

foxray

The Most Complete and Comprehensive Configuration Management, Documentation & Productivity Tool for the Foxboro I/A DCS



foxray™ is a tool which centralizes various functions related to electronic documentation and system management of the Foxboro I/A DCS.

foxray™ users recognise the following Improvements:

- Control System Performance – Improved system utilization, more effective control, easier Tracking of Control system modifications & System Documentation
- Process Operator Effectiveness – with comprehensive Alarm Management and Operator Action Analysis tools
- Enhanced Root Cause Analysis of Process and System abnormal conditions

foxray™ is a tool which centralizes various functions related to electronic documentation and system management of the Foxboro I/A DCS.

foxray™ users recognise the following Improvements:

- Control System Performance – Improved system utilization, more effective control, easier Tracking of Control system modifications,
 - Back Documentation capabilities
 - Graphical Mapping to easily show configured control logic
 - Configuration Integrity – Shows missing references, multiple I/O reads and writes, etc.
 - I/O Management and Documentation

foxray™ - Graphical Mapping of control schemes

Including applications such as OSI PI, Aspentech IP.21 & PLCs

The screenshot displays the LimeWare foxray software interface. At the top, the title bar reads "LimeWare foxray - Database Updated on 2006-09-12". The main window is divided into several sections:

- Network Diagram:** A hierarchical tree view on the left shows the "Foxboro Network" structure, including nodes like "ALL NETWORK", "CP001B CP40FT", "CP002A CP40FT", "CP002C CP40FT", "CP001A CP60FT", "CP001C CP40", "CP002B CP40", and "CP003A CP40".
- Compound List:** A table listing various compounds such as "CP", "ALL", "CP002B", "GDEV", "IND", "LOGIC", "LONG", "MAIN", "MATH", "MCIN", "MCOUT", "MDSCAN", "PID", "PLB", "RATIO", "REAL", "REALM", "RIN", "SIGSEL", "STA", "STRING", and "SWCH".
- Blocks Types:** A list of block types including "ECBPG", "GDEV", "IND", "LOGIC", "LONG", "MAIN", "MATH", "MCIN", "MCOUT", "MDSCAN", "PID", "PLB", "RATIO", "REAL", "REALM", "RIN", "SIGSEL", "STA", "STRING", and "SWCH".
- Block List:** A table listing specific blocks with columns for "CP", "COMPOUND", "BLOCK", and "TYPE".
- Compound Properties:** A section for displaying properties of selected compounds, currently showing "<No data to display>".
- Graphical Mapping:** The bottom half of the screen shows a detailed mapping diagram. It features several interconnected blocks: "G_TOWE01:FC01C REFLUX FLOW TWE02 INDICATION AENR" (blue), "G_TOWE01:FC01C REFLUX FLOW TWE02 CONTROLLER PID" (green), "G_FC01C:PV CP002C_IP21 10GETDEF Infoplus.21" (yellow), "G_FC01C:SP CP002C_IP21 10GETDEF Infoplus.21" (yellow), and "CP002C_ECB:915201L NO DESCRIPTION ECB2" (white). Colored lines represent data flow between these blocks.

The interface includes a "Generate Map" sidebar on the left with options for "DMCplus", "Infoplus.21", and "Triconex MSW". At the bottom, there are navigation buttons for "Save As...", "Print Preview", "Overview", and a "Zoom" slider. The status bar at the bottom right shows "87%" zoom and "Português (Brasil)" language setting.

