

Baler44 data retrieval

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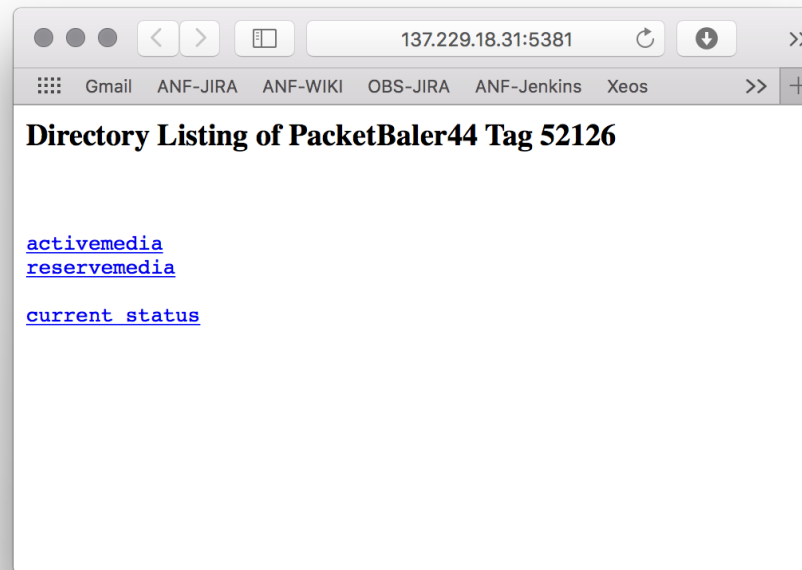
April 12-13, 2016

Palm Springs, CA

Access to the files

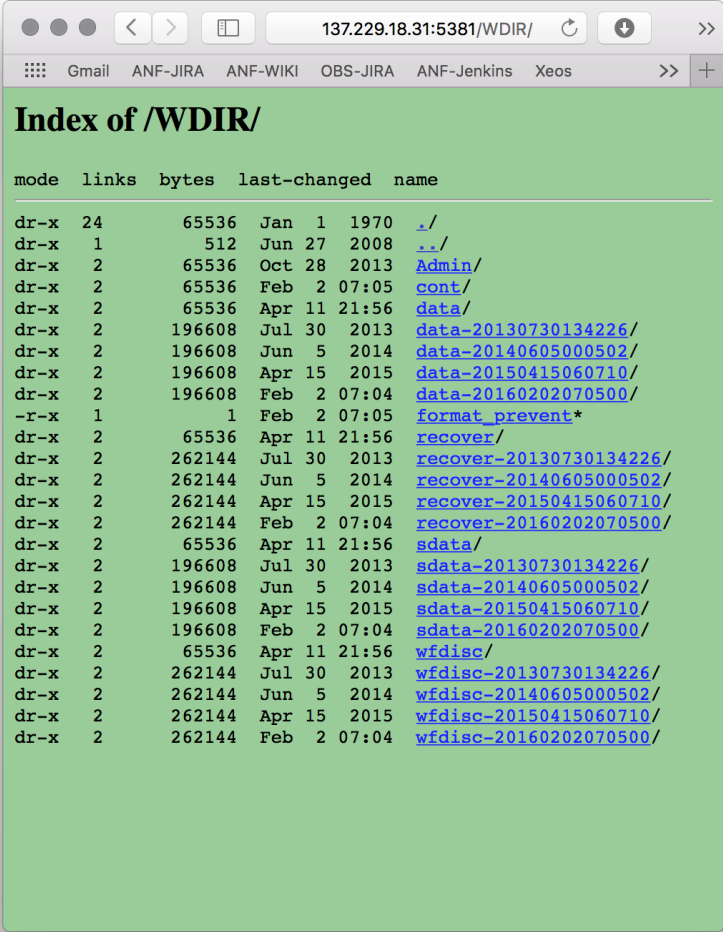
All communications to the stations are over HTTP port.

