, click *popen* to open the file.
- 8 Click the close button **Exercise** to close the *Preview Attached Documents* window.

Note: When you open and then edit an embedded document, changes apply only to the copy stored in the PCS Axis database; changes do not apply to the source file stored outside of PCS Axis. Likewise, editing the source file applies changes to the source file, not the copy stored in the PCS Axis database.



Figure 4-30. Preview Attached Documents

Working with Themes and Filter Groups

A theme is a group of named settings saved for later use, such as grid layout or sort theme. Themes are either public or private. A public theme is available for use by all PCS Axis users. A private theme is available only to the user who creates it.

Several installed themes are provided with the PCS Axis software installation. PCS Axis installed themes are public themes available to all PCS Axis users. These themes are identified with a globe icon and PCS in brackets [PCS], such as **(PCS) ROW Information**.

NOTE: Only public themes for layouts, sorts, and reports are available for selection. If you would like to use a private theme, your company's system administrator must make your private theme a public one.

A filter group is a named set of one or more filters that affect the data output in the *Edit ROW Detail* grid. PCS Axis provides two types of filter groups you can define. These include the AND and OR filter groups.

When you add a filter group, you define filter conditions that determine which records to include or exclude in the *Edit ROW Detail* grid. Adding an AND filter group produces a subset of records that meet all filter conditions. Adding an OR filter group produces a subset of records that meet any filter condition. When you apply a filter group to the grid, PCS Axis processes filters in descending order beginning with the filter at the top of the group.

The following sections describe how to add a layout theme, sort theme, and an optional filter group in the *Information* and *Maintenance* grids of *Edit ROW Detail*. Topics include those in the following list:

- Adding a Layout Theme
- Adding a Sort Theme (page 172)
- Adding an AND Filter Group (page 175)
- Adding an OR Filter Group (page 178)
- Editing and Arranging Filters and Filter Groups (page 180)

NOTE: Also see *Filtering Data in a Grid* (page 183) for information about filtering the data output in a data entry grid.

Adding a Layout Theme

A layout theme is a group of fields that determine which fields are available for use in the *Information* and *Maintenance* data grid of *Edit ROW Detail*. Adding a new *Layouts* theme allows you to choose which fields to include in the data grid and then save the layout as a theme for later use.

IMPORTANT: If you are working with the optional *Telluric Compensation* feature, you can add a layout theme that includes the required field *Telluric Compensation Required*. This field must be enabled in the *Information* data grid of *Edit ROW Detail* for each pipeline segment requiring telluric compensation.

To add a layout theme for the *Information* or *Maintenance* data entry grid in *Edit ROW Detail*, follow these steps:

1 Select one or more pipeline segments in the *Select ROWs* window. Click **Save** to close the window (Figure 4-31).



Figure 4-31. Select ROWs

- 2 Click Data Entry > Edit ROW Detail to open the *Edit ROW Detail* window. If you want to collapse the *Selected ROWs* panel to view more of the *Edit ROW Detail* grid, click Selected ROWs. To expand the panel, click Selected ROWs again (Figure 4-32, page 169).
- **3** To add a layout theme for the *Information* grid, click the **Information** tab **Information** if the grid is not visible. Click the **Maintenance** tab **Maintenance** to display the *Maintenance* grid if you want to create a layout theme for this grid.

mon	nation Mainten	nance		E (PCS) ROW Inform	nation 🛛 🐁 (PCS) ROW Info	rmation	🗢 Opt	tions 🦨 Cus
88 H	nd						🛛 😋 Add 🛛 🏹 Delete	😘 Refresh 🛛
R	OW Code	ROW Name	Pipe	Pipeline Name	Pipeline Size (Inches)	Total Footage (Feet)	Default Location Format	ROW Active
- • I	.G123-A	NE Paddock #1	1	LG123-A	12.00	3221234	Station Number	V
L	G123-8	NE Paddock #2	1	LG1238-2	6.00	655667	Station Number	V
	G123-C	NE Paddock #3	1	LG123C-3	12.00		Station Number	V
L	G123-D	NE Paddock #4	1	LG123A-1	12.00	42311	Station Number	1
4								TRow Co
	lity Location ID For	mats	_		4785		_	TRow Co
	lity Location ID For Facility Type	mats Facility Location Fo	semat		90.00			
Faci			semat	•	-			
Faci	Facility Type	Facility Location Fo	ormat					
Faci	Facility Type Atmospheric	Facility Location Fo Stotion Number	ormat					
Faci	Facility Type Atmospheric Circuit Breakers Coupon Electric Meters	Facility Location Fo Station Number Station Number Station Number Station Number	ormat					
Faci	Facility Type Atmospheric Circuit Breakers Coupon Electric Meters Foreign Bond	Facility Location Fo Station Number Station Number Station Number Station Number Station Number	semat					
Faci	Facility Type Atmospheric Circuit Breakers Coupon Electric Meters	Facility Location Fo Station Number Station Number Station Number Station Number Station Number Station Number	semat		600			