foxray™ - Graphical Mapping of LOGIC / MATH / CALC & CALCA blocks

Viewer Manager

Calc & Calca List

CP	COMPOUND	BLOCK	TYPE
CP501A	AUTOPRBS	MV1	CALC
CP501A	AUTOPRBS	MV2	CALC
CP501A	AUTOPRBS	MV3	CALC
CP501A	AUTOPRBS	MV4	CALC
CP501A	AUTOPRBS	MV5	CALC
CP501A	AUTOPRBS	MV6	CALC
CP501A	AUTOPRBS	MV7	CALC
CP501A	AUTOPRBS	MV8	CALC
CP501A	AUTOPRBS	SWITCH	CALC
CP201A	CA201ALIM	FC06SAUX	CALCA
CP201A	CA201ALIM	FC065LOG	CALCA
CP201A	CA201ALIM	FC068LOG	CALCA
CP201A	CA201ALIM	FC103LOG	CALCA
CP201A	CA201ALIM	FD1073MEAS	CALCA
CP201A	CA201ALIM	FX182MEAS	CALCA
CP201A	CA201ALIM	HS002LOG	CALCA
CP201A	CA201ALIM	HS013LOG	CALCA

Block Properties

Param	Value
CP	CP201A
COMPOUN	CA201ALIM
BLOCK	FC103LOG
TYPE	CALCA
DESCRP	LOGICA INTERLOCK FC103
PERIOD	2
PHASE	6
LOOPID	3201FC103
RI01	CA201ALIM:PI106.PNT
RI02	0.0
RI03	0.0
RI04	0.0
RI05	0.0
RI06	1000.0
RI07	25.0
RI08	100.0
BI01	0
BI02	0
BI03	0
BI04	0
BI05	0
BI06	0
BI07	0
BI08	0
BI09	0
BI10	0
BI11	0
BI12	0

Calc & Calca Mapping

Generate Map
Expand All Map
Goto Step: 1

35%

Ladder Viewer HLBL Viewer Calc & Calca Viewer Logic Viewer Math Viewer

foxray™ - Integrity checks to find configuration problems in your system like: missing references, multiple I/O reads and writes, etc...

Integrity Checks

Missing Tags References | Missing Displays References | Missing Historian References | Missing Modular Keyboard References | Missing Referenced Displays

Missing References Between CBP

CP	COMPOUND	BLOCK	PARAMETER	REF COMPOUND	REF BLOCK	REF PARAMETER	REF EXT
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ56	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ54	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ55	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ53	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ51	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ52	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ56	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ56	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ52	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ53	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ54	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ55	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ51	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ55	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ56	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ55	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ55	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ54	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ53	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ52	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ51	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ54	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ54	ACTIVE	
CP502A	CA502CAUS	RSEQ_ALL	SEQ	CA502FCD	RSEQ57	ACTIVE	

Missing References | Inactive Tags | Tags in Manual/Local | Alarm Integrity | Database Integrity | Peer to Peer Connections

Multiple FBM Reads and Writes | Infoplus.21 Missing References | DMCplus Missing References

foxray™ - Change Tracking: Complete tracking of changes to configuration including tags modified, created & deleted

The screenshot shows the 'Change Tracking' application window. It features a left-hand navigation pane with 'Public Sets' and 'User Sets'. The main area displays a table of changes for a selected dataset, with columns for Modification Time, CP, Compound, Block, Parameter, Old Value, and New Value. Below the table, there are sections for 'Created Tags for Selected DataSet' and 'Deleted Blocks for Selected DataSet', with the latter currently showing '<No data to display>'. A search filter is visible at the top right of the main area.

MODIFICATION TIME	CP	COMPOUND	BLOCK	PARAMETER	OLD VALUE	NEW VALUE
2003-08-29	CP002B	C_TOWE02_V	FI11F	HSC01	7.11	9.85
2003-09-18	CP004A	LPG_BLEND	522F5T1J	HSC01	100.0	5.74
2003-09-18	CP004A	LPG_BLEND	57FI20J	HSC01	100.0	9.38
2003-09-18	CP004A	LPG_BLEND	522F5Q1J	HSC01	100.0	2000.
2003-08-29	CP002B	C_TOWE02_V	FI11F	HSC01	7.11	9.85
2003-09-18	CP004A	LPG_BLEND	522F5T1J	HSC01	100.0	5.74
2003-09-18	CP004A	LPG_BLEND	57FI20J	HSC01	100.0	9.38
2003-09-18	CP004A	LPG_BLEND	522F5Q1J	HSC01	100.0	2000.
2003-09-18	CP004A	LPG_BLEND	57E220J	HSC01	100.0	2000.

