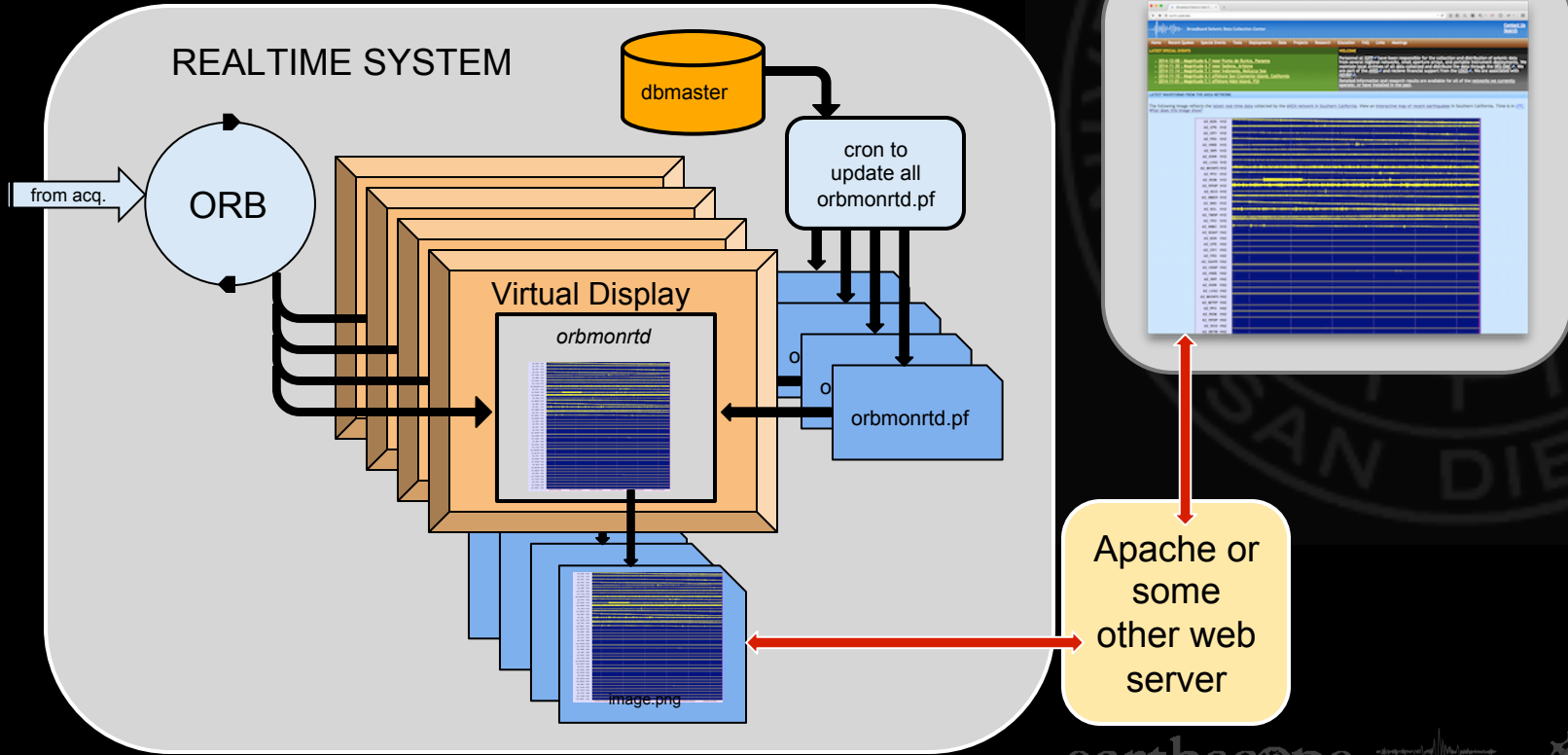


ANF *rtwebserver* setup

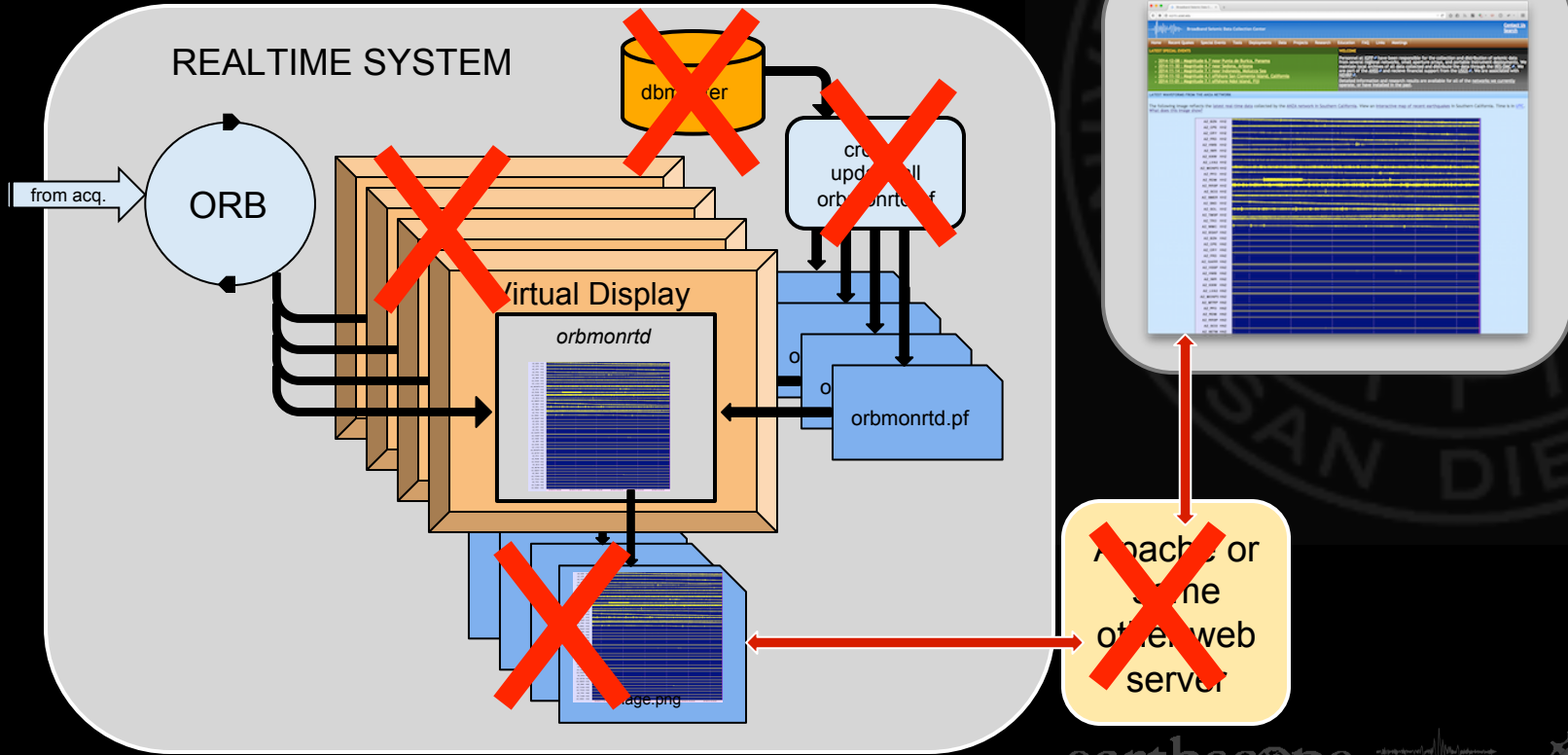
Implementing the embedded web-server
for Antelope real-time systems

Juan Reyes
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AUG meeting
January 16, 2015
San Diego, CA