Figure 4-32. Edit ROW Detail

4 Click the **Customize** tab **Customize** then **Customize**

New Layout Theme	
Enter Theme Name:	
My Edit ROW Detail Information Layout_1	
Public 🗹 Copy Content	
Copy Fields From Theme:	
[PCS] ROW Information	-
Fields in the Selected Theme:	
ROW Code ROW Name	^
Pipe	_
Pipeline Name	_
Pipeline Size	_
Total Footage Default Location Format	_
ROW Effective Date	- 1
ROW Active	- 1
Surface Area ROW Permanent Comments	
	-
V OK 🚱 Cano	cel

Figure 4-33. New Layout Theme

5 Type a name for the layout theme in the field **Enter Theme Name**. If you want to create a *public* theme, click the **Public** check box to place a check mark inside the check box. When the check box is empty, the layout saves as a *private* theme.

NOTE: Themes are either public or private. A public theme is available for use by all PCS Axis users. A private theme is available only to the user who creates it.

6 Select a layout theme with fields you want to copy to the new layout theme. Click the Copy Content check box and then click the down arrow in Copy Fields From Theme and select a theme in the selection list.

Information Maintenance Layouts: ROW Information	😤 Save and Close 💾 Save 🔾 Add 🗡 Delete 👒 Revert		Options 🥜 Cu
Layouts: ROW Information Select Layout Theme	Br Save and Close B Save O Add 🔨 Delete 👒 Revert		Layouts
Wy Edit ROW Detail Information Layout_1			Sorts
Search For Field	× 🔒 ROW Code		Y Filters
All Fields Default Location Format	ROW Name		Forms
Pipe	Pipe Pipeline Name		🔀 Close
Pipeline Name Pipeline Size	Pipeline Size		
ROW Active	Total Footage Default Location Format		
ROW Attached Documents	ROW Effective Date		
ROW Code ROW Code and Pipe	ROW Active		
ROW Currently Active	Surface Area ROW Permanent Comments		
ROW Ending Station			
ROW Permanent Comments	\odot	\odot	
ROW Starting Station	(1)	\odot	
Total Footage			
ROW Permanent Information Fields			
ROW Information Fields			

7 Click **V OK** to save changes and return to the *Layouts* page (Figure 4-34).

Figure 4-34. Layouts

- **8** Complete the following steps in the *Layouts* page to add and remove fields in the new layout theme as needed:
 - a Click the toggle arrow ▶ for a field category in the left pane of the window to view a list of fields available for selection. For example, click ▶ All Fields.
 - **b** Double-click a field listed in the left pane to move it to the right pane. Repeat this step as needed. The grid layout theme includes all fields listed in the right pane of the *Layouts* page.
 - **c** If telluric compensation is required for the selected pipeline segment(s), add the field labeled **Telluric Compensation Required** in the layout theme.
 - **d** To remove a field in the layout theme, double-click a field listed in the right pane to move it to the left pane. Repeat this step as needed.

NOTE: Fields with a lock icon **A** are required and cannot be removed from the theme, such as **B ROW Code** shown in the previous example (Figure 4-34, page 170).

- **10** Click **B** Save to save changes.
- **11** To apply the new layout theme to the data entry grid:
 - a Click the **Options** tab Options to open the options page (Figure 4-35).
 - **b** Click the down arrow in the field **Select Layout Theme** and select the new layout theme in the selection list.
 - c Click 💾 Apply to save changes and return to the data entry grid.