OBS: deleted tags are documented and they can be reloaded into the DCS if needed (ex: deleted by accident)

foxray™ is a tool which centralizes various functions related to electronic documentation and system management of the Foxboro I/A DCS.

foxray™ users recognise the following Improvements (continued):

- Process operator effectiveness – with comprehensive Alarm Management and Operator Actions analysis tools
 - Dynamic Statistics compares actual alarm history to EEMUA or plant specific standards.
 - Configured Alarm list for priority analysis
 - Alarm Integrity – Duplicates, Crossed Alarms, etc.
 - Operator Actions Analysis – Improve controls where Operators are acting

foxray™ - Alarm Management: Create filters for analysis of alarm load (per Controller, Station, Operator, etc...)

The screenshot displays the 'Alarm Statistics' application window. On the left, a tree view shows 'Public Sets' and 'User Sets' with various alarm categories like 'DAILY ALARMS AREA 122' and 'WEEKLY ALARMS AREA 02'. The main area is divided into 'Parameters' and 'Filters' sections. The 'Parameters' section includes fields for 'SET NAME' (set to 'ALL'), 'DATE RANGE' (with 'Start Date Time' and 'End Date Time' dropdowns), 'Public Set' checkbox, 'PERIOD' (with radio buttons for 'ALL DATA', 'USER DEFINED', and 'LAST'), and a 'LAST...' dropdown (set to '1' and 'Years'). Below this are tabs for 'Alarms Per Time Period', 'Chattering Alarms', 'Flooding Alarms', 'Standing Alarms', 'Time to Acknowledge', and 'Schedule'. The 'Filters' section features a table with columns for 'Fields', 'Operator', and 'Filter'. The 'Fields' list includes 'Alarm_Description', 'Alarm_Value', 'AlarmType', 'ALM_RTN', 'Block', 'Compound', 'Description', 'Eng_Unit', and 'Name'. The 'Operator' list includes '<', '<>', '=', '>', 'LIKE', and 'NOT LIKE'. The 'Filter' field contains '%'. Below the table are 'Clear Filter' and 'Add Filter' buttons, and an 'Advanced Filter' checkbox. A yellow highlighted area below the filter table shows the text 'Compound LIKE "35%"'. At the bottom right of the main area are 'Cancel' and 'Save' buttons. The bottom of the window has a tabbed interface with 'General', 'Raw Alarms', 'Most Frequent Alarms', 'Alarms Per Time Period', 'Chattering Alarms', 'Flooding Alarms', 'Standing Alarms', 'Time to Acknowledge', 'Inhibited Alarms', and 'Configured Alarms'.

foxray™ - Alarm Management: Flooding Alarms

Alarm Statistics

Public Sets
 User Sets

- ALL
- DAILY ALARMS AREA 122 - (LAST 12 M...
- DAILY ALARMS AREA 21/22/23/24 - (1...
- DAILY ALARMS AREA 89 - (LAST 12 MO...
- DAILY ALL ALARMS (LAST 6 MONTHS)
- WEEKLY ALARMS AREA 02 - (LAST 6 MC...
- WEEKLY ALARMS AREA 03/04/05 - (LA...
- WEEKLY ALARMS AREA 122 - (LAST 6 M...
- WEEKLY ALARMS AREA 21/22/23/24 -

