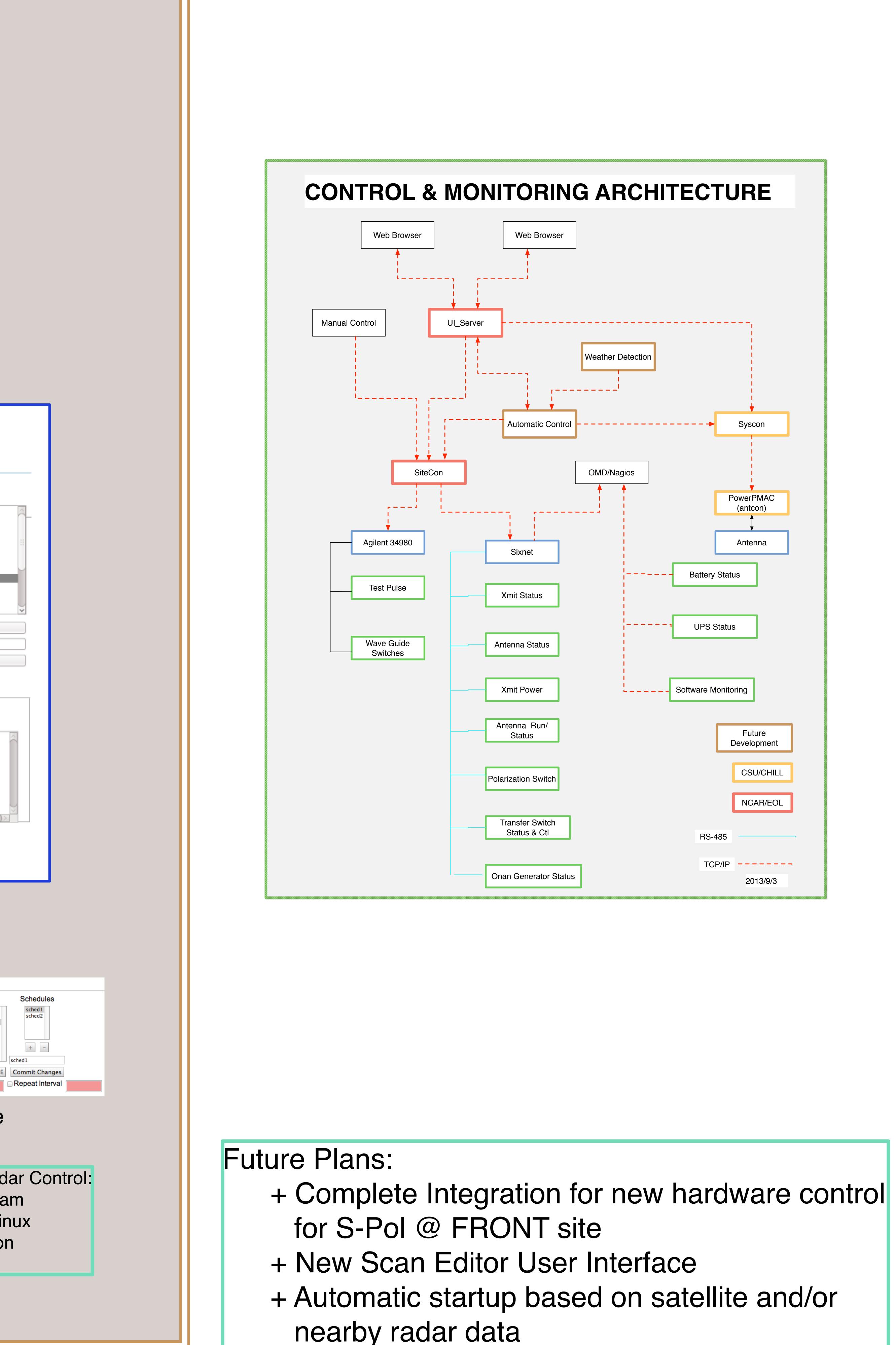


	C	ONTRO		
NC	AR SPOLKA	CSU-CHILL		
Fie Run Abort (C	Current: 2011-Aug	-11 17:59:15 Неlp рск <u>Lo</u>g	gout	
PPI RHI SUR Point Sc	hedule Special			
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usect vhsppi	Est. Time	02:36	one360 pck_gust rain11	VHxb VHxbcf Vcf128h
	Max Duration		rain_5 swps2 swps3	bluesky cwcal ice_SUR
+ ! item in use! ppi_pck	Follow Mode	None		+ · · · · · · · · · · · · · · · · · · ·
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		-Scan Status		
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SCANINING.	Transmitter	<((
	Web E	Based Rada	r Control	
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Bottom 0 Center 15.0 Range 30.0		PPI RHI S	SUR Point Control Schedule Sp RHI SUR Po	ecial SiteCon
Fill		ppi1 ppi2	rhi1sur1blueskyrhi2sur2stow	
				Total: 04:46 Insert IDLE
	el OK			Start Time
Editing an Ar	ngle List	E	Editing a Tasł	< Schedule
Capabilities:		Adva	intages of a We	b Based Bad
+ Create and run radar sca	ans		+ No need to ir	
+ Create sequences(sched	dule) of scans		+ Run on Wind	ows, Mac, Lir
+ Change polarization mod			+ Local or Rem	note Operatio
 + Monitor basic radar oper + Turn radar transmitter on 				
+ Tunnauar transmitter on				

A New Radar Control System for NCAR/EOL S-POL and CSU-CHILL ColoradC

Joe VanAndel and David Brunkow

