## StatFolio Alerts

## Summary

StatFolios can be configured to generate alerts when unusual events occur. Alerts are currently generated by the following:

- 1. Statistical process control charts
- 2. Process capability analysis procedures

The alert mechanism is most effective for StatFolios that either poll their data repeatedly or are refreshed at periodic intervals (such as every night). Once an alert is generated, its information is stored in a message alert file to prevent its being generated again.

## Operation

To implement the alert mechanism, you first create a StatFolio with one or more procedures. Then select *StatFolio Alerts* from the *Tools* menu. This will display the dialog box shown below:

StatFolio Alerts			X								
Alert message file:		BROWSE	ОК								
C:\DocData16\sgalarms.csv		Cancel									
Location control charts Beyond upper control limit	Dispersion control charts Beyond upper control limit		Help								
Beyond lower control limit	Beyond lower control limit										
Run rule violation	Run rule violation										
Capability analyses Cp below: 1.33 Pp below: 1.33	Cpk below: 1.33 Shortterm DPM above: 30. Ppk below: 1.33 Longterm DPM above: 30.	.0 CCpk	below: 1.33 we: 0.1								
Actions											
Display message box Sound audio alarm 🔽 Send e-mail from: support@statgraphics.com											
Recipient e-mail addresses:											
me@mydomain.com			<								

• Alert message file: Select a message file in which alerts will be stored once they are generated. Since alerts are stored in a comma-delimited file, you may select any file name ending with *.csv*. Alert message files allow you to review historical alerts and also prevent the same alert from being issued more than once.

- **Location control charts**: Specify the condition(s) that will cause an alert to be generated from charts involving the mean, proportion, or count.
- **Dispersion control charts**: Specify the condition(s) that will cause an alert to be generated from charts involving the range or standard deviation.
- **Capability analysis**: Specify the condition(s) that will cause an alert to be generated from procedures that estimate process capability.
- Actions: Select the action(s) to occur whenever an alert is generated. In the case of e-mail alerts, you must specify e-mail addresses for both the sender and recipients.

The selections made on this dialog box are stored in the StatFolio.

Note: Once an alert message file is established, you should take care not to erase it. Otherwise, old alerts may be regenerated the next time the procedures in the StatFolio are updated.

## **Displaying Historical Alerts**

The *Display* button on the above dialog box displays the contents of the selected alert message file:

Display Alerts File												
		Date/Time	Alert	StatFolio	Variable	Char	Location	Violation	Actior	ОК		
	1	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	Х	3:30	8 below center	Notified sam@tech.com			
	2	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	Х	7:30	4 of 5 below IWL	Notified sam@tech.com	Cancel		
	3	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	Х	8:20	4 of 5 above IWL	Notified sam@tech.com			
	4	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	4:20	8 below center	Notified sam@tech.com	Print		
	5	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	4:30	8 below center	Notified sam@tech.com	Save		
	6	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	4:40	8 below center	Notified sam@tech.com			
	7	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	4:50	8 below center	Notified sam@tech.com	Help		
	8	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	5:00	8 below center	Notified sam@tech.com			
	9	1/31/2009 14:25	Runs rule	C:\test.sgp	strength	MB()	1:00	4 of 5 above IWL	Notified sam@tech.com			
	10	1/31/2009 14:25	Control limit	C:\test.sgp	strength	MB()	0:30	Above upper CL	Notified sam@tech.com			
	11	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	Cp below 1.33	Notified sam@tech.com			
	12	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	Pp below 1.33	Notified sam@tech.com			
	13	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	Cpk below 1.33	Notified sam@tech.com			
	14	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	Ppk below 1.33	Notified sam@tech.com			
	15	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	CCpk below 1.33	Notified sam@tech.com			
	16	1/31/2009 14:38	Runs rule	C:\test.sgp	strength	Х	0:10	K above 0.1	Notified sam@tech.com			
	17	1/31/2009 14:38	Control limit	C:\test.sgp	strength	MR()	0:30	Above UCL	Notified sam@tech.com			
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The fields are:

- 1. **Date/Time** the date and time when the alert was generated.
- 2. Alert the type of alert.
- 3. **StatFolio** the name of the StatFolio that generated the alert (more than one StatFolio may share the same alert file).
- 4. Variable the name of the variable that generated the alert.
- 5. **Chart** the type of chart on which the alert was generated.
- 6. Location for control charts, the location of the point that generated the alert.
- 7. **Violation** the type of violation.
- 8. Action the action that was taken.

You can review the alerts and make annotations if you wish.