_	Modules Data Entry Reports / Graphs Tools Field Computer Help 🖉 🍄 PCS Axis	Welcome John Smith 🕘 🔀 Log Out
9	Edit ROW Detail ×	
	Information Maintenance	Options of Customize
	ROW Information	💾 Apply 🎯 Cancel
	3 View	🖉 🔠 Grid 🔘 📮 Form 🔍 🛅 Grid And Form
	Select Layout Theme 🗣 My Edit ROW Detail Information Layout_1 🔹 Select Sort Theme 🦃 (PCS) ROW Information	-
	Select Form Theme Sort Dates (Oldest First Newest Fir	st
	(2) Options	
	Only the most recent information record for each facility	
	💡 Filters	① New 'And' Group ② New 'Or' Group
Selected ROWs		

Figure 4-35. Options

12 If telluric compensation is required for the selected pipeline segment(s), click the **Telluric Compensation Required** check box for each pipeline segment requiring compensation.

A check mark inside the check box indicates the option is enabled. To disable the option, click the check box again to remove the check mark.

Adding a Sort Theme

A sort theme determines how PCS Axis sorts records in a data entry grid. Adding a sort theme allows you to choose which field(s) to sort records by and if records sort alphanumerically in ascending or descending order.

To add a sort theme, follow these steps:

- 1 Select one or more pipeline segments in the *Select ROWs* window. Click **Save** to close the window (Figure 4-31, page 168).
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-32, page 169).

NOTE: Clicking the *Selected ROWs* bar collapses the *Selected ROWs* panel allowing you to view more of the grid. Clicking the *Selected ROWs* bar again expands the *Selected ROWs* panel.

- 3 To add a sort theme for the *Information* grid, click the **Information** tab Information if the grid is not visible. Click the **Maintenance** tab Maintenance to display the Maintenance grid if you want to create a sort theme for this grid.
- 4 Click the **Customize** tab **→** Customize then the **Sorts** button **Sorts** to open the *Sorts* page (Figure 4-36).



Figure 4-36. Sorts

5 Click 🛟 Add to open the New Sort Layout dialog box (Figure 4-37).

New Sort Theme	
Enter Theme Name:	
My Edit ROW Detail Sort Theme_1	
Public 🗹 Copy Content	
Copy Fields From Theme:	
S [PCS] ROW Information	•
Fields in the Selected Theme:	
ROW Code	
Pipe ROW Effective Date	
🗸 OK 🕴 🚳 Cano	el

Figure 4-37. New Sort Layout

6 Type a name for the sort theme in the field **Enter Theme Name**. If you want to create a *public* theme, click the **Public** check box to place a check mark inside the check box. When the check box is empty, the sort theme saves as a *private* theme.

NOTE: Themes are either public or private. A public theme is available for use by all PCS Axis users. A private theme is available only to the user who creates it.

- 7 Select a sort theme with fields you want to copy to the new sort theme. Click the down arrow in **Copy Fields From Theme** and select a theme in the selection list.
- 8 Click **W** OK to save changes and return to the *Sorts* page (Figure 4-38, page 174).
- **9** Complete the following steps in the *Sorts* page to add and remove fields in the new sorting theme as needed:
 - a Click the toggle arrow ▶ for a field category in the left pane of the window to view a list of fields available for selection. For example, click ▶ All Fields.
 - **b** Double-click a field listed in the left pane to move it to the right pane. Repeat this step as needed. The sorting theme includes all fields listed in the right pane.
 - **c** If you want to remove a field in the sorting theme, double-click a field listed in the right pane to move it to the left pane. Repeat this step as needed.

- **10** Select a sorting method for each field listed in the right pane. To sort grid records in ascending order, click the toggle button to select **ASC ASC**. To sort in descending order, click the toggle button to select **DESC**.
- 11 To change the order of fields listed in the right pane and subsequently in the grid, click and drag a field to a new position in the list. Or, select a field and then click the up () or down () button.

