

Do You Want to Build a New Parameter?



Why a New Parameter?

- Don't want to touch existing configured parameters
- Different Equation
- Excluding Startup and Shutdown, MDC, etc.
- Validity

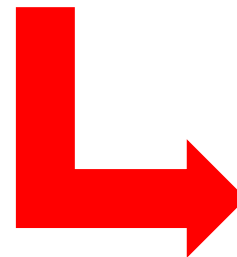
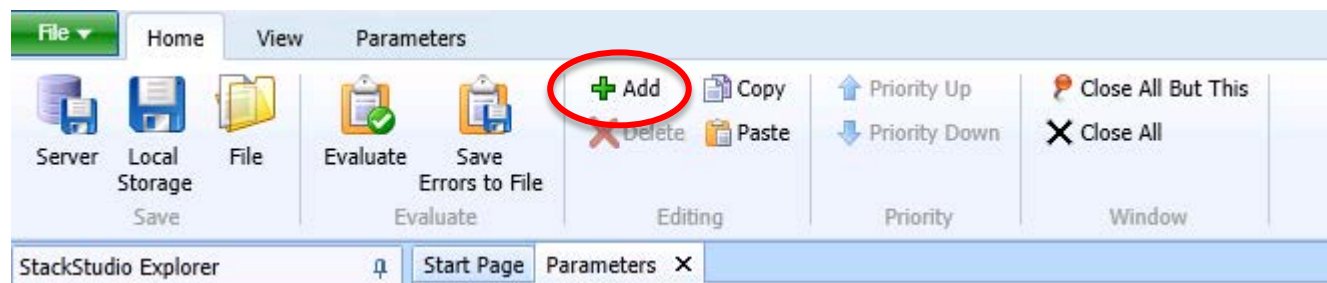
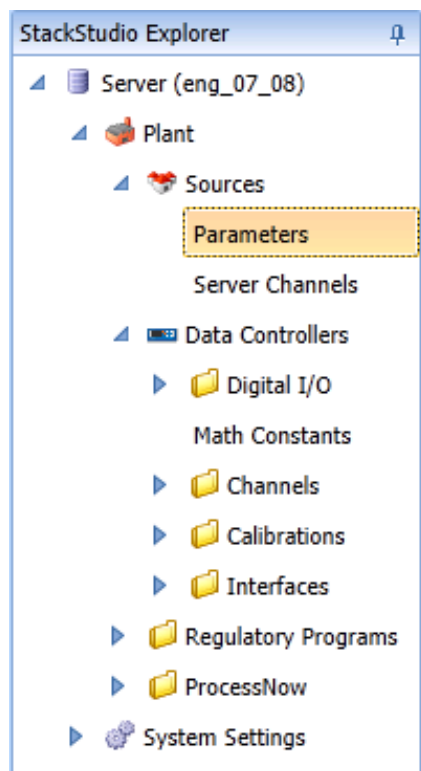
STACKSTUDIO

Note: If you hover over a setting in a new parameter a description should pop up and remind you what the setting does

STACKSTUDIO

Settings in a new parameter:

- First hit parameters under Sources in StackStudio Explorer
- Then it will take you to a page listing your parameters
- To add new parameter, click "add"
- It will pop up with a few settings for you to start off with
 - Don't have to click "Create Data Controller Channel" right away



To begin adding a new Parameter, supply the following information in the top of this form. Optionally, create a data controller channel by specifying the information in the bottom of this form. Click the OK button to create the parameter and channel.

Source: U1

Name:

Description:

Unit Of Measure: LB/MMBTU

Create Data Controller Channel?