<http://137.229.18.31:5381>



Access to the files

Listing of all available files and MD5 checksums of them



The screenshot shows a web browser window with the address bar displaying '137.229.18.31:5381/WDIR/'. The browser's tab bar includes links for 'Gmail', 'ANF-JIRA', 'ANF-WIKI', 'OBS-JIRA', 'ANF-Jenkins', and 'Xeos'. The main content area is titled 'Index of /WDIR/' and displays a table of directory entries. Each entry includes its mode, number of links, size in bytes, last modification date and time, and the file name. The file names are hyperlinks to various subdirectories and files, including 'Admin/', 'cont/', 'data/', 'data-20130730134226/', 'data-20140605000502/', 'data-20150415060710/', 'data-20160202070500/', 'format_prevent*', 'recover/', 'recover-20130730134226/', 'recover-20140605000502/', 'recover-20150415060710/', 'recover-20160202070500/', 'sdata/', 'sdata-20130730134226/', 'sdata-20140605000502/', 'sdata-20150415060710/', 'sdata-20160202070500/', 'wfdisc/', 'wfdisc-20130730134226/', 'wfdisc-20140605000502/', 'wfdisc-20150415060710/', and 'wfdisc-20160202070500/'.

mode	links	bytes	last-changed	name
dr-x	24	65536	Jan 1 1970	./
dr-x	1	512	Jun 27 2008	../
dr-x	2	65536	Oct 28 2013	Admin/
dr-x	2	65536	Feb 2 07:05	cont/
dr-x	2	65536	Apr 11 21:56	data/
dr-x	2	196608	Jul 30 2013	data-20130730134226/
dr-x	2	196608	Jun 5 2014	data-20140605000502/
dr-x	2	196608	Apr 15 2015	data-20150415060710/
dr-x	2	196608	Feb 2 07:04	data-20160202070500/
-r-x	1	1	Feb 2 07:05	format_prevent*
dr-x	2	65536	Apr 11 21:56	recover/
dr-x	2	262144	Jul 30 2013	recover-20130730134226/
dr-x	2	262144	Jun 5 2014	recover-20140605000502/
dr-x	2	262144	Apr 15 2015	recover-20150415060710/
dr-x	2	262144	Feb 2 07:04	recover-20160202070500/
dr-x	2	65536	Apr 11 21:56	sdata/
dr-x	2	196608	Jul 30 2013	sdata-20130730134226/
dr-x	2	196608	Jun 5 2014	sdata-20140605000502/
dr-x	2	196608	Apr 15 2015	sdata-20150415060710/
dr-x	2	196608	Feb 2 07:04	sdata-20160202070500/
dr-x	2	65536	Apr 11 21:56	wfdisc/
dr-x	2	262144	Jul 30 2013	wfdisc-20130730134226/
dr-x	2	262144	Jun 5 2014	wfdisc-20140605000502/
dr-x	2	262144	Apr 15 2015	wfdisc-20150415060710/
dr-x	2	262144	Feb 2 07:04	wfdisc-20160202070500/

Access to the files

Compressed list of files in memory

<http://166.241.252.233:5381/stats.html>

Media File Lists

list.active.Admin.gz,70
list.active.cont.gz,128
list.active.data-20130111142656.gz,10175
list.active.data.gz,3008
list.active.gz,36
list.active.recover-20130111142656.gz,10226
list.active.recover-20130111142656.other-20120222225649.gz,20
list.active.recover.gz,3096
list.active.sdata-20130111142656.gz,10441
list.active.sdata.gz,3081
list.active.wfdisc-20130111142656.gz,10308
list.active.wfdisc.gz,3184
list.reserve.Admin.gz,63
list.reserve.cont.gz,98
list.reserve.data.gz,150
list.reserve.gz,36
list.reserve.recover.gz,163
list.reserve.sdata.gz,158
list.reserve.wfdisc.gz,151

File downloading process

There are multiple applications adding files to the archive.