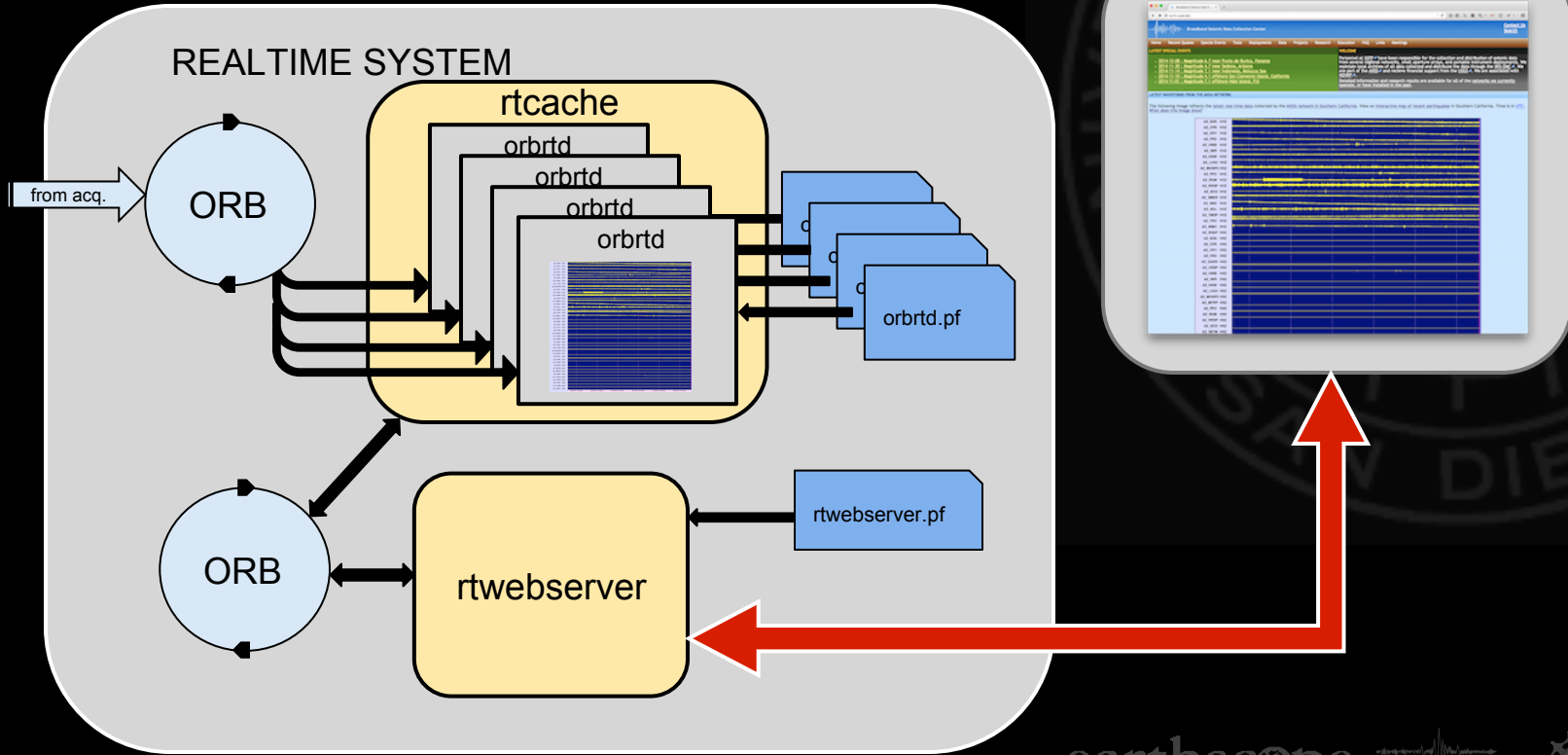
Old Method



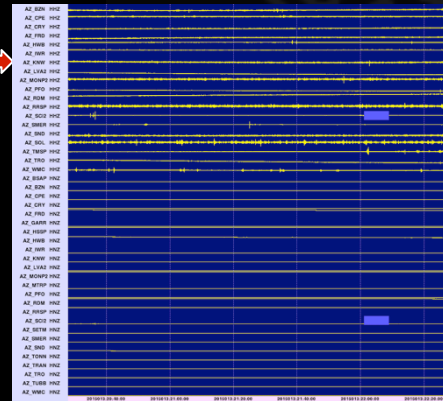
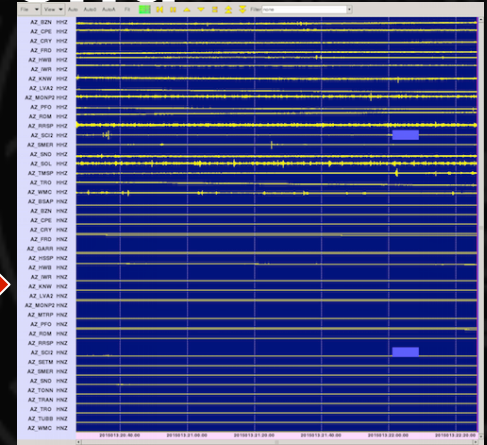
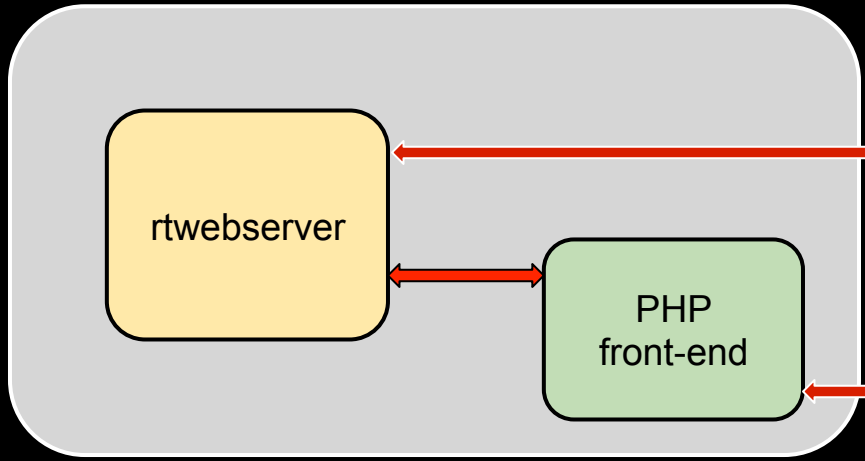
Old Method



New Method



ANF additions: PHP front-end



ANF rtwebserver setup

ANF additions: rpy modules

Station Metadata

<http://anf.ucsd.edu/api/ta/stations/?snet=TA&sta=U51A>

```
{
  "decert_time": 1393947000,
  "equip_remove": 1393518900,
  "cert_time": 1342202400,
  "equip_install": 1338336000,
  "lon": -84.0165,
  "snet": "TA",
  "baler_firm": "20121002-W",
  "staname": "La Follette, TN, USA",
  "lat": 36.3786,
  "pdcc": "IRIS DMC",
  "endtime": 1393518579.5,
  "orb": { },
  "sta": "U51A",
  "vnet": "_US-TA",
  "elev": 0.472,
  "time": 1339026060.525
}
```

Event information

<http://anf.ucsd.edu/api/ta/events/>

```
{
  "allmags": [
    {
      "printmag": "4.3 mb",
      "magid": 258822,
      "magtype": "mb",
      "uncertainty": 0.31,
      "auth": "dbevproc",
      "magnitude": 4.26,
      "ldate": 1420377963.28521
    }
  ],
  "auth": "ANF:vladik",
  "lat": -6.6533,
  "srname": "ANDEAN SOUTH AMERICA",