Data Controller: H1 (HG1)

Channel Type: A

Channel Number: 04

OK Cancel

- There should be a little red "X" on the certification date – must fill this in to save it
- Certification date is the date the monitoring system for the parameter was certified
 - Need to make sure it is accurate
- Is QA available? Determines whether parameter will be included in EDR
- Depending on purpose of parameter, need to go to equation settings and include your equation
 - If you want to include this equation, must first check "Has Equation" box
 - Equal sign must be at end of equation, not the beginning

Start Page Parameters X

	Source	Name	Channel	Description	Unit of Measure	Enabled?	Parameter Group	QA Enabled?	Parameter Code	Method Code (Default)	Monitoring Location	Graph Max	Graph Min	Certification Date	Decimal Positioner	Round Precision
* J1	CDPMLBM	(None)	(None)	CD PM Corrected for Press/Temp LB/MMBTU	LB/MMBTU	<input checked="" type="checkbox"/>	0 (STACK)	<input type="checkbox"/>	(None)	01	(None)	100	1	<input type="text" value=""/>	3	3

Start Page Parameters X

	Source	Name	Channel	Description	Unit of Measure	Enabled?	Parameter Group	QA Enabled?	Parameter Code	Method Code (Default)	Monitoring Location	Graph Max	Graph Min	Certification Date	Decimal Positioner	Round Precision
> * U1	CDPMLBM	(None)	(None)	CD PM Corrected for Press/Temp LB/MMBTU	LB/MMBTU	<input checked="" type="checkbox"/>	U (STACK)	<input type="checkbox"/>	(None)	U1	(None)	100	1	01/01/2011 / 00:00	3	3

Base Settings Part 75 Settings Calibration Settings Reason Code/Action Code Settings Equation Settings

Has Equation?

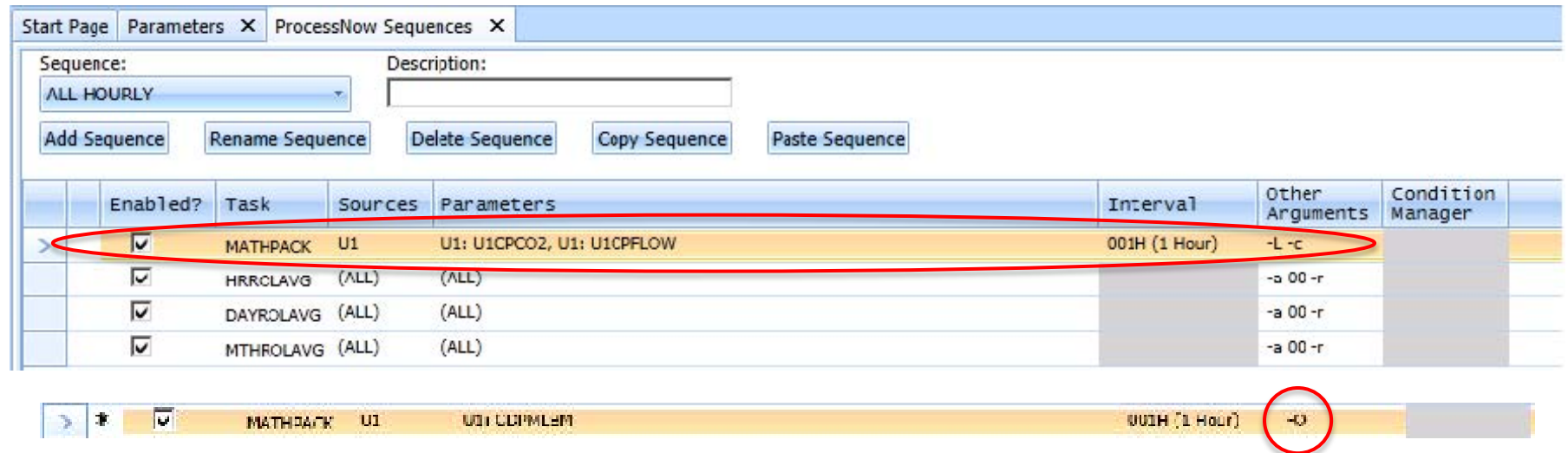
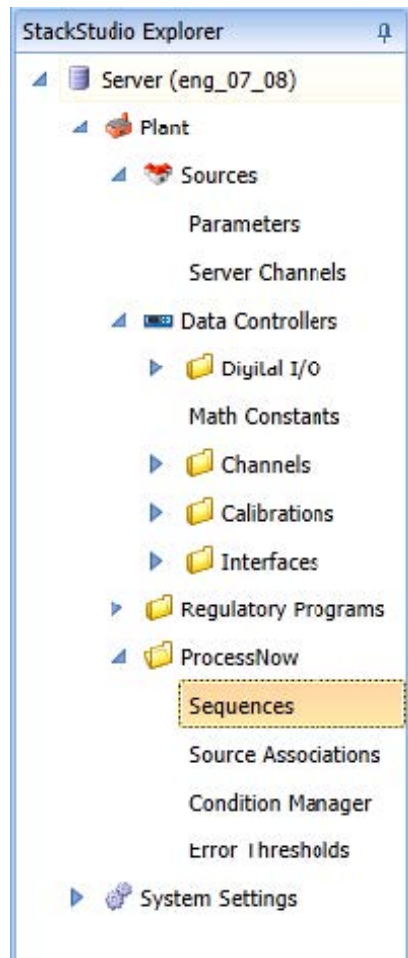
Equation