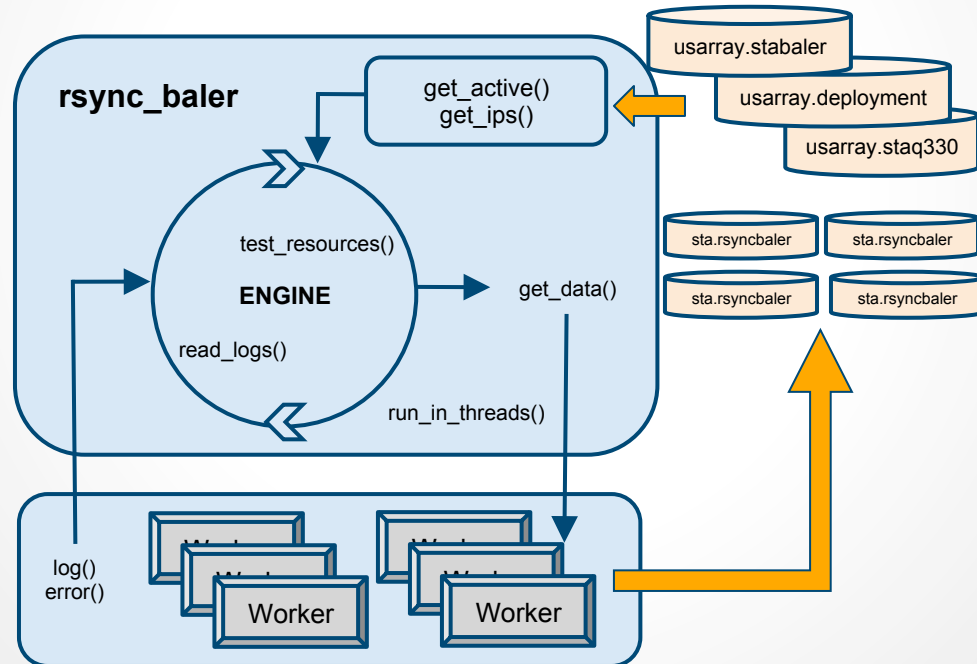
- Automatic download from the field
- Uploads from AOF (Passcal)
- Uploads from AOC (Alaska)
- Manual Baler downloads at ANF (San Diego)

I. Clean the databases.

- a. Correlate the list of files in the local directory with the database
- b. Verify each file metadata with the database parameters
 - i. size
 - ii. folder
 - iii. md5 (try to download them if missing)
 - iv. file permissions
 - v. station name

