MassLynx Auto Shutdown

- Feature that enables you to halt the mass spec and other peripheral equipment that are controlled through MassLynx
  - Saves Mobile Phases
  - Saves Gases (collision and API)
  - Extends lifetime of equipment by shutting down when not in use - takes MS out of operate, turns LC pump off, turns UV lamp off)
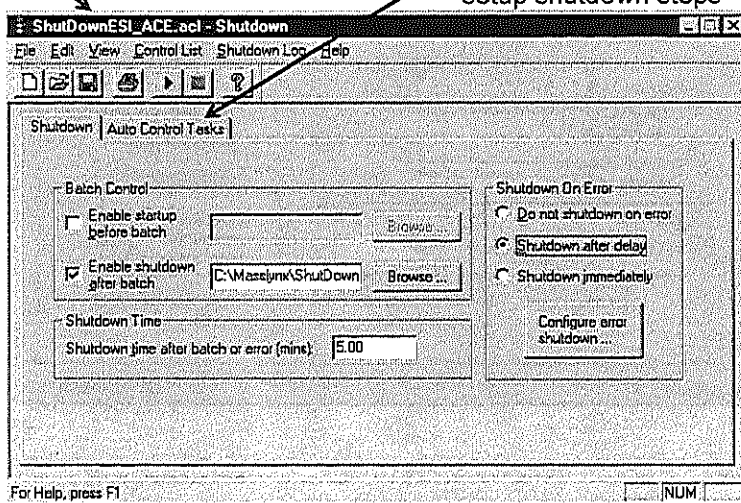
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To setup the shutdown procedures, use the 'Run / Edit Shutdown' menu item on the main MassLynx window.

Shutdown file name

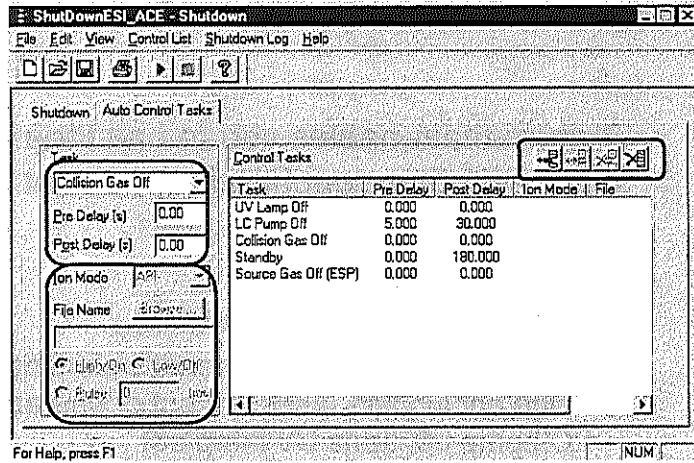Use 'Auto Control Tasks' to setup shutdown steps

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Go Over Various Control Tasks

Basic Order to Shutdown

LC UV Lamp
LC Pump
Standby
Collision Gas
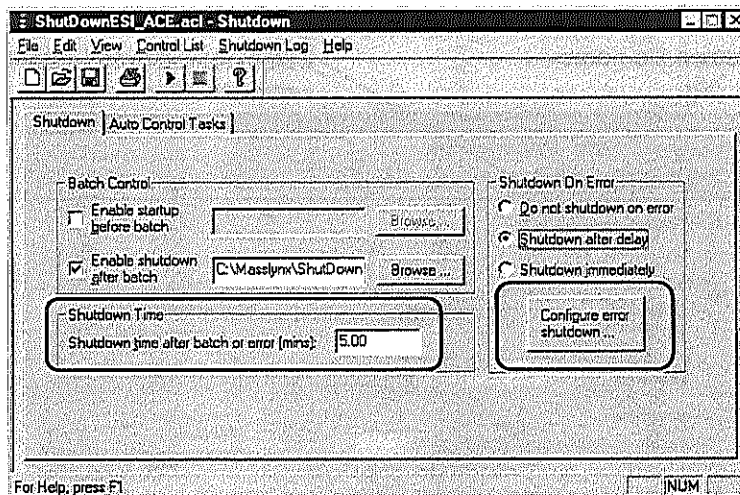Source Gas

(Collision gas can be done any time)

Go over: 1) Post/Pre Delay, 2) Wait after Standby before turning off source gas, 3) Running an LC method at the end, 4) Loading another tune page
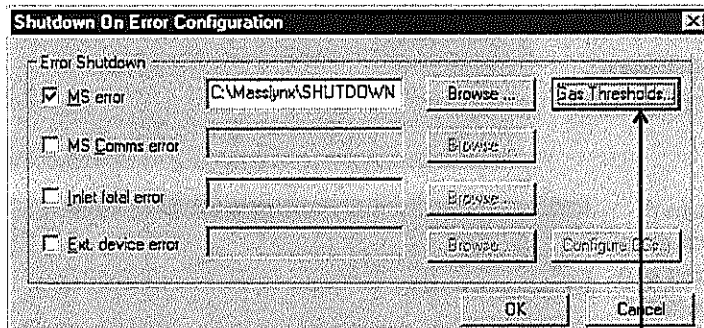
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Time to Wait Before Shutdown and Error Shutdown Configuration
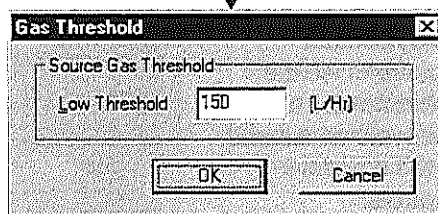

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Shutdown on Error Configuration

Shutdown On Error Configuration

Error Shutdown

☑ MS error   C:\Masslynx\SHUTDOWN   [Browse ...]   [Gas Thresholds...]