National Center for Atmospheric Research/Colorado State University-CHILL



CK_<mark>∭≾</mark>_v1.1.10 Hosts Problems Unhandled stateHostIconsAliasOKWaUnCrPdUPengImage: Amount of the stateeng190000UPsixnet1Image: Amount of the stateSixnet1Image: Amount of the stateAliasOKWaUnCrPdUPsci1Image: Amount of the stateImage: Amount of the state vices Problems Unhandled State Host Icons Allas OK Wa Oh Cr Point UP control Image: I

What do we monitor?

Site Equipment:

- + Antenna
- + Transmitter
- + Generator
- + UPS & Batteries
- + Site temperatures

14 different computers:

- + Product Generation
- + Arrival of Satellite Datasets
- + CPU Load
- + Disk Space

What are the benefits of monitoring? + automatic scanning of >700 checks

- + allows unattended operation
- reducing labor costs for a field project
- + quickly detect problems in a complex hardware/software system
- + computers are better than people at detecting problems - 24x7 coverage
- + improves data quality
- + improves up-time

Web Based System Monitoring



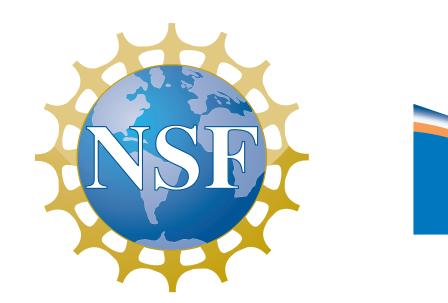
Delta TAU Power **PMAC** Motion Controller



SIXNET : Embedded Linux computer for control and monitoring.

Hardware for Control and Monitoring of SPOLKA

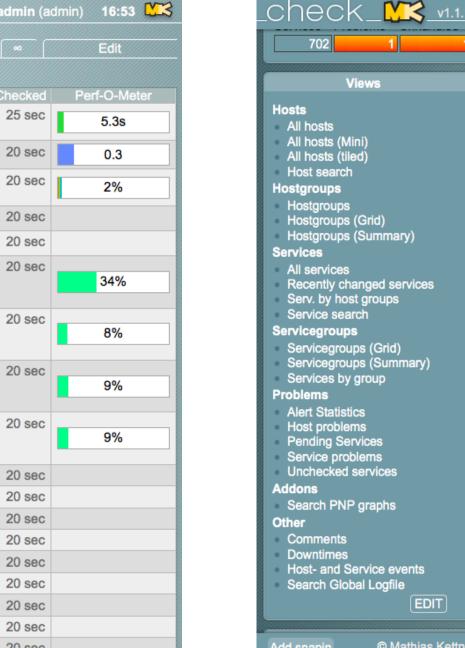
NCAR/EOL P.O. Box 3000 Boulder, CO 80307 http://www.eol.ucar.edu Authors email: vanandel@ucar.edu, David.Brunkow@colostate.edu