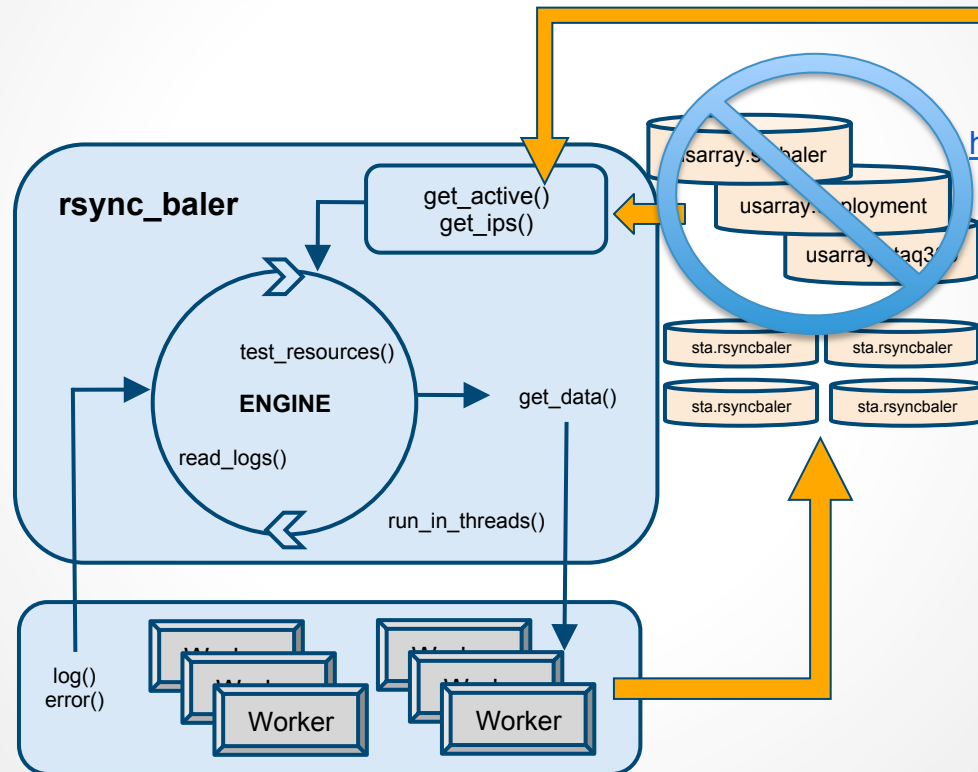
File downloading process

II. Now we can start downloading files



File downloading process

II. Now we can start downloading files



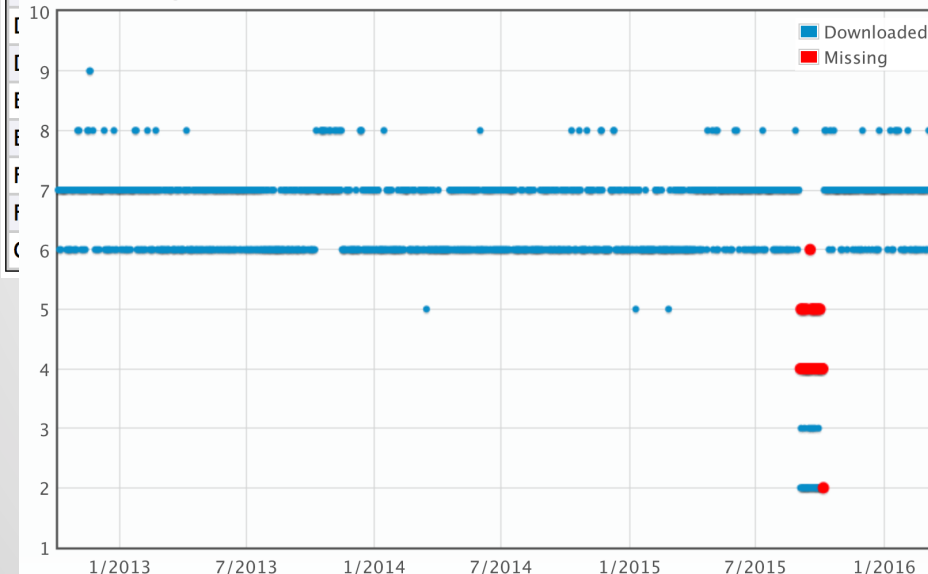
Reporting

https://anf.ucsd.edu/admin/tools/baler44_files/baler44.php

Baler44 data retrieval [click row to open details]

