



Oct 14-15,  
Moody Gardens Convention Centre, Galveston Tx

Booth #1202



**chromperfect**  
chromatography data systems



# chromperfect

The choice of 10,000 chemists since 1982

- Chromperfect is the **ONLY**, client server chromatography data available from an ***Independent*** AMERICAN manufacturer.
- Our company has been privately owned and operated for over 30 years.
- Over that period we have sold systems into almost every major company worldwide
- Most of the general features of CDS systems which are taken for granted today were first introduced in Chromperfect.
- Over our 30 year history we have NEVER left a customer behind.
- We continue to offer support for instrumentation that is abandoned by the manufacturers
- Chromperfect file compatibility runs from MS DOS to Windows 8.1

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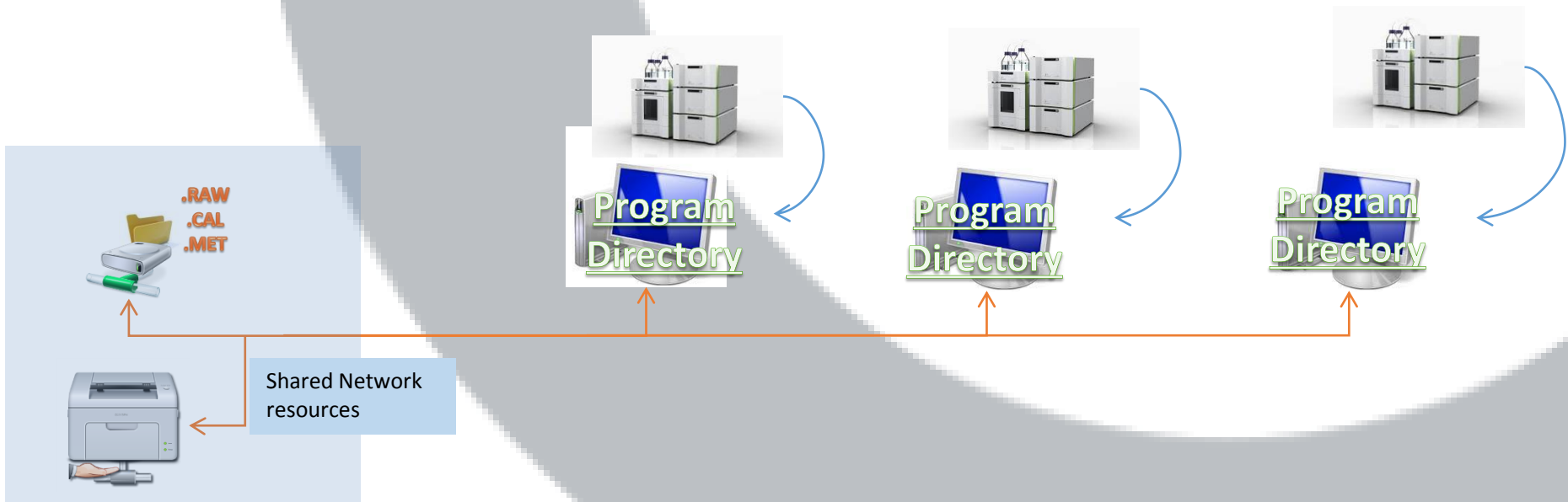
## Operating Systems

Chromperfect, is a chromatography data system designed to run on;



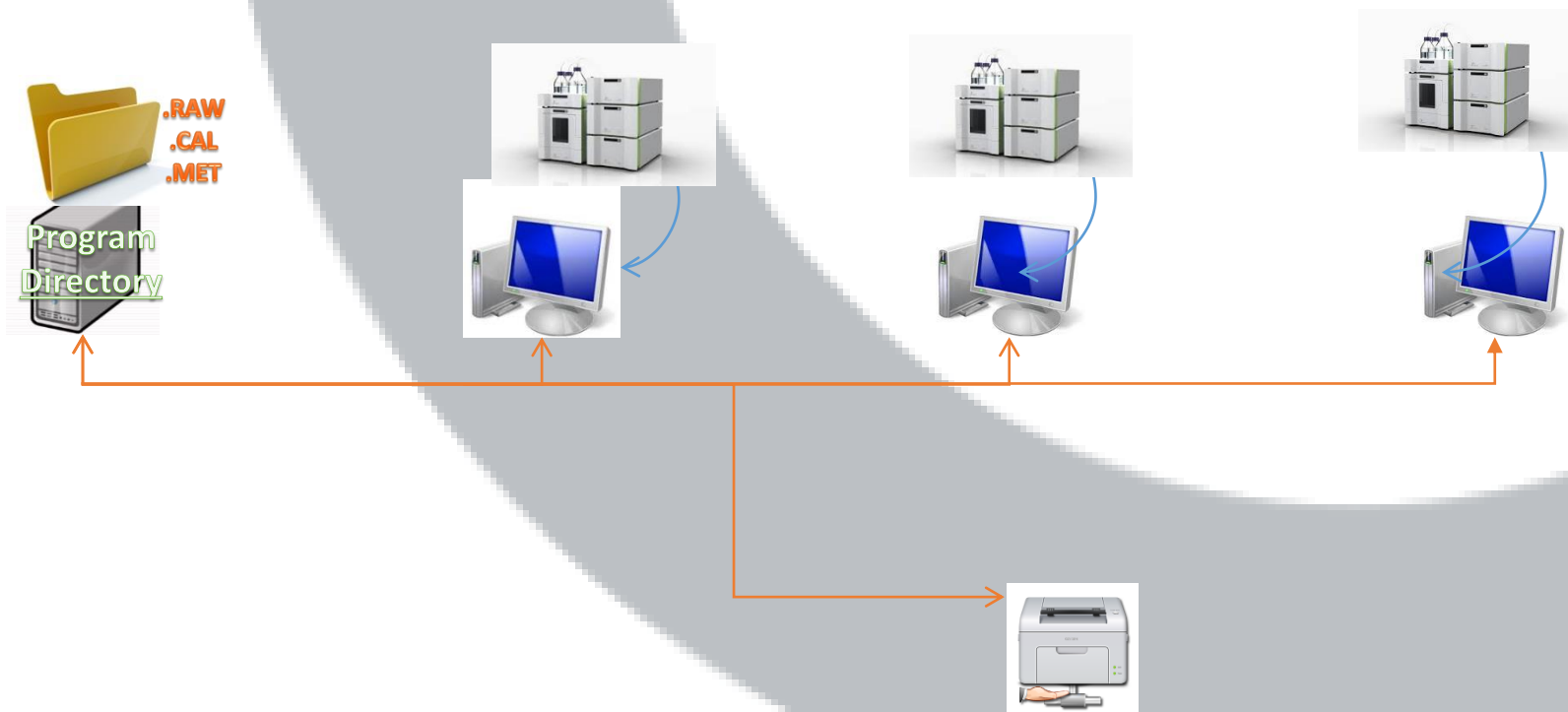
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## System Operations