Bias Constituents?

Round Constituents?

Math Constant Controller

Verifying the Parameter Gets Calculated



- Need to verify if parameter is actually getting calculated in ProcessNow
- Go to ProcessNow > Sequences
 - Make sure it is included under the correct Source
 - Argument is important
 - - O will make sure parameter is calculated and includes
 - - C means it will calculate things downstream, but will not calculate the selected parameter itself
 - - L means it will calculate the logger channel

Part 75 Settings

If you are concerned about the validity of the parameter, go to Part 75 settings – starts off empty

- At the top it will show “N” for “no Part 75 settings checked”
- If you check/fill in something in the section, the Part 75 settings will become true and change to a “Y”
- Few important things:
 - If you check a certain setting, others will pop up with an error (red X) indicating you need to fill in those fields too
 - Some fields are mutually exclusive

Field	Value
Epa Component ID	
Epa System ID	
Epa Formula ID	
Accumulate?	<input type="checkbox"/>
Accumulate Yearly?	<input type="checkbox"/>
Accumulate Ozone Season?	<input type="checkbox"/>
Time Weight Accumulations?	<input type="checkbox"/>
Accumulate Average?	<input type="checkbox"/>
Accumulate Convert to Tons?	<input type="checkbox"/>
Parameter Daily Record?	<input type="checkbox"/>
PDR Ozone Only?	<input type="checkbox"/>
BAF Enabled?	<input type="checkbox"/>
PMA Enabled?	<input type="checkbox"/>
Load Range Enabled?	<input type="checkbox"/>
Missing Data Enabled?	<input type="checkbox"/>
Missing Data Approach	(None)
Use Seasonal Historical Data?	<input type="checkbox"/>
Fuel Specific Lookback Type	(None)
Use Fuel Specific Max Potential?	<input type="checkbox"/>
Controls Operating Parameters	(None)
Unmonitored Bypass TOL Parameter	(None)
QA Certification Date	
Max Potential Concentration (Default)	
Bias Server Constant	(None)
Bias Controller Constant	