Station	Missing	Downloaded	Median BW	7 days	30 days	Last File	Downloaded On (YYYY-MM-DD)
109C	0	30577	78.5	0	359.38	TA-109C_4-20160318003435	2016-03-19
121A	0	9028	84.5	0	148.44	TA-121A_4-20160318023725	2016-03-18
214A	0	20140	18.7	0	277.34	TA-214A_4-20160317232326	2016-03-18
435B	0	6992	71.5	0	101.56	TA-435B_4-20160319035013	2016-03-19
833A	0	6143	55	0	85.94	TA-833A_4-20160319044406	2016-03-19
A04D	0	20604	49.7	0	253.91	TA-A04D_4-20151018024706	2016-03-15
A21K	779	2668	33.1	0	875	TA-A21K_4-20160122143354	2016-03-12
A36M	0	4839	41.6	0	167.97	TA-A36M_4-20160319024837	2016-03-19
ABTX	0	10143	36.1	0	195.31	TA-ABTX_4-20160318235322	2016-03-19
B05D	263	18997	56.8	0	1285.16	TA-B05D_4-20160319005307	2016-03-19
BGNE	0	10886	88	0	238.28	TA-BGNE_4-20160319002025	2016-03-19
POKR						160318213609	2016-03-19

(Click point to get date.

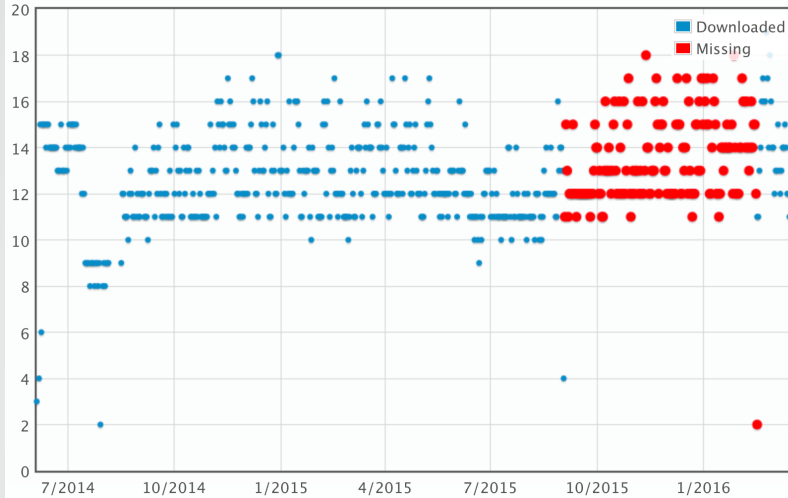


Element	Value
Status	Active
VNET	TA
IP	74.198.18.156:5381
Downloaded	588
Last Download	TA-G55A_4-20130417201826
Downloaded on	2013-04-18
Last 30 days	347.66 Mbytes
Last 7 days	85.94 Mbytes
Highest Bandwidth	40.7 kbps
Median Bandwidth	39.5 kbps
Average Bandwidth	39.4 kbps
Lowest Bandwidth	24.1 kbps

Reporting

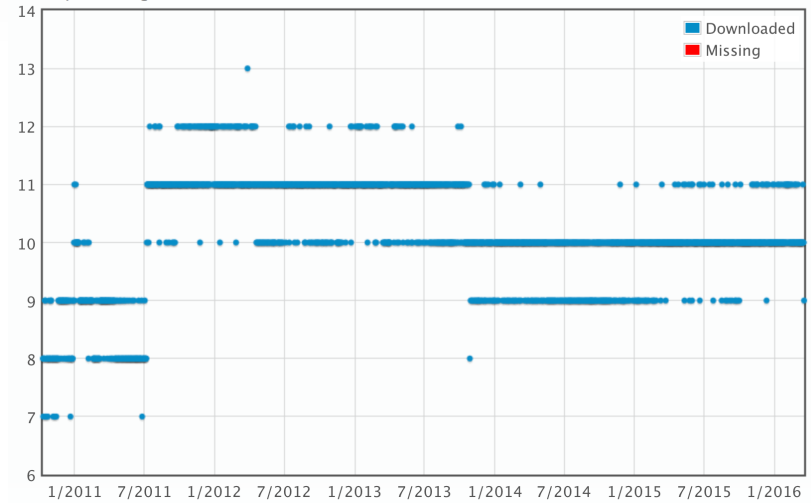
Q23K

Click point to get date.