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## System Operations

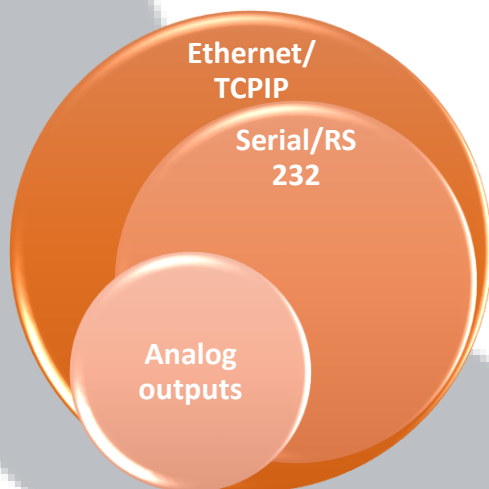


## The Instrument Work Horse

- Technology that bridges control and analytics
- Compact instrumentation
- Analysis at site of production
- Familiar software for the technical professional
- Result information for the non technical colleague

## Data Sources

Chromperfect can acquire, process, and report data from any GC or HPLC



## 3.4 The Chromperfect Main Menu



- Communicates with Instruments
- Creates Raw files

- Integrates Raw Files,
- Generates reports & plots
- Creates Bound files
- Update method
- Update calibration

- Creates, edits Methods and other files

- Search directories
- Set preferences

- Log Files
- Data
- Error
- Alarm

- Auditing

- Support information
- License information
- Software version
- Licensee

- System info
- Security

- CIMS
- Find Files

- Configure Instruments



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Open Existing File

Which type of file do you wish to edit?

method	calibration	format
supermethod	sequence	raw data
sec cal		results job
setpoint		

Show this form at startup Cancel

Open Existing File

Which type of setpoint file do you wish to edit?

Varian 3800 (.M38)	HP5890 (.MXT)	HP7890 (.M78)
Varian 4900 (.M49)	HP6890 (.M68)	Falcon (.MFL)
Thermo (.MTE)	DANI (.MDI)	ICom (.MEC)
setpoint		

Show this form at startup Cancel



## Distribution of Control

- Centrally located Instrument Server
- Client workstations placed anywhere
- Instruments controlled from LIMS to LAB

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## New Powerful Compact Instruments



## Instrument Control

C:\CPData\SampleData\Sample.mfl

Aux Oven | Events | Inlet | Detectors | Columns

Detector #1

Temperature, deg. C

Hydrogen pressure

Air pressure (ignite)

Air pressure (run)

Invert data

Detector #2

Temperature, deg. C

Hydrogen pressure

Air pressure (ignite)

Air pressure (run)