PCS	Axis					- C - X
file	Modules Data Entry Reports / Graphs Tools Field Computer	Help	PCS Axis	We	kome J	iohn Smith 😢 🔀 Log Out
		×		We Add X Detete Secret @ Acc: Acc: COCC Co	ø	

Figure 4-38. Sorts

- **12** Click **B** Save to save changes.
- **13** To apply the new sort theme to the data entry grid, follow these steps:
 - a Click the **Options** tab **Options** to open the options page (Figure 4-39, page 175).
 - **b** Click the down arrow in the field **Select Sort Theme** and select the new sort theme in the selection list.
 - c Click Apply to save and apply changes and then return to the data entry grid. To cancel changes, click the **Options** tab Options or **O** Cancel to return to the grid.
| | V Detail × | | | | |
|--------|-------------------|---|-----|---------------------------------|------------------------------------|
| Inform | mation Maint | tenance | | | 🤨 Options 🖌 Custom |
| ROWI | nformation | | | | 💾 Apply 🏐 Can |
| 🔛 Vie | SW . | | | | 🗄 Grid 🔘 📮 Form 🔘 🕅 Grid And F |
| Select | Layout Theme | My Edit ROW Detail Information Layout_1 | • s | My Edit ROW Detail Sort Theme_1 | - |
| Select | Form Theme | | * s | Oldest First O Newest First | |
| () Op | tions | | | | |
| 🔲 Only | y the most recent | t information record for each facility | | | |
| 🍸 Fil | Iters | | | | D New 'And' Group 0 New 'Or' Group |
| | | | | | |
| | | | | | |

Figure 4-39. Options

Adding an AND Filter Group

An AND filter group is a named set of one or more filters that affect the data output in the *Edit ROW Detail* grid. Adding an AND filter group produces a subset of records that meet all filter conditions. PCS Axis processes filters in a filter group in descending order beginning with the filter at the top of the filter group.

To add an AND filter group, follow these steps:

- 1 Select one or more pipeline segments in the *Select ROWs* window. Click **Save** to close the window (Figure 4-31, page 168).
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-32, page 169).

NOTE: Clicking the *Selected ROWs* bar collapses the *Selected ROWs* panel allowing you to view more of the grid. Clicking the *Selected ROWs* bar again expands the *Selected ROWs* panel.

- **3** Select the grid you want to work with by clicking the **Information** tab **Information** or the **Maintenance** tab **Maintenance**.
- 4 Click the **Customize** tab **Customize** then the **Filters** button **Filters** to open the *Filters* page (Figure 4-40, page 176).
- 5 Click () New 'And' Group to open the filter properties group box.

EI PO	S Axis		
File	Module	s Data Entry Reports / Graphs Tools Field Computer Help 🔗 PCS Axis Wekome Jo	hn Smith 😬 🔀 Log Out
۹	Edit RC	W Detail X	
	Info	mation Maintenance	ptions 🥜 Customize
	Filter	s: ROW Information 🛛 😫 Save and Close 🛛 Save 🗠 Revert 🚳 Cancel	🛗 Layouts
		(ID) New 'And' Group	Sorts
		Filter Group Caption	T Filters
		8 Default Location Format Contains []	C Forms
	8.		Close
		Enter Custom Filter Caption	
5			
Selected ROWs			
x ted			
Sele			

Figure 4-40. Filters

- 6 Type a name for the filter group in the field **Filter Group Caption**.
- **7** Use filter selection fields to set up filter criteria. Select a PCS Axis field, operator, and one or more filter conditions.
- 8 If you want the filter to remain on for all sessions of the data entry grid, select the check box **Filter is Always On**. When this check box is not selected, toggle the filter on and off in the *Options* page using the filter's check box.
- 9 Type a name for the filter in the field **Enter Custom Filter Caption**.
- **10** If you want to set up additional filter criteria for the filter group:
 - a Click **C** Add to open another filter properties group box. Then click the dit icon to display selection fields.
 - b Type a name for the filter in the field Enter Custom Filter Caption. Then repeat step 7 through step 9 to set up filter criteria.
- **11** To move a filter to a different position in the filter group or a filter group to a different position in a group of filters:
 - **a** Point the mouse at the filter handle \parallel to change the cursor to a vertical resize cursor $\hat{1}$.
 - **b** Drag and drop the filter or the filter group to a new location.