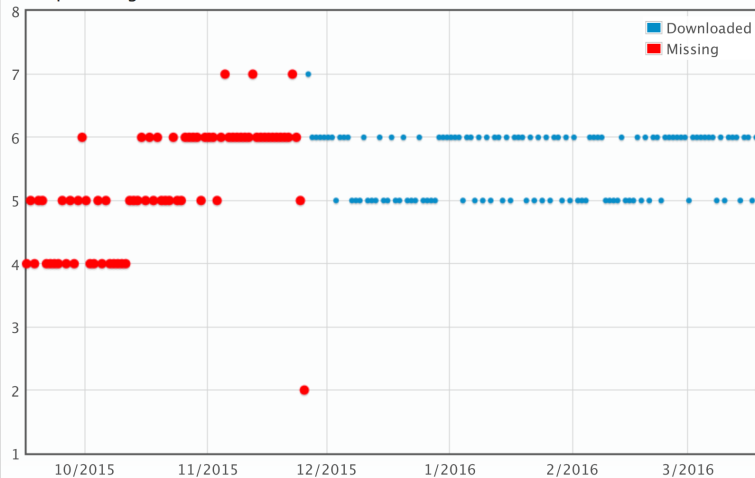
214A

Click point to get date.



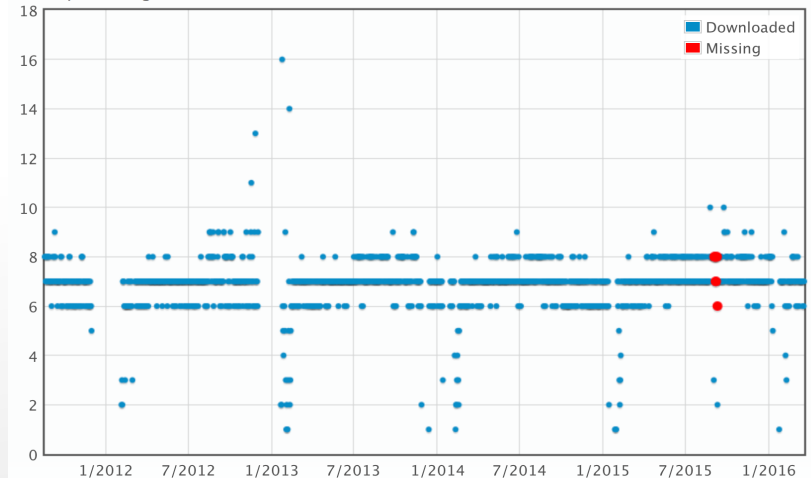
N31M

Click point to get date.



TOLK

Click point to get date.



Bandwidth usage:

Testing the download of 4000Kb files...

Station transmitted-Mbytes	Connection	FileSize	Total-
240A	Verizon	4000Kb	4.22
109C	Internet	4000Kb	4.24
348A	ATT	4000Kb	4.22
H31A	AllTel	4000Kb	4.23
C39A	WildBlue	4000Kb	4.23
F33A	Verizon	4000Kb	4.23

Status page

There is a link to visit the HTTP Baler page on this window.