Invert data

C:\CPData\SampleData\Sample.mfl

Aux Oven | Events | Inlet | Detectors | Columns

Oven Temperature, deg C

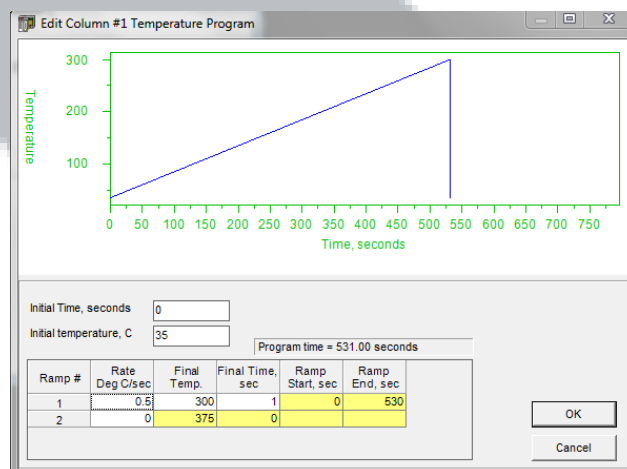
Delay time, seconds

Splitless time, seconds

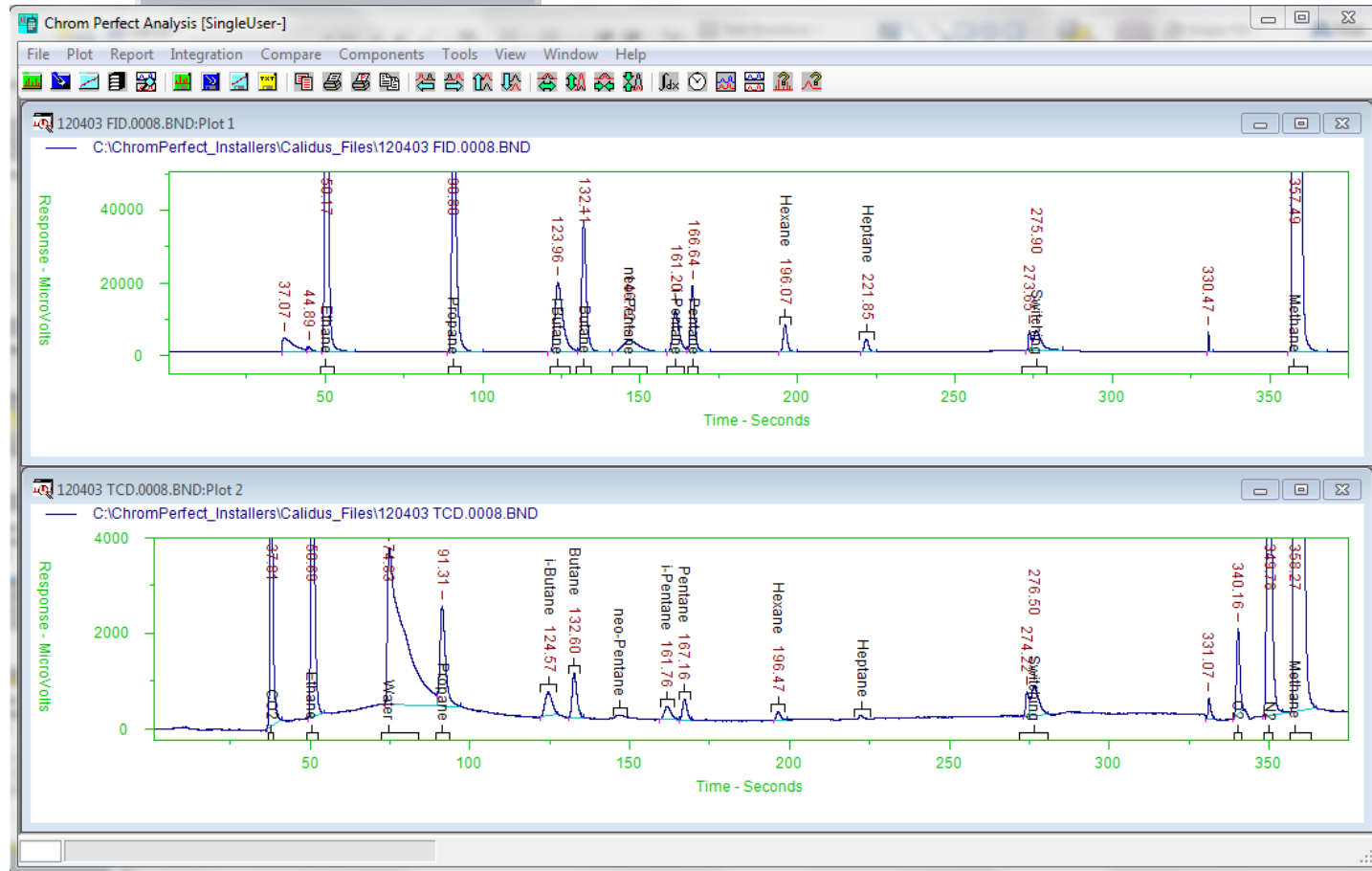
Split vent time, seconds