☐ MS Comms error   [Browse...]

☐ Inlet total error   [Browse...]

☐ Ext. device error   [Browse...]   [Configure CDs]

[OK]   [Cancel]

Gas Threshold

Source Gas Threshold

Low Threshold [150] [L/Hr]

[OK]   [Cancel]

Shutdown on MS error should use the **ShutdownESI_ACE.acl** shutdown menu.

Be sure to set a low gas threshold for an MS error

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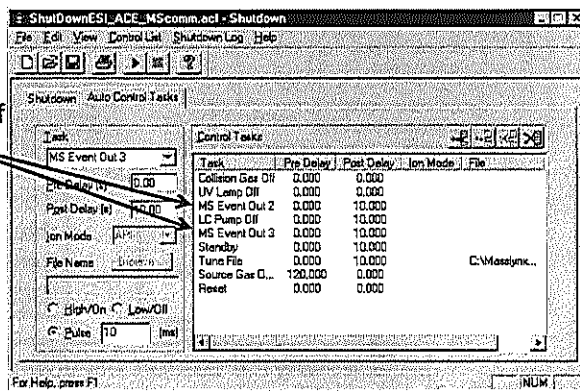## Advanced Concepts on Error Shutdown Configuration

Shutdown On Error Configuration

Error Shutdown

☑ MS error   C:\Masslynx\SHUTDOWN   [Browse ...]   [Gas Thresholds...]

☑ MS Comms error   C:\Masslynx\SHUTDOWN   [Browse...]

☐ Inlet total error   [Browse...]

☐ Ext. device error   [Browse...]   [Configure CDs]

[OK]   [Cancel]
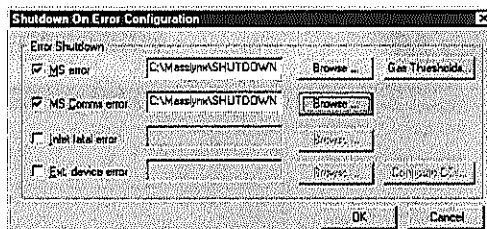
In the event of a Comms error, add a few MS Event out settings.
These are contact closures to the UV and LC to turn off the lamp and stop the pump in the event communication has been lost.

Save this shutdown menu under another filename and browse it into the error configuration.

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ShutDownESI_ACE_MScomm.acl - Shutdown

File Edit View Control List Shutdown Log Help

Shutdown | Auto Control Tasks |

Task: MS Event Out 3

Pre Delay (s): 0.00

Post Delay (s): 10.00

Ion Mode: API

File Name: [Browse...]

○ High/On ○ Low/Off
○ Pulse [10] [ms]

Control Tasks

Task	Pre Delay	Post Delay	Ion Mode	File
Collision Gas Off	0.000	0.000		
UV Lamp Off	0.000	0.000		
MS Event Out 2	0.000	10.000		
LC Pump Off	0.000	10.000		
MS Event Out 3	0.000	10.000		
Standby	0.000	10.000		
Tune File	0.000	10.000		C:\Masslynx...
Source Gas O...	120.000	0.000		
Reset	0.000	0.000		

For Help, press F1   NUM

Advanced Concepts on Error Shutdown Configuration

Shutdown On Error Configuration

Error Shutdown
- ☑ MS error   C:\Masslynx\SHUTDOWN   Browse... Gas Thresholds...
- ☑ MS Comms error C:\Masslynx\SHUTDOWN   Browse...
- ☑ Inlet fatal error   C:\Masslynx\SHUTDOWN   Browse...
- ☐ Ext. device error   Browse... Configure Box...
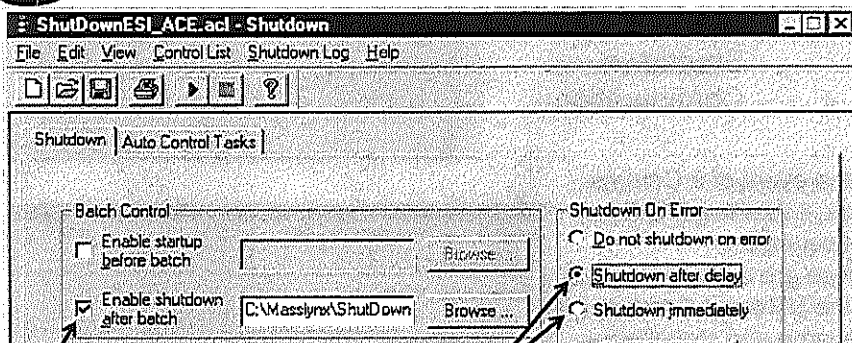
OK   Cancel

In the event of an inlet fatal error there will be no comms to the pump, therefore the pump and UV lamp must be turned off by contact closure. Use the event outs to turn off the systems instead of the standard controls.