ALL
 From: 2003-11-21 11:15:32
 To: 2007-02-05 09:08:41

Flooding Alarms for Selected Dataset

BEGIN FLOODING	END FLOODING	OCCURENCES	DURATION (Minutes)
2005-01-19 16:30:00	2005-01-19 18:30:00	700	120
2005-10-28 21:40:00	2005-10-29 00:00:00	632	140
2005-12-09 10:50:00	2005-12-09 14:20:00	604	210
2004-02-07 01:20:00	2004-02-07 02:00:00	522	40
2005-09-12 11:20:00	2005-09-12 12:00:00	494	40
2005-10-29 07:20:00	2005-10-29 09:10:00	347	110
2004-06-03 12:30:00	2004-06-03 12:50:00	332	20
2006-02-15 10:30:00	2006-02-15 10:40:00	278	10
2004-03-28 03:10:00	2004-03-28 03:50:00	271	40
2004-04-21 15:00:00	2004-04-21 16:00:00	267	60
2004-09-01 21:30:00	2004-09-01 22:00:00	262	30
2004-03-24 19:10:00	2004-03-24 19:40:00	250	30
2005-10-29 16:30:00	2005-10-29 17:20:00	239	50
2005-01-19 19:50:00	2005-01-19 21:10:00	217	80
2004-09-02 18:50:00	2004-09-02 19:20:00	214	30
2005-09-12 20:20:00	2005-09-12 20:40:00	186	20
2004-01-12 17:20:00	2004-01-12 17:40:00	185	20
2003-12-19 14:40:00	2003-12-19 15:10:00	179	30
2004-05-17 12:10:00	2004-05-17 12:30:00	178	20
2004-03-08 12:30:00	2004-03-08 12:50:00	172	20
2004-03-08 12:00:00	2004-03-08 12:20:00	171	20
2004-09-01 20:30:00	2004-09-01 20:50:00	167	20
2005-09-12 15:20:00	2005-09-12 15:40:00	161	20
2004-09-02 21:50:00	2004-09-02 22:10:00	161	20
2003-12-16 13:40:00	2003-12-16 14:20:00	153	40
2005-10-29 09:30:00	2005-10-29 10:00:00	149	30

foxray™ - Alarm Management: Configured alarms

Alarm Statistics

Configured Alarms

ALARM TYPE ▲▼

CP COMPOUND BLOCK PARAMETER DESCRIPTION TYPE ALARM TYP PRIORITY DEAD BAND GROUP

+ ALARM TYPE : BAD (2439)
 + ALARM TYPE : HHA (249)
 - ALARM TYPE : HMA (813)

CP	COMPOUND	BLOCK	PARAMETER	DESCRIPTION	TYPE	ALARM TYP	PRIORITY	DEAD BAND	GROUP
CP001A	BLEND_TANK_1	MASC5P	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASC6A122P	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASC6C8A22	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASC7A122P	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASC9P	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASNAFTAP	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_1	MASPFEP	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_2	MASC5I	HABLIM	TOTALIZER	ACCUM	HMA	2		1
CP001A	BLEND_TANK_2	MASC6A122P	HABLIM	TOTALIZER	ACCUM	HMA	2		1

Alarms per Priority

Priority	Number of Alarms	Percentage
1	4,000	73.82%
2	1,100	20.61%
3	200	4.73%
4	100	0.84%

Alarms per Type

Type	Number of Alarms	Percentage
BAD	2,439	44.39%
STA	1,100	21.13%
HMA	813	14.8%
LMA	650	12.36%
HHA	249	4.53%
LLA	249	2.44%
HOA	100	0.2%
LOA	100	0.09%
ROC	100	0.05%

Inhibited Alarms

General | Raw Alarms | Most Frequent Alarms | Alarms Per Time Period

Configured Alarms

Chattering Alarms | Flooding Alarms | Standing Alarms | Time to Acknowledge

foxray™ - Operator Actions Analysis: Most Frequent Actions

Change Tracking

Operation Action Journal

General | Raw OAJ | **Most Frequent OAJ** | OAJ Per Time Period

Print Preview | Export to Excel

SETPOINT CHANGES (LAST YEAR) | Where Parameter LIKE 'SPT'