NOTE: PCS Axis processes filters in descending order beginning with the filter at the top of the filter group.

12 Click 💾 Save.

NOTE: Clicking the *P* edit icon for a particular filter opens that filter's property settings allowing you to change settings as needed.

- **13** To apply one or more custom filter groups to the data entry grid of *Edit ROW Detail*, follow these steps (Figure 4-41, page 177):
 - a Click the **Options** tab **Options** to open the options page.
 - **b** Click the check box for each filter you want to apply.
 - c Click Apply to save changes and return to the data entry grid. To cancel changes, click the Options tab Options or O Cancel to return to the data entry grid.

H P	cs /	ót 🗾 🗖 🔤 🔤
File		odules Data Entry Reports / Graphs Tools Field Computer Help 🛛 🛟 PCS Axis 🥨 Welcome John Smith ! 🖬 Log Ou
Q	f	át ROW Deteil 🗙
		Information Maintenance Ø Options
		ROW Information 🛛 🗎 Apply 🏐 Cancel
		🛿 View 🖉 🕅 Grid 🔿 📮 Form 🖉 🕅 Grid And Form
		Select Layout Theme 🗣 My Edit ROW Detail Information Layout_1 🔹 Select Sort Theme 🖤 My Edit ROW Detail Sort Theme_1 🔹
		Select Form Theme Sort Dates Soldest First Newest First
		Options Only the most recent information record for each facility
		The most recent mormation record for each facility The most recent mormation record for each facility
	H	
×8		My AND Filter Group,1
A R	ł	KOW Code is Not Missing
Selected ROWs		(D) My AND Filter Group_2
ň		ROW is Active
	l	

Figure 4-41. Options

Adding an OR Filter Group

An OR filter group is a named set of one or more filters that affect the data output of a report. Adding an OR filter group produces a subset of records that meet any filter condition. PCS Axis processes filters in a filter group in descending order beginning with the filter at the top of the filter group.

To add an OR filter group, follow these steps:

- 1 Select one or more pipeline segments in the *Select ROWs* window. Click **Save** to close the window (Figure 4-31, page 168).
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-32, page 169).

NOTE: Clicking the *Selected ROWs* bar collapses the *Selected ROWs* panel allowing you to view more of the grid. Clicking the *Selected ROWs* bar again expands the *Selected ROWs* panel.

- **3** Select the grid you want to work with by clicking the **Information** tab **Information** or the **Maintenance** tab **Maintenance**.
- 4 Click the **Customize** tab *F* **Customize** then the **Filters** button *Filters* to open the *Filters* page (Figure 4-42).
- 5 Click **(())** New 'Or' Group to open the filter properties group box.

Inform	mation Maintenance	🕸 Options 👉 Custor
Filters:	s: ROW Information	e and Close 💾 Save 🖘 Revert 🎯 Cancel 🛛 🔠 Layouts
		New 'And' Group New 'Or' Group Sorts
	My Custom OR Filter Group_1	⊙ X Filters
1	8 ROW Code Is Missing	Di Forms
	Filter Is Always On	X Close
	ROW Code - Is missing -	
	ROW Code Is Missing	

Figure 4-42. Filters

- **6** Type a name for the filter group in the field **Include records that match any of these conditions** (Figure 4-42, page 178).
- **7** Use filter selection fields to set up filter criteria. Select a PCS Axis field, operator, and one or more filter conditions.
- 8 If you want the filter to remain on for all sessions of the data entry grid, select the check box **Filter is Always On**. When this check box is not selected, toggle the filter on and off in the *Options* page using the filter's check box.
- 9 Type a name for the filter in the field Enter Custom Filter Caption.
- **10** If you want to set up additional filter criteria for the filter group:
 - a Click 🛟 Add to open another filter properties group box.
 - **b** Type a name for the filter in the field **Enter Custom Filter Caption**. Then repeat **step 7** and **step 8** to set up filter criteria.
- **11** To move a filter to a different position in the filter group or a filter group to a different position in a group of filters:
 - **a** Point the mouse at the filter handle \parallel to change the cursor to a vertical resize cursor $\hat{1}$.
 - **b** Drag and drop the filter or the filter group to a new location.