ShutDownESI_ACE_LCcomm.acl - Shutdown

File Edit View Control List Shutdown Log Help

Shutdown | Auto Control Tasks

Task: MS Event Out 3

Pre Delay: 0.00
Post Delay (s): 10.00
Ion Mode:
File Name:

○ High/On ○ Low/Off
○ Pulse 10 (ms)

Control Tasks

Task	Pre Delay	Post Delay	Ion Mo...	File
Collision Gas Off	0.000	0.000		
MS Event Out 2	0.000	10.000		
MS Event Out 3	0.000	10.000		
Standby	0.000	10.000		
Tune File	0.000	10.000		C:\Masslynx...
Source Gas O...	120.000	0.000		
Reset	0.000	0.000		

For Help, press F1   NUM

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Enabling Shutdown

ShutDownESI_ACE.acl - Shutdown

File Edit View Control List Shutdown Log Help

Shutdown | Auto Control Tasks

Batch Control
- ☐ Enable startup before batch   Browse...
- ☑ Enable shutdown after batch C:\Masslynx\ShutDown Browse...

Shutdown On Error
- ○ Do not shutdown on error
- ○ Shutdown after delay
- ○ Shutdown immediately

To have MassLynx shutdown the instruments after a batch is completed, make sure this box is 'checked'.
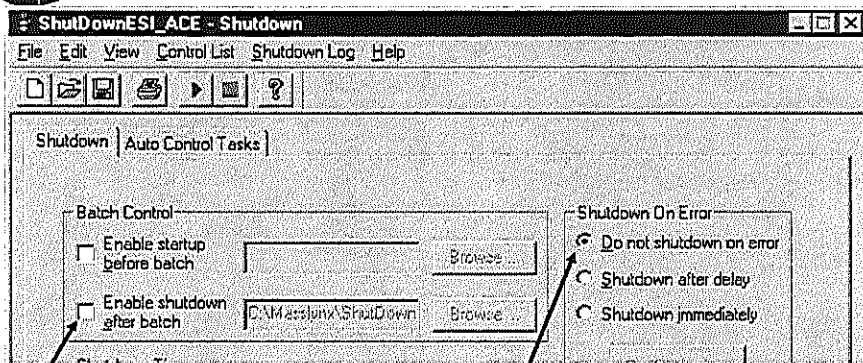
To have MassLynx shutdown the instruments if an error is detected, check one of the 'Shutdown' options.

After setting the desired shutdown, save these settings using 'File / Save' or 'click' on the 'floppy' button.

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Disabling Shutdown

To keep MassLynx from shutting down the instruments after a batch is completed, make sure this box is 'unchecked'.
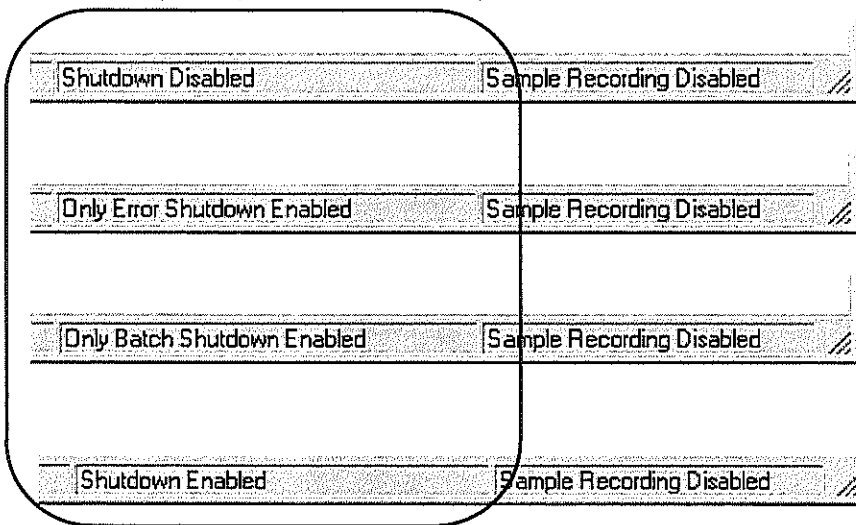
To keep MassLynx from shutting down the instruments if an error is detected, check 'Do Not Shutdown on Error'.

After setting the desired shutdown, save these settings using 'File / Save' or 'click' on the 'floppy' button.

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'Shutdown' Status is displayed in the lower right corner of the main MassLynx Window (sample list window)

Shutdown Disabled   Sample Recording Disabled

Only Error Shutdown Enabled   Sample Recording Disabled

Only Batch Shutdown Enabled   Sample Recording Disabled

Shutdown Enabled   Sample Recording Disabled

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