From: 2004-02-06 09:12:57
To: 2007-02-05 09:12:57

Public Sets
User Sets
DAILY ACTIONS AREA 02 (LAST 6 MONTHS)
DAILY ACTIONS AREA 03/04/05 (LAST 6 MONTHS)
DAILY ACTIONS AREA 122 (LAST 6 MONTHS)
DAILY ACTIONS AREA 21/22/23/24 (LAST 6 MONTHS)
SETPOINT CHANGES (LAST MONTH)
SETPOINT CHANGES (LAST YEAR)

Default Plot 10

Frequent OAJs for Selected Dataset

COMPOUN	BLOC	PARAMET	# of ACTION	% of ACTION	% ACCUM
G_TOWE02	FC06U	SPT	577	14.6076	14.6076
G_TOWE01	FC01C	SPT	221	5.5949	20.2025
G_TOWE01	FC02U	SPT	173	4.3797	24.5822
G_TOWE01	FC05U	SPT	164	4.1519	28.7341
H_TOWE01	FC01U	SPT	147	3.7215	32.4556
G_TOWE05	LC08D	SPT	127	3.2152	35.6708
A_TOWE02	FC44Y	SPT	125	3.1646	38.8354
G2_TOWE01	FC02F	SPT	102	2.5823	41.4177
B_TOWE01	FC06T	SPT	93	2.3544	43.7721
G2_PUMP07	TC28W	SPT	91	2.3038	46.0759
I_TOWE01	LC07L	SPT	89	2.2532	48.3291
A_TOWE06	FC34Y	SPT	86	2.1772	50.5063
A_TOWE05	LC15H	SPT	80	2.0253	52.5316
G_TOWE01	FC03U	SPT	75	1.8987	54.4303
F_REAC01	FC05Q	SPT	68	1.7215	56.1518
A_TOWE03	FC19P	SPT	63	1.5949	57.7467

Most Frequent Operation Actions by Set

Setpoint	Number of Actions	% Accumulated
G_TOWE02:FC06U SPT	577	31.7%
G_TOWE01:FC01C SPT	221	12.14%
G_TOWE01:FC02U SPT	173	9.51%
G_TOWE01:FC05U SPT	164	9.01%
H_TOWE01:FC01U SPT	147	8.08%
G_TOWE05:LC08D SPT	127	6.96%
A_TOWE02:FC44Y SPT	125	6.87%
G2_TOWE01:FC02F SPT	102	5.6%
B_TOWE01:FC06T SPT	93	5.11%
G2_PUMP07:TC28W SPT	91	5%

Configuration Modifications | **Operator Action Journal**

foxray™ users recognise the following Improvements (continued):

- Enhanced Root Cause Analysis of Process and System abnormal conditions
 - Alarm History – Sort, Analysis and Maintenance tools
 - Merges alarms and operator actions for better analysis
 - Add comments to any tag
 - List of Inhibited Devices
 - Various System ERROR Checks
 - Controller Performance Statistics for System Health – overruns, etc
 - MESH Monitoring
 - Advance Queries – Query the system for just about anything for any condition,
note: have e-mail alerts – PROACTIVE SYSTEM.

foxray™ - Operator actions listed per Tag showing where, when and what parameters were changed

TimeWare foxray - Database Updated on 2007-02-19

File Tools General System Info System Management Add-ons Help

Foxboro Network: DEMO Max Alarms, OAJs and Changes Results: 100

CP002C > H_TOWE01 > FC01U 3/12/2007 4:43:51 PM

Foxboro Network

Compound List

CP	COMPOUNDS
ALL	COMPOUNDS
CP002B	AL_ENCLOSURES
CP001C	ANALIZERS
CP001B	APC_A_UNIT
CP002A	APC_C_UNIT
CP001C	A_BULK01_V
CP001R	A_DESP01