https://anf.ucsd.edu/admin/baler_status/

Baler44 status.html[click row to open details]						
Station	page load (UTC)	Last Baler Reboot	Baler Reboots	Baler Runtime (days)	Q330 Boots	Q330 Last Reboot
109C	2016-04-10 08:39:10	2015-02-17 01:05:14	158	418.31	126	2013-08-27 07:01:12
121A	2016-04-10 08:39:11	2016-02-28 19:46:17	1284	41.54	155	2016-02-27 22:01:12
214A	2016-04-10 08:39:27	2015-06-30 16:12:21	65	284.68	172	2015-06-30 17:01:12
435B	2016-04-10 08:39:37	2016-01-26 17:40:28	446	74.62	167	2016-01-26 17:01:12
833A	2016-04-10 08:39:38	2016-01-22 20:15:19	205	78.51	143	2016-01-22 20:01:12
A04D	2016-04-10 08:39:39	2015-09-05 19:14:36	83	217.56	50	2015-09-05 19:01:12
A21K	2016-04-10 08:39:43	2016-04-05 22:48:35	433	4.41	99	2016-04-07 09:01:12
A36M	2016-04-10 08:39:45	2015-04-30 17:50:54	47	345.62	26	2015-07-24 00:01:12
ABTX	2016-04-10 08:39:59	2016-02-08 18:46:45	73	61.58	124	2016-02-08 18:01:12
B05D	2016-04-10 08:40:10	2016-03-05 23:32:39	345	35.38	141	2014-11-05 20:01:12
BGNE	2016-04-10 08:40:20	2015-02-18 17:38:18	23	416.62	62	2012-06-07 11:01:12
C06D	2016-04-10 08:40:35	2016-03-03 01:53:46	569	38.28	61	2014-11-02 23:01:12
C36M	2016-04-10 08:40:46	2015-11-07 16:16:53	54	154.68	26	2014-07-09 13:01:12
D03D	2016-04-10 08:40:56	2016-01-28 18:19:12	1026	72.6	205	2016-01-28 18:01:12
D04E	2016-04-10 08:41:10	2015-10-13 20:24:17	434	179.51	418	2015-10-13 20:01:12
E04D	2016-04-10 08:41:23	2016-03-07 22:32:08	305	33.42	126	2014-11-07 20:01:12
EPYK	2016-04-10 08:41:26	2015-02-18 19:29:17	1663	416.55	120	2015-02-13 19:01:12
F04D	2016-04-10 08:41:40	2015-08-28 17:50:32	729	225.62	263	2015-08-28 18:01:12
F05D	2016-04-10 08:41:50	2015-09-29 21:09:41	56	193.48	111	2015-09-29 21:21:49
G03D	2016-04-10 08:42:01	2015-08-27 19:12:08	1133	226.56	145	2015-08-27 19:24:18
G05D	2016-04-10 08:42:05	2015-09-13 18:22:24	478	209.59	195	2015-09-13 18:34:18
H04D	2016-04-10 08:42:16	2015-08-25 18:13:14	138	228.6	108	2015-08-25 18:25:48
H17A	2016-04-10 08:42:26	2016-03-24 02:26:13	72	17.26	140	2012-06-07 12:36:35
H21K	2016-04-10 08:42:30	—	—	—	—	—
H23K	2016-04-10 08:42:49	2016-02-12 02:01:05	111	58.28	226	2016-02-12 02:38:54

252A RAW HTML: ✕

From:2013-09-27 18:03:47

3.6 hours ago

Go to station page now

Reboot folder 1

Reboot folder 2

Status PacketBaler44 Tag 16275 - Station TA-252A

up

Baler Information

Copyright Quanterra, Inc. BALER44-20120425-W tag 16275 at 2013-09-27 18:01:07
 last baler reboot: 2013-09-20 17:17:26 reboots: 70 runtime: 7.030d
 MEDIA GOOD
 MEDIA site 1 crc=0xac3d RESERVE state: READONLY capacity=15264.031Mb free=1.471%
 MEDIA site 2 crc=0x3f54 IN USE state: ACTIVE capacity=15264.031Mb free=96.688%
 upvolts=12.397 primaryvolts=12.746 degc=33.789
 baler cfg options: AUTH=DEFAULT,***
 cpu speed 177
 mseed record generator at 41856 and last flush at 41000
 media elections=1 write thread activations=41 media power ups=110
 routing turns=41 primary records written=41000 secondary records written=4717
 media last write time: 2013-09-27 15:01:12
 last media file written: /mnt/data/TA-252A_4-20130927150058
 SERIAL Q330 connection
 nvbackup file not loaded
 proxy base port: 5330
 public ip discovered: 166.148.56.229
 DNS IP find hits:
 85 0 0 99 98 98 0 100 0
 non-DNS IP find hits:
 2 0 14 1 0 0 1 0 0
 Routing Table:
 Kernel IP routing table
 Destination Gateway Genmask Flags Metric Ref Use Iface
 192.168.33.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0
 127.0.0.0 0.0.0.0 255.0.0.0 U 0 0 0 lo
 0.0.0.0 192.168.33.1 0.0.0.0 UG 0 0 0 eth0
 eth0 Link encap:Ethernet HWaddr 00:D0:69:42:29:0C
 inet addr:192.168.33.2 Bcast:192.168.33.255 Mask:255.255.255.0
 UP BROADCAST RUNNING MULTICAST MTU:1350 Metric:1
 Package Installation Signature:
 d8d8bf1cd75386e88851bf588ecc6c9 b4update-20120425-W-sg.tar.gz
 Program Signature:
 92fec9864b8f224acac7dbb447eabf5f Seneca