NOTE: PCS Axis processes filters in descending order beginning with the filter at the top of the filter group.

12 Click 💾 Save.

NOTE: Clicking the *P* edit icon for a particular filter opens that filter's property settings allowing you to change settings as needed.

- **13** To apply one or more custom filter groups to the data entry grid of *Edit ROW Detail*, follow these steps (Figure 4-43, page 180):
 - a Click the **Options** tab **Options** to open the options page.

- **b** Click the check box for each filter you want to apply.
- c Click Apply to save changes and return to the data entry grid. To cancel changes, click the Options tab options or O Cancel to return to the data entry grid.

My Edit ROW Detail Information Layout,1 Sefect Sort Theme My Edit ROW Detail Sort Theme,1 Sefect Sort Theme Sort Data Sort Sort Data		View	View	View V
Sort Dates © Oldest First © Newest First information record for each facility @ New Yord' Group @ New Yor' Gr ter Group,1	Select Layout Theme W My Edit ROW Detail Information Layout,1 Select Sort Theme W My Edit ROW Detail Sort Theme,1 Select Form Theme Sort Dates Sort Dates Oldest First Oldest	Select Layout Theme My Edit ROW Detail Information Layout 1 Select Form Theme My Edit ROW Detail Sort Theme 1 Select Form Theme My Edit ROW Detail Sort Theme 1 Sort Dates Oldest First Oldest First Oldest First Oldest First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First Only the most recent information record for each facility First First Only the most recent information record for each facility First Fi	Select Layout Theme My Edit ROW Detail Information Layout 1 Soft Theme My Edit ROW Detail Information Layout 1 Soft Soft Theme My Edit ROW Detail Soft Theme 1 So	Select Layout Theme My Edit ROW Detail Information Layout,1 Select Sort Theme My Edit ROW Detail Sort Theme,1 Select Form Theme My Edit ROW Detail Sort Theme,1 Select Form Theme My Edit ROW Detail Sort Theme,1 Sort Dates My Edit ROW Detail Sort Theme,1 My Edit ROW Detail Sort Theme,1 Sort Dates My Edit ROW Detail Sort Them
Sort Dates Oldest First Newest First information record for each facility D New Yor' Group New Yor' Group New Yor' Group	Select Fram Themes Sort Dates Oldest Frat Newest First Options Only the most record for each facility Frats Only the most record for each facility New Yor Group New Yor Group New Yor Group	Select Form There Oldert First Oldert First Oldert First Oldert First Oldert First One west First Options Only the most recent information record for each facility Fifters Only the root recent information record for each facility Only the root rece	Select form Themes Sort Dates Sort Dates Oldest First Options Only the most record for each facility Fitters Only the most record for each facility Fitters Only the most record for each facility Content of the fitter Group I content of the most o	Select Form Theme Sold Ext Form Theme Sold Ext Form Theme Objects Object Ford Newset First Objects Ford New Yord Group New Yo
information record for each facility Image: Second Secon	Options Only the most recent information record for each facility Fittes Only the most recent information record for each facility Fittes Only there 'And' Group New 'And' Group New 'Or Gr	Options Only the most recent information record for each facility Fitters O New Yand' Group New Yor' My Custom OR Filter Group 1 O	Options Only the most recent information record for each facility Fitters Only the most recent information record for each facility Fitters Only the most recent information record for each facility Only the most recent information record for each facility Fitters Only the most recent information record for each facility	Options Only the most recent information record for each facility Fittes Only the most recent information record for each facility Fittes Only Custom OR Filter Group_1
© New Yord' Group ● New Yor' Gr	Only the most recert information record for each facility Filters New 'And' Group @ New 'On' Gr May Custom OR Filter Group, 3	Colly the most recert information record for each facility Filters Converting the most recert information record for each facility Mere Yord Group 1 Inter Group 1 New Yord Group 1	Chy the most recert information record for each facility Filters New Yand Group	Only the most recert information record for each facility Filters New 'And' Group New '
© New Yord' Group ● New Yor' Gr		Y Filters Image: Second State St	P Filters © New And Group © New Yor G Image: Mark Strate Group 1 ©	Y Filters
ter Group,1.	My Custom OR Filter Group,1	My Custern OR Filter Group,1	My Custom OR Filter Group,1.	My Custom OR Filter Group,1
ng	E ROW Code Is Maxing	ROW Code Is Missing	E ROW Code Is Missing	ROW Code b Moving
·,				

Figure 4-43. Options

Editing and Arranging Filters and Filter Groups

PCS Axis processes filters in a filter group in descending order beginning with the filter at the top of the filter group. Filter groups are processed similarly. Information in this section explains how to edit filter property settings and how to arrange filters and filter groups.