Blocks Types

Type
ECB2
ECB200
ECB201
ECB4
ECB73
ECB74
ECB8
ECBP
ECBPG
GDEV
IND
LOGIC
LONG
MAIN
MATH
MCIN
MCOUT
MDSCAN
PID

Block List

CP	COMPOUND	BLOCK	TYPE
CP002A	C_VESS05	0CFF11V	PID
CP002A	G2_TOWE02	2CFF11W	PID
CP002C	H_TOWE01	3CDT10BU	PID
CP002C	H_TOWE01	3CDT10U	PID
CP002A	C_VESS04	3CFF10E	PID
CP004A	LPG_BLEND	522CF512J	PID
CP002A	G2_MINE02	5501ZC10	PID
CP002A	G2_MINE02	55FC010	PID
CP002A	G2_PUMP07	5CFF11W	PID
CP002A	G2_TOWE03	6CDT100	PID
CP003C	B_FEED01	FC01B	PID
CP002C	G_TOWE01	FC01C	PID
CP001B	A_TOWE01	FC01G	PID
CP003C	I_FURN01	FC01L	PID
CP002C	H_TOWE01	FC01U	PID
CP004A	J_FEED01	FC01Z	PID
CP003B	F_REGE01	FC01Z	PID
CP003C	I_REAC01	FC01Z	PID
CP002A	C_VESS01	FC02E	PID

Block Properties

Para	Value
CP	CP002C
COMPOUND	H_TOWE01
BLOCK	FC01U
TYPE	PID
DESCR	RECYCLE FLOW TWD7 CONTROLLER
PERIOD	2
PHASE	0
LOOPID	FC01U
MEAS	:F01U.PNT
HSCI1	54.843
LSCI1	0.0
DELTI1	1.0
EI1	T/H
PROPT	0
SPT	42.348430634
FBK	:FV01U.BCALCO
MODOP	4
PBAND	150.0
INT	0.5
DERIV	0.0
KD	10.0
INCOPT	0
HSCO1	100.0
ISCO1	0.0

Operation Action Journal

DATE	STATION	PARAMETER	OLD VALUE	NEW VALUE	HIST
2005-08-03 15:33:29	ST04AW	SPT	36.20	36.00	hist02
2005-08-03 13:56:28	ST01AW	SPT	36.30	36.20	hist02
2005-08-03 11:44:35	ST03AW	SPT	36.50	36.30	hist02
2005-08-03 09:09:32	ST04WP	SPT	36.30	36.50	hist02
2005-08-03 09:03:42	ST04AW	SPT	36.00	36.30	hist02
2005-08-03 08:53:21	ST03AW	SPT	35.80	36.00	hist02
2005-08-03 08:21:12	ST01AW	SPT	35.75	35.80	hist02
2005-08-03 01:45:02	ST03WP	SPT	35.20	35.75	hist02
2005-08-02 20:09:26	ST02WP	SPT	35.40	35.20	hist02
2005-08-02 19:24:43	ST04AW	SPT	35.60	35.40	hist02
2005-08-02 14:05:41	ST04AW	SPT	35.50	35.60	hist02
2005-08-02 09:45:46	ST02WP	SPT	35.30	35.50	hist02
2005-08-02 09:34:08	ST02AW	SPT	35.00	35.30	hist02
2005-08-02 09:26:24	ST02WP	SPT	34.70	35.00	hist02
2005-08-02 08:39:33	ST01WP	SPT	34.50	34.70	hist02
2005-08-02 08:27:52	ST03AW	SPT	34.25	34.50	hist02
2005-08-02 07:19:32	ST03AW	SPT	33.70	34.25	hist02
2005-08-02 01:19:43	ST01AW	SPT	34.00	33.70	hist02
2005-08-02 00:41:58	ST01WP	SPT	33.75	34.00	hist02
2005-08-01 16:28:02	ST02WP	SPT	34.00	33.75	hist02
2005-08-01 16:12:17	ST01AW	SPT	34.50	34.00	hist02