Loop injection time, seconds

Idle Flow fraction, percent



## Fast Fast Fast

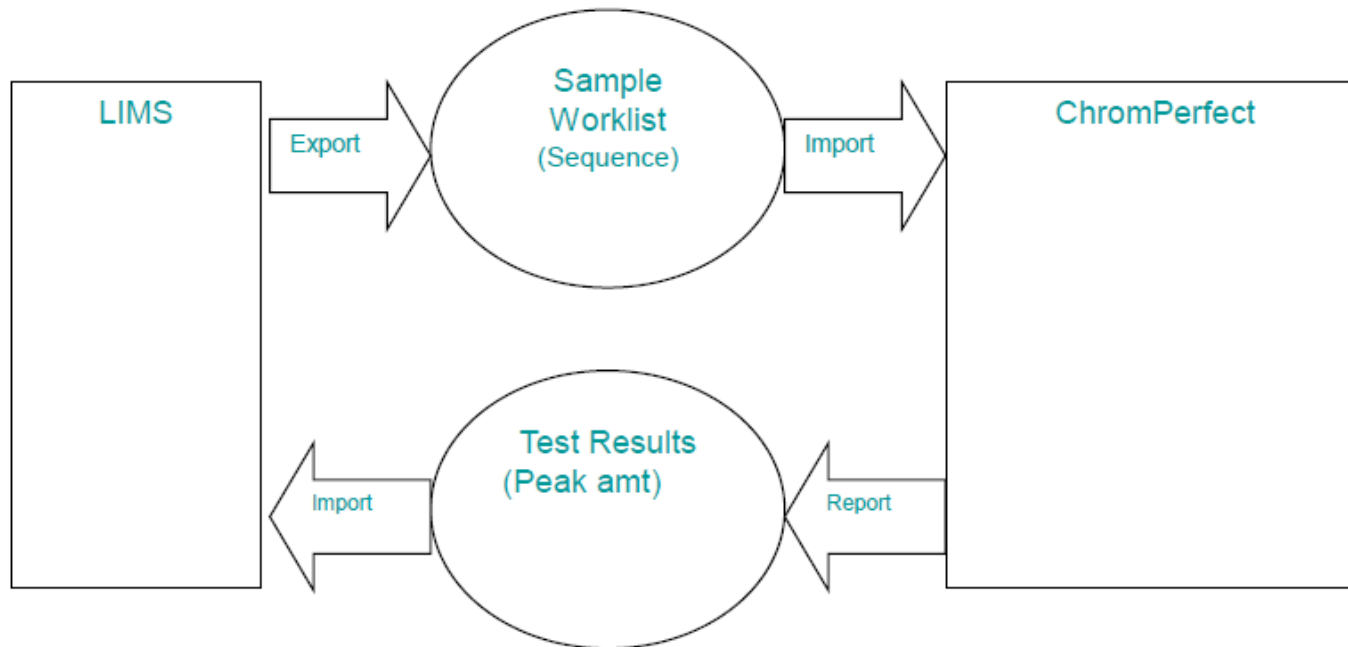




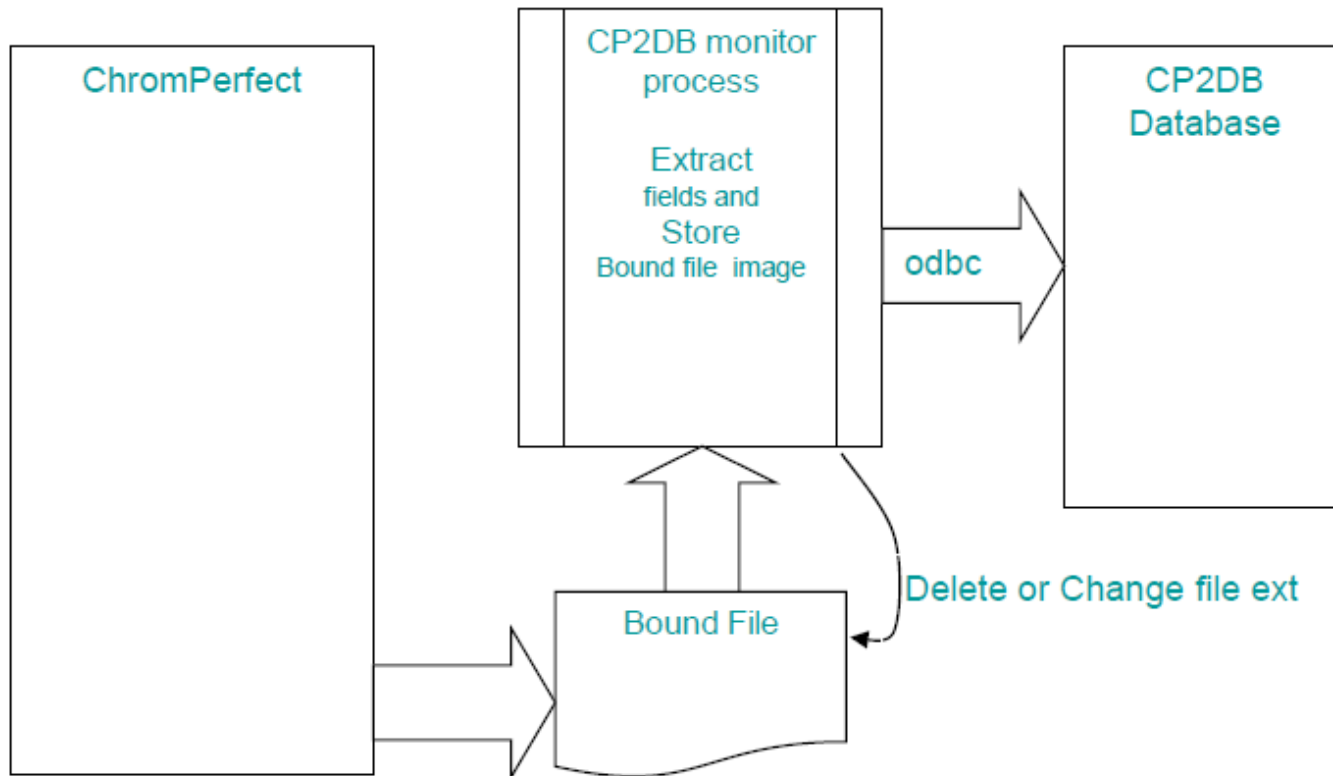
## Robust Software to Match

- Integration algorithms
- Data handling reporting
- Instrument control
- Interface with LIMS systems