Complete the following steps:

- 1 Select one or more pipeline segments in the *Select ROWs* window. Click **Save** to close the window (Figure 4-31, page 168).
- 2 Click **Data Entry** > **Edit ROW Detail** to open the *Edit ROW Detail* window (Figure 4-32, page 169).
- **3** Select the grid you want to work with by clicking the **Information** tab **Information** or the **Maintenance** tab **Maintenance**.

- 4 Click the **Customize** tab **Customize** then the **Filters** button **Filters** to open the *Filters* page (Figure 4-44).
- 5 Click the edit icon *J* to display a filter's property settings.

Q,	Addulas Data Entry Reports / Graphs Tools Field Computer Help 🕜 PCS Axis Welcome J Edit ROW Detail X	ohn Smith 🤨 🔀 Log C
	Information Maintenance	Options 🥜 Customize
	Filters: ROW Information 🛛 🕄 Save and Close 🛛 Save 🕾 Revert 🕲 Cancel	E Layouts
	1 New 'And' Group 1 New 'Or' Group	🐁 Sorts
	My AND Filter Group_2	T Filters
	✓ Pipeline Size (Inches) Does not equal '12'	Forms
		Close
	My OR Filter Group_1	
	Pipe Is not missing	
ŝ.	P ROW Name Is missing	
Selected KOWS	P Default Location Format Is equal to 'Station Number'	
l let		
×		

Figure 4-44. Filters

- 6 To delete a filter in a filter group, click the filter's X delete button (Figure 4-45). Then click **√ Yes** when the *Delete* message displays.
- 7 To rename a filter, type a description in the filter's name field.
- **8** To change filter criteria, use filter selection fields to select a PCS Axis field, operator, and one or more filter conditions.
- 9 To enable a filter for all sessions of the data entry grid, click the check box Filter is Always On to place a check mark inside the check box. When this check box is not selected, toggle the filter on and off in the options page using the filter's check box.
- **10** Click the **X** close button to close the filter's property settings group box.

- **11** To move a filter to a different position in a filter group, or to move a filter group to a different position, follow these steps:
 - **a** Point the mouse at the handle \parallel of a filter or filter group to display a vertical resize cursor $\hat{\parallel}$.
 - **b** Drag and drop the filter or filter group to a new location.

NOTE: PCS Axis processes filters in descending order beginning with the filter at the top of the filter group.

12 Click **P** Save and Close to save changes and return to the data entry grid.

Figure 4-45. Filters

Filtering Data in a Grid

Information in this section explains how to filter the data output in any data entry grid in *Edit ROW Detail*. It includes a description of the options and filters available in the *Options* page when working with the *Information* and *Maintenance* grids. Filtering data allows you to work with only those records you are interested seeing in the grid.

Topics in this section include those in the following list:

- Filtering Data in the Information Grid
- Filtering Data in the Maintenance Grid (page 184)

Filtering Data in the Information Grid

To filter the data output in the *Information* grid of *Edit ROW Detail*, follow these steps:

- 1 Click Data Entry > Edit ROW Detail.
- 2 Click the **Information** tab Information, then the **Options** tab Options to open the *Options* page (Figure 4-46).

Edit ROW Detail 🗙					
Information M	aintenance				Options of Custom
ROW Information					💾 Apply 🛞 Can
View				(Grid ()	Form 🔘 🐂 Grid And F
Select Layout Then	🐢 🚭 My Edit ROW Detail Information Lay	out_1	Select Sort Theme	Wy Edit ROW Detail Sort Theme_1	-
Select Form Theme			Sort Dates	Oldest First O Newest First	
Options					
Only the most re	cent information record for each facility				
💡 Filters				O New 'And	" Group 🛛 🔘 New 'Or' Gr

Figure 4-46. Options/Information Grid

3 To include only the most recent information record for each pipeline, select the check box **Only the most recent information record for each facility**. This option uses the *Effective Date* to filter the data output.