Summary References Alarms Displays OAJ Change Tracking HLBL Viewer PLB Viewer Historian Mapping

Modular Keyboard Manual External Documents Master Alarm DB

foxray™ - Monitor the MESH Network Switches & Ports

Foxray MESH Feature

File | Start Period: 2009-09-16 14:18:45 | End Period: 2009-10-01 14:18:45 | Actual Period: 2009-10-01 14:18:45 | Only Enabled Ports | Per Second | List Exceptions Using Period | Plot Related Port

MESH Switches

- MESH NETWORK
- AROMATICOS
 - 01SW01
 - 01SW02

01SW01 - Enterasys Networks, Inc. A2H124-24FX Rev 02.01.00.0011

Switch Details

Location: sysLocation
Contact: sysContact
Topology Changes: 6
Last Top. Change: 229 days, 21:52:06.00
Root MAC: 001F451307E8
of Services: 2
System Up Time: 229 days, 23:40:35.00

Port Details

ifOutUcastPkts | ifInNUcastPkts | ifOutNUcastPkts | ifInErrors | ifOutErrors | ifInDiscards | ifOutDiscards | ifInUnknownProtos | ifOutQlen | ifSpecific | ifAdminStatus

Actual | Average | Threshold

Exceptions

DateTim	Param	Switch	Port	Value
+ DateTime: 2009-10-01 14:18:45 (330)				

Topology

Switch	Port	Device
01SW01	1	AW1001
01SW01	2	AW2001
01SW01	3	AW3001
01SW01	4	AW4001
01SW01	9	CP1001
01SW01	10	CP1002
01SW01	11	CP1003
01SW01	12	CP1004
01SW01	13	CP1005
01SW01	14	CP1006
01SW01	15	CP1007
01SW01	16	CP1008
01SW01	17	CP1009
01SW01	419	01SW02

Playback Controls

30 FPM
 Reversed
 Moving Average

Absolute Values

Threshold Exceptions

foxray™ - Advanced Queries. Retrieve any information from the system on demand or by scheduled e-mails

The screenshot shows the 'Advanced Query' application window. It has a menu bar with 'Import Query', 'Saved Queries', 'Delete Query', and 'New Query'. Below the menu is a tree view for 'Imported Queries' with sub-items 'Public Queries' and 'User Queries'. The main area is divided into three tabs: 'SQL', 'Tables and Fields', and 'Schedule'. The 'SQL' tab is active, showing a query editor with the text: `SELECT `CP`,`COMPOUND`,`BLOCK`,`TYPE`,`DESCRP`,`PERIOD` FROM `AIN``. There are 'Execute', 'Cancel', and 'ADD' buttons. Below the editor is a 'Query Results' section displaying a table with columns: CP, COMPOUND, BLOCK, TYPE, DESCRP, and PERIOD. The table contains 20 rows of data. At the bottom, there is a 'Query Builder' button and a status bar showing 'Results Returned = 2207'.

CP	COMPOUND	BLOCK	TYPE	DESCRP	PERIOD
CP001B	A_FEED01	FB050	AIN	RECYCLE FLOW TW08 INDICATION	2
CP001B	A_MINE01	B1_NRCATEETA	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	43_NRCATEET_	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	3_NRCATEEV4	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	AEDHP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	1_BTCP8P	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	CA2_BTCP0B	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	2_BTCP3P	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	FUFRP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	IISLCP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	F_DBPEP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	F_BBREP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	ARCDB_AGP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	1SLTEI_COP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	1SDB_C3P	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	ONFDB_UDP	AIN	NO DESCRIPTION	2
CP001B	A_MINE01	ONFAGAU_UD	AIN	NO DESCRIPTION	2

foxray™

You have only seen half of what foxray can do!