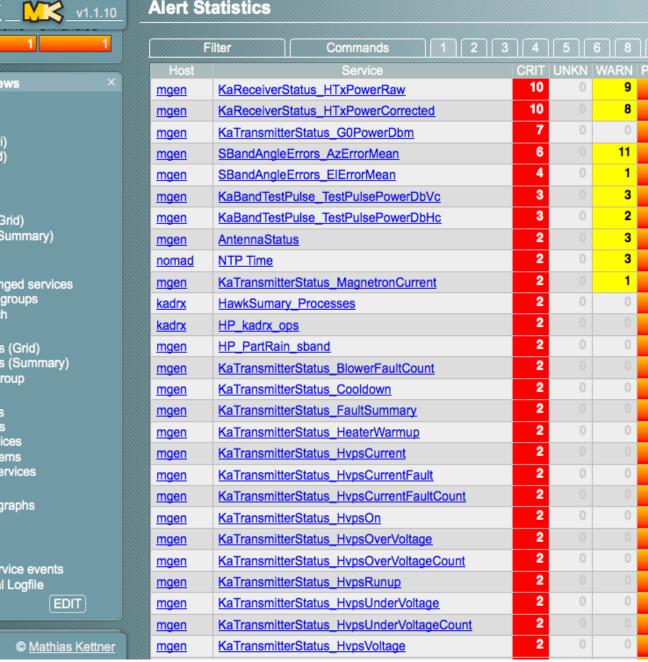


Acknowledgements: The National Center for Atmospheric Research and CSU-CHILL are sponsored by the National Science Foundation. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

MONITORING

							ome	Jadmin (a	dmin) 16:53 🕰	
Commands	Display			5	6	8 30 s	60 s 90 s	∞ [Edit	
Service		Status detail				Icons	Age	Checked	Perf-O-Meter	
2		OK - Agent version 1.1.10, execution time 5.3 sec			3 💈	28 hrs	25 sec	5.3s		
	ОК	- 15min Load	0.40 at 1	6 CPL	ls	S	28 hrs	20 sec	0.3	
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ad	OK	OK - 0.0MB/s (in last 60 secs)				S	28 hrs	20 sec		
rite	ОК	- 0.2MB/s (in	last 60 se	ecs)		<u>8</u>	28 hrs	20 sec		
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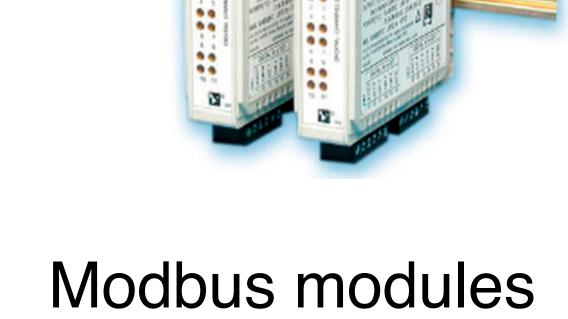
Web Based Monitoring of Site, Radar, Computers

Where have we used this? + CSU-CHILL (Since July 2010) + NCAR-SPOLKA (Since July 2010)

NCAR/EOL successfully used this hardware/software for the DYNAMO project for 3.5 months in the Maldives (October 2011 - January 2012).

Notifications: + Text Message + Email

and set



for control and monitoring.



Cell Modem for **Trouble Notiifications**