# LIMS Sequence Interface

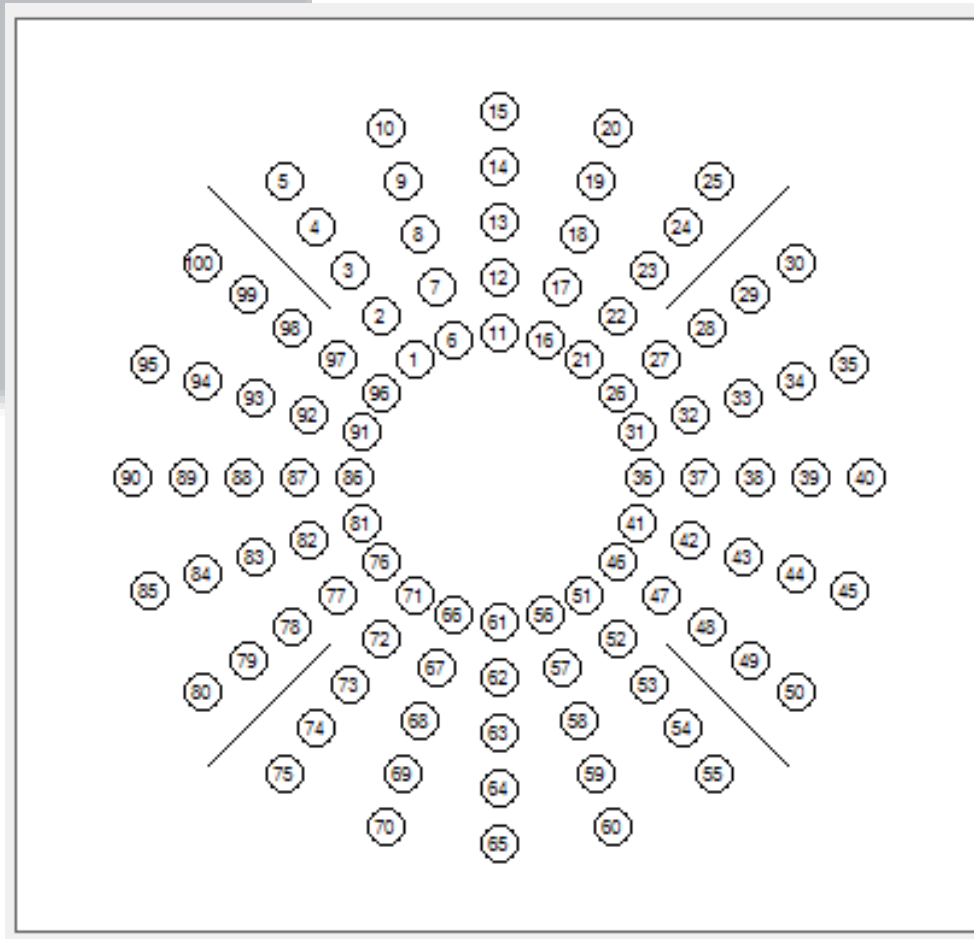


## Information Transmitted





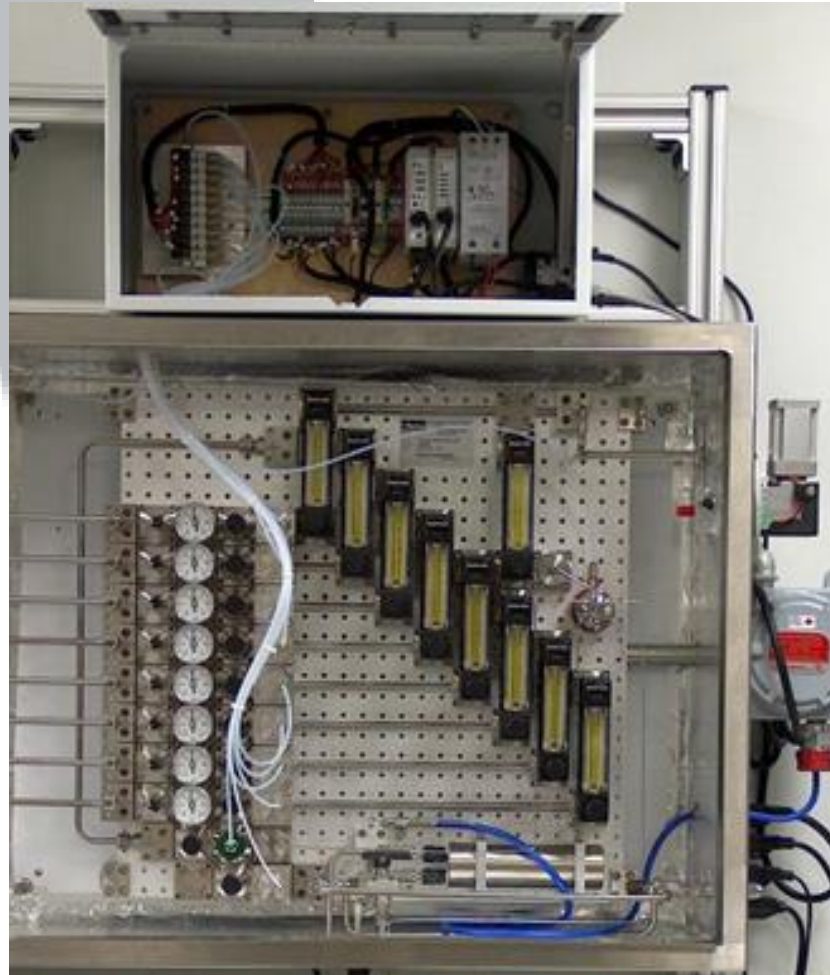
## Sample Systems Control



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## Process Sample Systems

Nessi



Customized  
Solutions

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CTC PAL3



FALCON PALARUS



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## Automatic Sequencing

C:\CPData\SampleData\Procall.seq

	Raw File Base Name		Cycle Number	Sample Name	Method File Name			Sample Weight	Injection Volume	Dilution Factor	Int. Std. Amount	Calib. Level	Vial Number	Injector
1	Amino	...	.O.	1		Amino.met	...	.O.	0	0	0	0	6	ALS Front
2	Aminob	...	.O.	1		Aminob.met	...	.O.	0	0	0	0	0	GSV
3	Pump	...	.O.	1		Pump.met	...	.O.	0	0	0	0	0	None
4	PumpB	...	.O.	1		Pump.met	...	.O.	0	0	0	0	0	None
5	Epa601	...	.O.	1		Epa601.met	...	.O.	0	0	0	0	0	None
6	Epa601B	...	.O.	1		Epa601B.met	...	.O.	0	0	0	0	0	None
7	Demo	...	.O.	1		Demo.met	...	.O.	0	0	0	0	0	None
8	Atest	...	.O.	1		Atest.met	...	.O.	0	0	0	0	0	None
9	Atestb	...	.O.	1		Atest.met	...	.O.	0	0	0	0	0	None

Operations | Display | Validation

Channels

Auto Base Names

## Common Technology Employed

- Balance and use existing infrastructure
- Local at site processing
- Remote control
- Highly secure

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## Common User Interface



Chrom Perfect Data Acquisition on GEORGESCHREINER [SingleUser-]

File Plot View Tools Window Help Edit

	Instrument Name	Status	Owner's Name	Claiming Station	Controlling Station	Control	Show Plot	Ref. Plot	Show Meter	Auto Integ	Auto Proc	Data Directory	Printer	ID
1	Digital Data (FID)	Ready				Claim	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	C:\CPData	HP Photosmart	1
2	Tigre III HHCA (TCD)	Off Line				Claim	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	C:\CPData	HP Photosmart	2
3	Tigre III HHC B (TCD)	Off Line				Claim	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	C:\CPData	HP Officejet Pro	3
4	Calidus GC (FID)	Off Line				Claim	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	C:\CPData	HP Officejet Pro	4