Field	Value
Epa Component ID	F01
Epa System ID	112
Epa Formula ID	
Accumulate?	<input type="checkbox"/>
Accumulate Yearly?	<input type="checkbox"/>
Accumulate Ozone Season?	<input type="checkbox"/>
Time Weight Accumulations?	<input type="checkbox"/>
Accumulate Average?	<input type="checkbox"/>
Accumulate Convert to Tons?	<input type="checkbox"/>
Parameter Daily Record?	<input checked="" type="checkbox"/>
PDR Ozone Only?	<input checked="" type="checkbox"/>
BAF Enabled?	<input checked="" type="checkbox"/>
PMA Enabled?	<input checked="" type="checkbox"/>
Load Range Enabled?	<input checked="" type="checkbox"/>
Missing Data Enabled?	<input checked="" type="checkbox"/>
Missing Data Approach	03
Use Seasonal Historical Data?	<input type="checkbox"/>
Fuel Specific Lookback Type	(None)
Use Fuel Specific Max Potential?	<input type="checkbox"/>
Controls Operating Parameters	(None)
Unmonitored Bypass TOL Parameter	(None)
QA Certification Date	
Max Potential Concentration (Default)	103000000
Bias Server Constant	(None)
Bias Controller Constant	K18

Calibration Settings

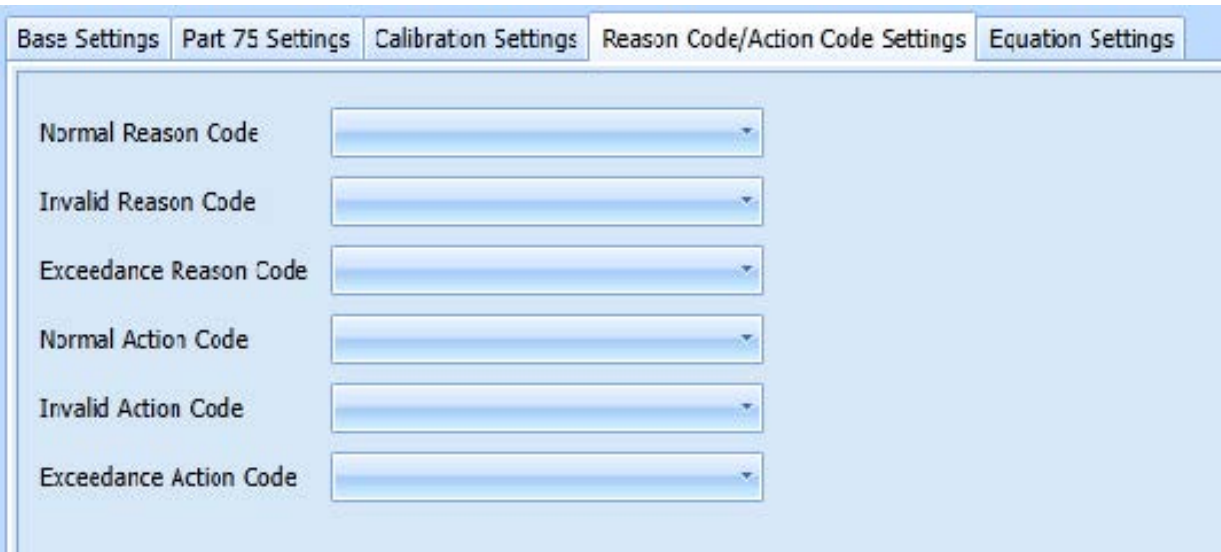
Base Settings	Part 75 Settings	Calibration Settings	Reason Code/Action Code Settings	Equation Settings
Calibrated?	<input type="checkbox"/>			
Instrument Span Value	<input type="text"/>			
Span Scale Type	H			
Calibration Point (Low)	<input type="text"/>			
Calibration Point (Mid)	<input type="text"/>			
Calibration Point (High)	<input type="text"/>			
Primary Calibration Error Calculation Type	5			
Primary Out Of Control Error Limit	<input type="text"/>			
Primary Maintenance Error Limit	<input type="text"/>			
Error Decimal Positioner	<input type="text"/>			
Default Calibration Allowed Limit	<input type="text"/>			
Offline Calibrated For Part 75?	<input type="checkbox"/>			
CHKOOC60 Target Parameter	(None)			