Note: When using the *Filters* group box to apply additional filters to the data output, the most recent information record is found first, and then all other filters are applied to the data output. For more information about filters, see *Adding an AND Filter Group* (page 175) and *Adding an OR Filter Group* (page 178).

4 Click Apply to save and apply changes and then return to the *Information* grid. To cancel changes, click the **Options** tab **Options** or **O Cancel** to return to the grid.

Filtering Data in the Maintenance Grid

To filter the data output in the *Maintenance* grid of *Edit ROW Detail*, follow these steps:

- 1 Click Data Entry > Edit ROW Detail.
- 2 Click the **Maintenance** tab Maintenance, then the **Options** tab Options to open the Options page (Figure 4-47).

		Reports / Graphs	Tools Field Computer	Help 👸	PCS Axis		Welcome John Smith 😣 🔀 Log
ł,	Edit ROW Detail ×						
	Information Main	tenance					🙆 Options 🖌 Customi
	ROW Maintenance						🛃 Apply 🚳 Canci
	173 - 4						🔠 Grid 🔘 📮 Form 🔘 🐂 Grid And Fo
	🔡 View	😨 [PCS] ROW M	latennes		101	-	Grid U Grid And Fo
	Select Layout Theme	Pical Kow M	sincenance		Select Sort Theme Sort Dates	Oldest First Newest First	
	Select Form Theme Options				Sort Dates	Oldest First Newest First	
		rs to the most rec	er criteria ent maintenance found w r the filter criteria has bee		rame		
ŧ.	 All maintenance Apply other filte 	rs to the most rec	ent maintenance found w		rame		
	 All maintenance Apply other filte 	rs to the most rec	ent maintenance found w		rame		T New 'And' Group T New 'Or' Gro
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		① New 'And' Group ④ New 'Or' Group
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		(1) New 'And' Group (2) New 'Or' Group (3) New 'Or' Group (4) N
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		© New 'And' Group ◎ New 'Or' Gro
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		@ New 'And' Group @ New 'Or' Gro
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		D New And Group D New Or Gro New Yor Gro
	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		rame		① New And Group ④ New Or Gro D New And Group ④ New Or Gro
Selection (COMS)	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		ame		D New 'And' Group D New 'Or' Gro
CALCON DEPARTMENT	 All maintenance Apply other filte The most recent 	rs to the most rec	ent maintenance found w		ame		ⓓ New 'And' Group ⓓ New 'Or' Gro

Figure 4-47. Options/Maintenance Grid

- **3** Review the following descriptions and then select one or more filter options as required:
 - Only include facilities with maintenance during the reporting time period: The data output for this option only includes those maintenance records that meet the filter criteria defined for a particular date or date range. Filter criteria is defined by filter settings in the *Filters* group box for any of the following time period fields: *Effective Date, Repair Found Date, Repair Initiated Date,* and *Repair Corrected Date.*
 - All maintenance that meet the filter criteria: This option includes all maintenance records in the data output that meet filter criteria based on filter settings in the *Filters* group box.
 - Apply other filters to the most recent maintenance found within the report timeframe: This option finds the most recent maintenance record within the reporting time frame first, and then applies other filter settings to the data output. Filter criteria for both of these are defined in the *Filters* group box. Use any of the following fields when defining filter criteria for the reporting time frame: *Effective Date, Repair Found, Repair Initiated,* and *Repair Complete.*
 - The most recent maintenance after the filter criteria has been met: The data output for this option includes the most recent maintenance record only for those pipeline records that meet all other filter criteria first. Filter criteria for both of these are defined in the *Filters* group box. Use any of the following fields when defining a time period for the most recent maintenance record: *Effective Date, Repair Found, Repair Initiated,* and *Repair Complete.*

NOTE: For more information about filters, see *Working with Themes and Filter Groups* (page 167).

4 Click Apply to save and apply changes and then return to the *Maintenance* grid. To cancel changes, click the **Options** tab Options or **O** Cancel to return to the grid.