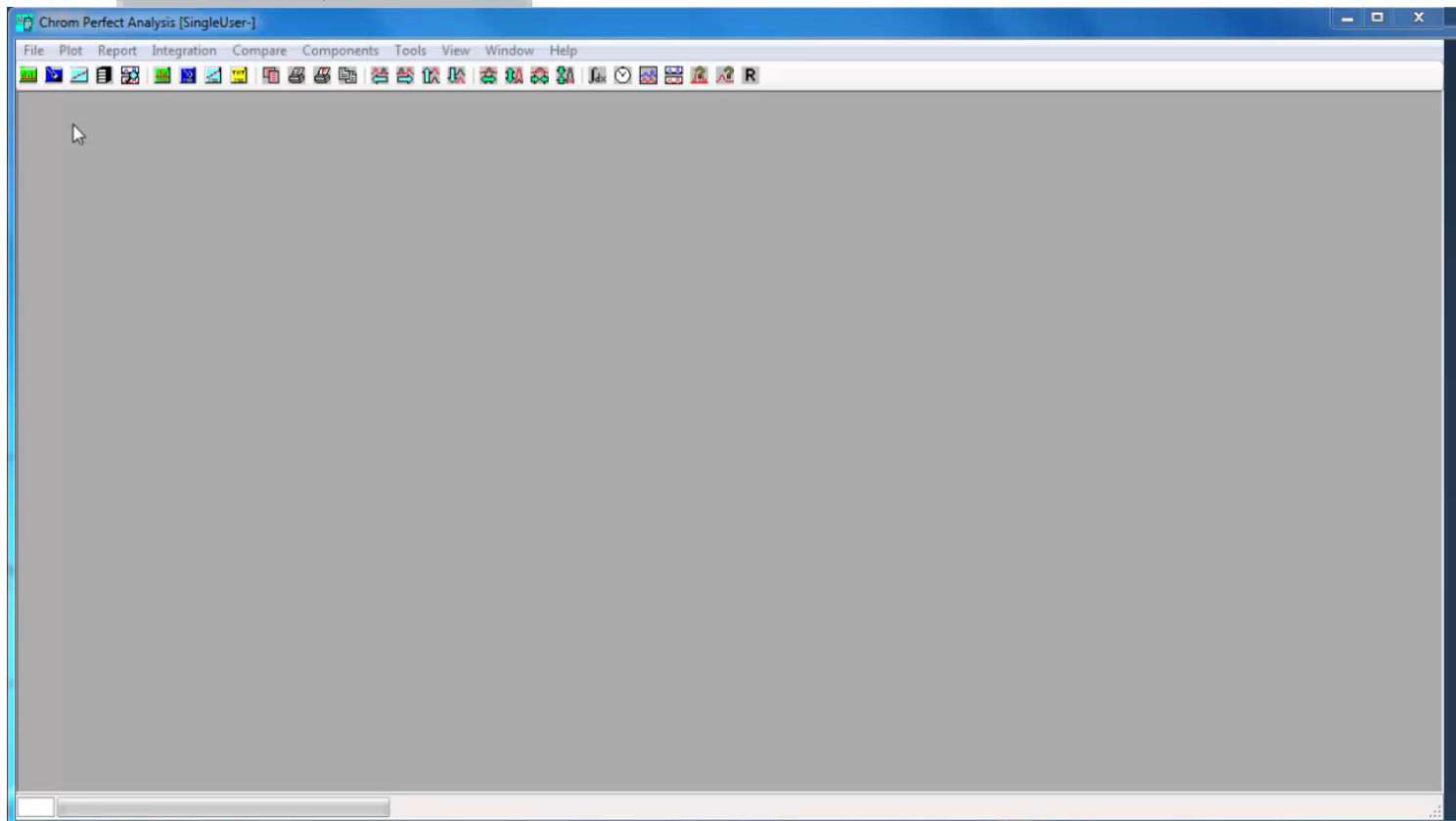
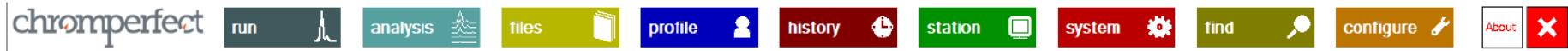
Chrom Perfect Data Acquisition on GEORGESCHREINER [SingleUser-]

File Plot View Tools Window Help Edit

	Instrument	Control	Detector	Status	Sample Name	Raw File	Method File	et ho	Calib. File	Run Time	Response	Sequence File	qu an	Seq. #	Vial #	Relays	R
1 A	Digital Data		FID	Ready	Cal	1309291812A	ATEST.MET	.O.		13.99			.O.	0	0		
2 A	Tigre III HHC		TCD	Off Line	test		ATEST.MET	.O.		0			.O.	0	0		
3 A	Tigre III HHC		TCD	Off Line	test		ATEST.MET	.O.		0			.O.	0	0		
4 A	Calidus GC		FID	Off Line				.O.					.O.				

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## Spinning Wheels





## Long Arm of the Laboratory

- Sampling Stays Local
- Testing of Process Cleaning Procedures
- Monitoring of Workplace Atmosphere
- Local Chemical Reaction Monitoring
- Processing of Water streams
- Wireless connectivity for Legacy Instruments





## Alarms from Analytical Results





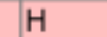
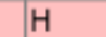
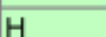
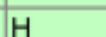
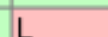

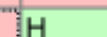
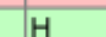
Alarm Status | Hardware | E-Mail | Internal

Spreadsheet displays...

- Alarm status: click to dismiss
- Polarity set-up: click to invert
- Output state: click to toggle

Legend

	Inactive	Active
Applied		
Pending		

	IP Addr	Line # 1	Line # 2	Line # 3	Line # 4	Line # 5	Line # 6	Line # 7	Line # 8
1	10.1.1.90	L 	L 	L 	H 	H 	H 		
2	10.1.1.91	H 	H 	L 	L 	H 	H 		

## Alarms from Analytical Results

Alarm Status | Hardware | E-Mail | Internal

Send alarm messages to these e-mail addresses

	E-Mail address	
1	<input type="text" value="jrbob@chromperfect.com"/>	...
2	<input type="text" value="supervisor@myCompany.com"/>	...