Base Settings	Part 75 Settings	Calibration Settings	Reason Code/Action Code Settings	Equation Settings
Calibrated?	<input checked="" type="checkbox"/>			
Instrument Span Value	120000000			
Span Scale Type	H			
Calibration Point (Low)	1			
Calibration Point (Mid)	<input type="text"/>			
Calibration Point (High)	3			
Primary Calibration Error Calculation Type	5			
Primary Out Of Control Error Limit	<input type="text"/>			
Primary Maintenance Error Limit	3			
Error Decimal Positioner	1			
Default Calibration Allowed Limit	6			
Offline Calibrated For Part 75?	<input type="checkbox"/>			
CHKOOC60 Target Parameter	(None)			

If your parameter is being calibrated, select "Calibrated" and check the box.

- Must check "Calibrated?" box first before filling in corresponding values/fields (or it won't save)
- Make sure it is consistent with what is configured in the calibration sequence
- Fill in Span Value and at least two of the Calibration Points

Reason Code/Action Code Settings



Base Settings | Part 75 Settings | Calibration Settings | Reason Code/Action Code Settings | Equation Settings

Normal Reason Code

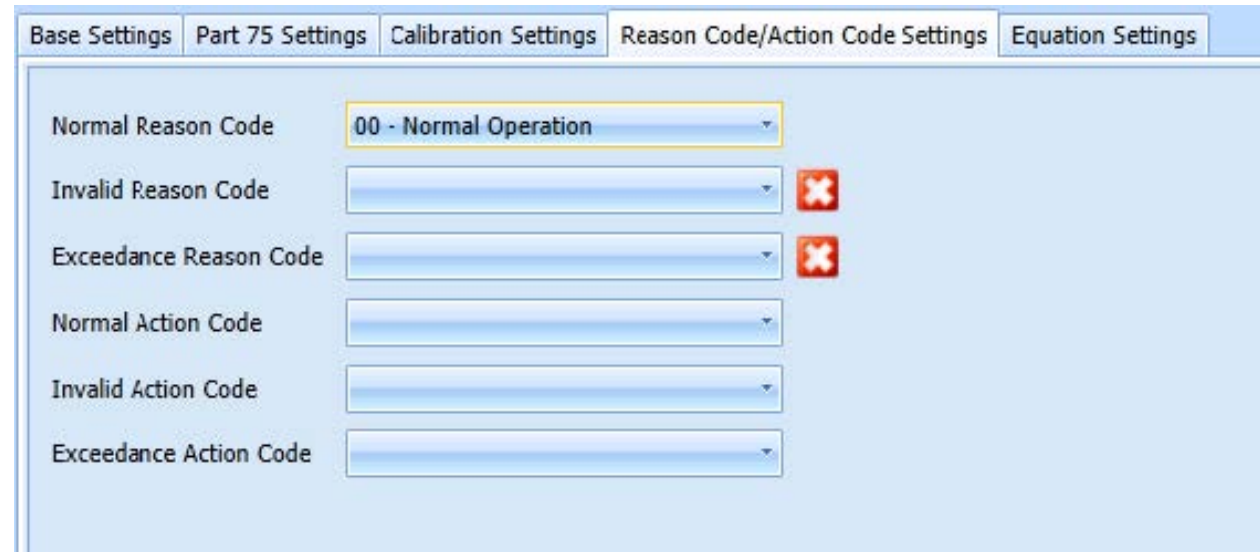
Invalid Reason Code

Exceedance Reason Code

Normal Action Code

Invalid Action Code

Exceedance Action Code



Base Settings | Part 75 Settings | Calibration Settings | Reason Code/Action Code Settings | Equation Settings

Normal Reason Code

Invalid Reason Code ❌

Exceedance Reason Code ❌

Normal Action Code

Invalid Action Code

Exceedance Action Code

- Can leave these blank
- If you choose to fill them in, must fill in top 3 fields
- If you only fill in 1 you'll get an error (red X's) – can't save with errors