Q330 Information

Q330 Serial Number: 010000044C89A26
 ANB Serial Number: 010000044C43636C
 Seismo 1 Serial Number: 0000000000000000
 Seismo 2 Serial Number: 0000000000000000
 QAPCHP 1 Serial Number: 895938
 QAPCHP 2 Serial Number: 895944
 KML Property Tag Number: 3650
 System Software Version: 1.145
 Slave Processor Version: 1.11
 Calibrator Type: QCAL330
 Calibrator Version: 1.8
 Auxiliary Board Type: None
 Clock Type: Motorola M12
 PLD Version: 7.10
 GPS Engine Identification
 SFTW P/N # 61-G10002A
 SOFTWARE VER # 1
 SOFTWARE REV # 8
 CPMWAVE DATE MAY 15 2002

Status page

We read each Baler page every 6 hours and we keep a copy of the page.

General options:

OK Defaults None All

STA page load (UTC) URL Illegal Files

Media Extended:

Media 1 Vendor ID Media 1 Product ID Media 1 Product Revision Media 1 Vendor Media 1 Product Media 1 Serial Media 2 Vendor ID Media 2 Product ID Media 2 Product Revision Media 2 Vendor
Media 2 Product Media 2 Serial

Baler options:

Conf Name Full Tag Firmware Tag num. Tag date Last Baler Reboot Baler Reboots Baler Runtime (days) UPS Volts Primary Volts Temp. (C) Baler cfg Options CPU Speed
MSEED record at MSEED last flush at Primary Recs. Written Secondary Recs. Written Media Last Write Time Last Media File Written Q330 connection PROXY Base Port Public IP Discovered HWAddr

Q330 options:

Q330 Last Boot Q330 Boots Q330 Last Re-Sync Q330 Re-Syncs Digitizer Calibration 1 Digitizer Calibration 1 % Gain Digitizer Calibration 2 Digitizer Calibration 2 % Gain Digitizer Calibration 3
Digitizer Calibration 3 % Gain Digitizer Calibration 4 Digitizer Calibration 4 % Gain Digitizer Calibration 5 Digitizer Calibration 5 % Gain Digitizer Calibration 6 Digitizer Calibration 6 % Gain

EPI options:

MEMS Temp. (C) Humidity % MEMS Pressure (ubar) Analog Input 1 Analog Input 2 Analog Input 3 EP Input Volts Secs Since EP Boot Secs Since EP Re-Sync EP Re-Sync Count EP Time Error
SDDI Devs, Aux I/O Processor ID Models Versions (fw,base,ad) Base S/N ADC S/N

Baler-Q330 options:

Last Data Received Time Connected Total Data Gaps

Media options:

Media Status Media 1 Media 1 ID Media 1 State Media 1 Capacity (Mb) Media 1 Free % Media 2 Media 2 ID Media 2 State Media 2 Capacity (Mb) Media 2 Free %

Questions?