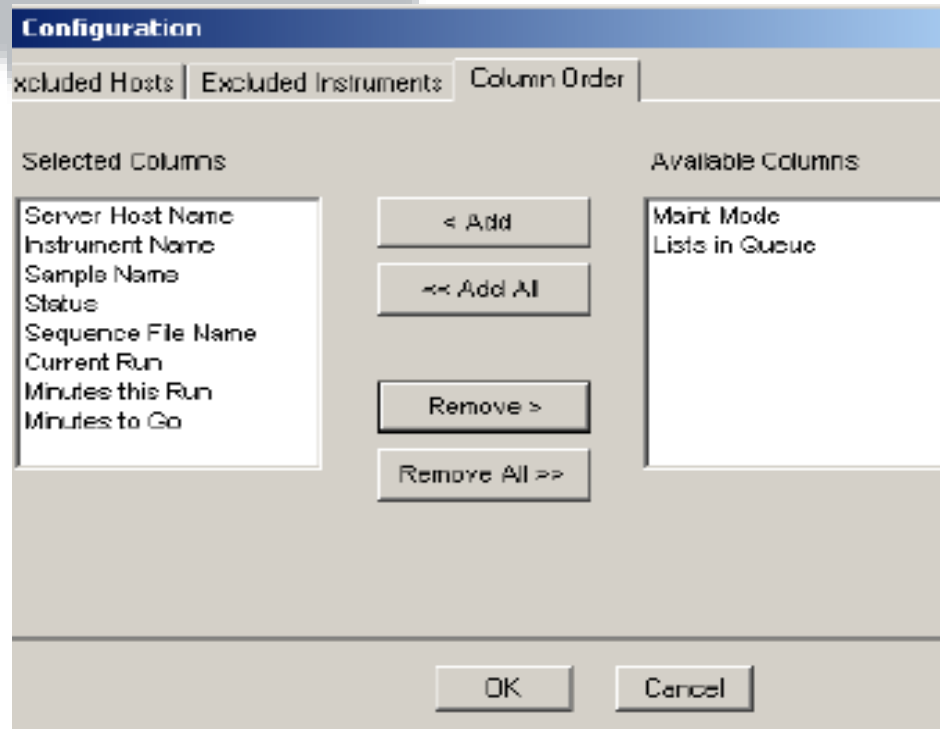
## Alarms from Analytical Results

Name	R.T.	Missing peak?	Amount	Out of limit?	Area %	Over FV1?	Skew	Over UF1?
propanol	0.30	OK	0.74	OK	21.155	OK	1.002	OK
n-butanol	0.40	OK	1.00	OK	18.501	OK	0.999	OK
s-butanol	0.44	OK	0.50	OK	14.052	OK	1.010	OK
i-butanol	0.48	OK	0.84	OK	17.560	OK	1.002	OK
hexanol	0.70	OK	0.32	OK	16.795	OK	1.007	OK
heptanol	0.74	OK	0.58	OK	11.936	OK	0.999	OK

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## System Monitoring

- Each Workstation can Monitor System Wide



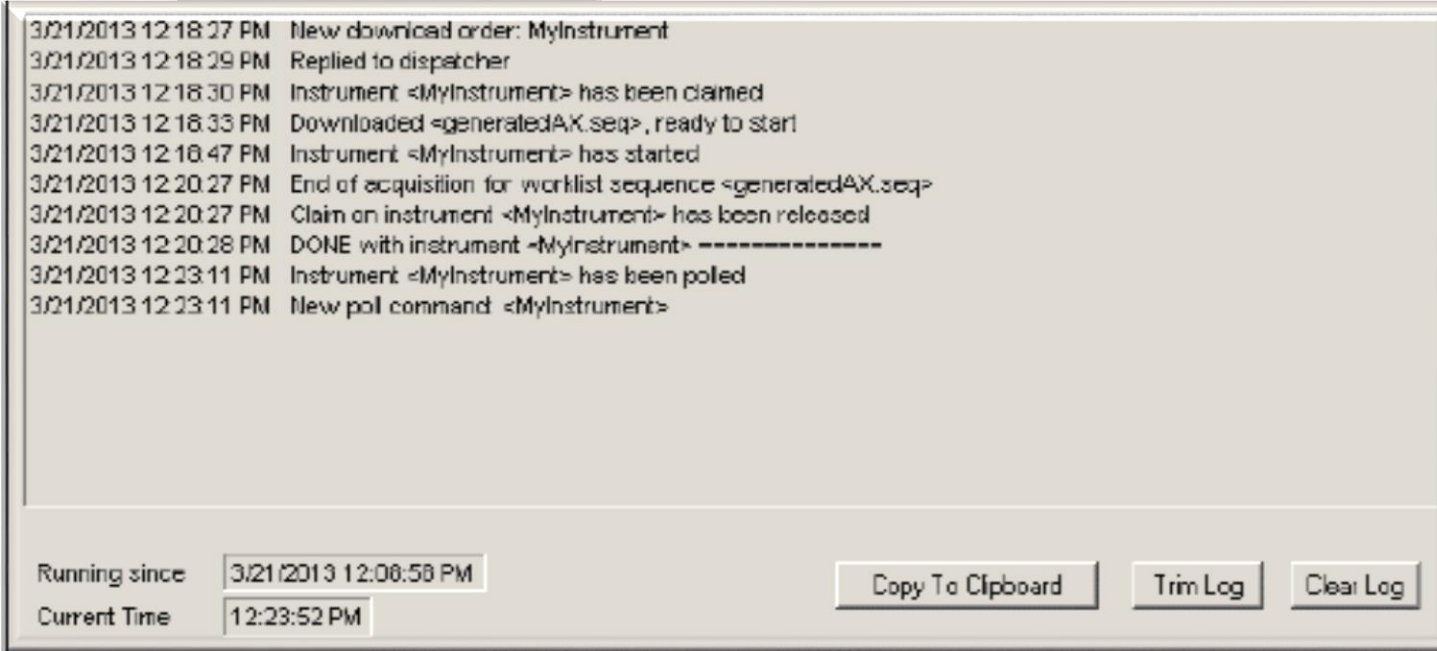
## System Monitoring

- Status of All Instruments

	Server Host Name	Instrument Name	Sample Name	Status	Sequence File Name	Current Run	Minutes this Run	Minutes to Go
1	TARIK-XP	MyInstrument	myFile2	Ready	generatedAX.seq	2 of 4	N/A	3
2	TARIK-XP	fake-2	mySample-124	Ready		Done	N/A	Done
3	TARIK-XP	fake-D	mySample-123	Ready		Done	N/A	Done

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## System Monitoring



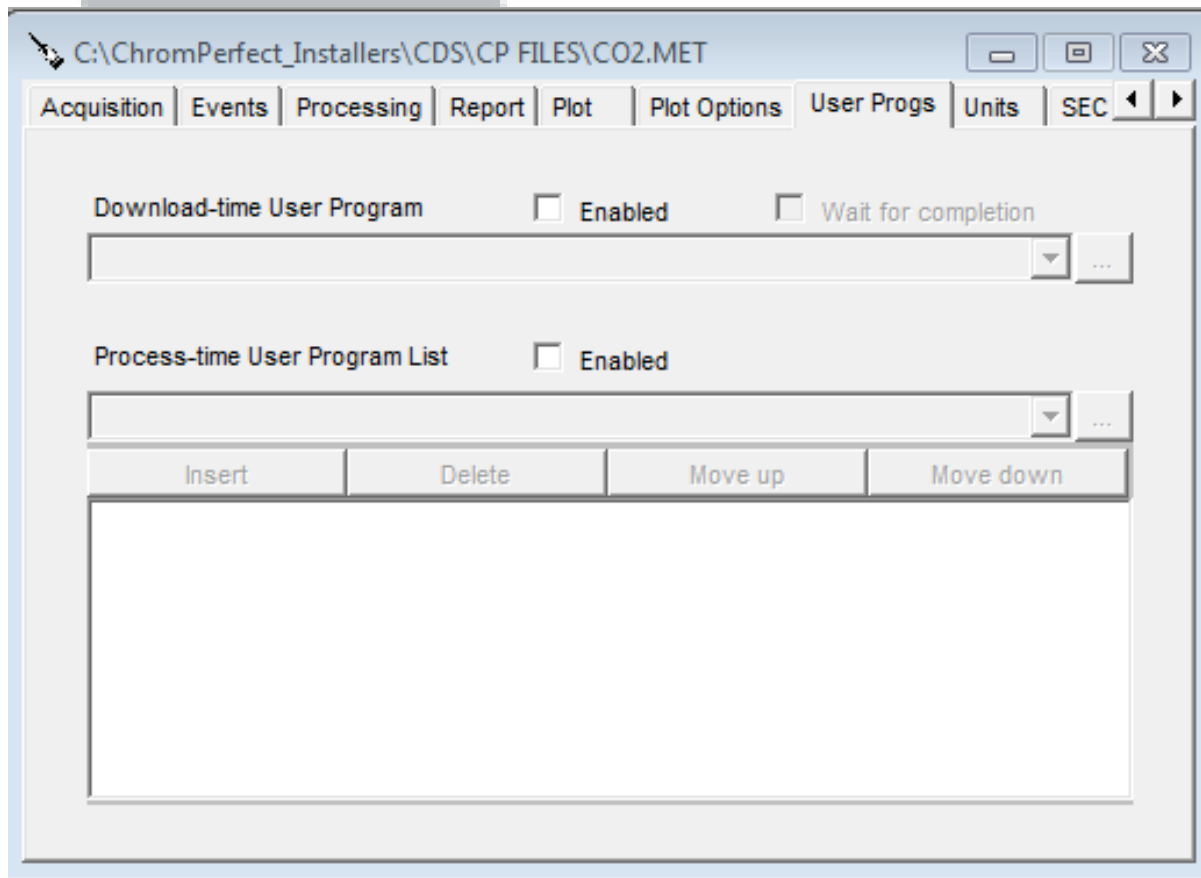
The screenshot displays a system monitoring window with a log of events and control buttons. The log entries are as follows:

- 3/21/2013 12:18:27 PM New download order: MyInstrument
- 3/21/2013 12:18:29 PM Replied to dispatcher
- 3/21/2013 12:18:30 PM Instrument <MyInstrument> has been claimed
- 3/21/2013 12:18:33 PM Downloaded <generatedAX.seq>, ready to start
- 3/21/2013 12:18:47 PM Instrument <MyInstrument> has started
- 3/21/2013 12:20:27 PM End of acquisition for worklist sequence <generatedAX.seq>
- 3/21/2013 12:20:27 PM Claim on instrument <MyInstrument> has been released
- 3/21/2013 12:20:28 PM DONE with instrument <MyInstrument> -----
- 3/21/2013 12:23:11 PM Instrument <MyInstrument> has been polled
- 3/21/2013 12:23:11 PM New poll command <MyInstrument>

At the bottom of the window, there are two input fields and three buttons:

- Running since: 3/21/2013 12:08:58 PM
- Current Time: 12:23:52 PM
- Copy To Clipboard
- Trim Log
- Clear Log

## Flexible Programming

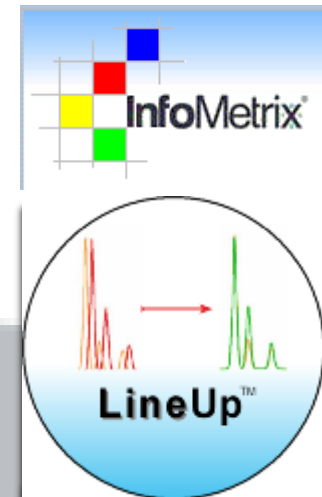
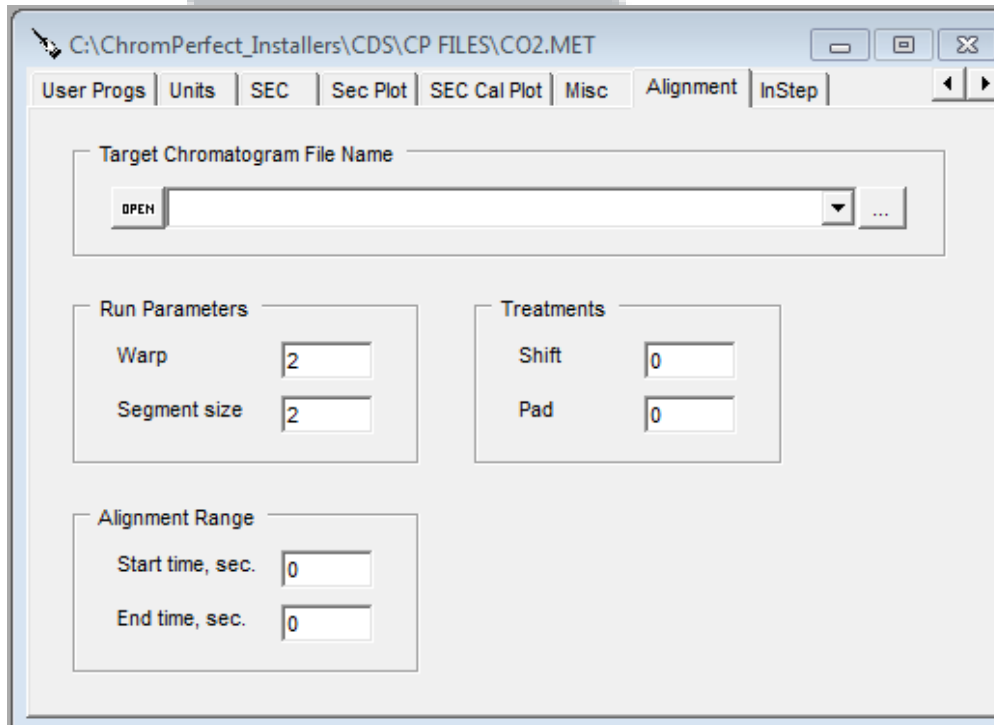




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## Chemometrics

- Direct Integration of InfoMetrix LineUp Software



## Chemometrics

- Direct Integration of InfoMetrix InStep Software