  "orid": 1548134,
  "strtime": " 1/01/15 (001) 14:50:44 UTC",
  "nass": 182,
  "evid": 1337855,
  "review": "y",
  "lon": -74.1107,
  "depth": 371.0706,
  "magnitude": "4.3 mb",
  "grname": "PERU-BRAZIL BORDER REGION",
  "time": 1420123844.41794
}
```

ANF additions: rpy modules

ORB sources:

```
"info": {
  "status": "online",
  "clients_time": 1421190452.315882,
  "name": "ceusnexport:usarray",
  "sources_time": 1421190452.316233,
  "last_check": 1421190452.31575
},
"sources": {
  "N4": {
    "V52A": {
      "soldest_time": 1420993547.971,
      "npkts": 1643,
      "slatest": 18634947,
      "srcname": "N4_V52A/MGENC/EP1",
      "nbytes": 827275,
      "slatest_time": 1421190227.971,
      "soldest": 61348467,
      "active": 18
    },
    "Z35B": {
      "soldest_time": 1420993534,
      "npkts": 1642,
      "slatest": 18632410,
      "srcname": "N4_Z35B/MGENC/M1",
      "nbytes": 1105893,
      "slatest_time": 1421190214,
      "soldest": 61345886,
      "active": 18
    }
  }
},
```

ANF rtwebservice setup

ANF additions: rpy modules

ORB clients:

```
{
  "lastrequest": 3,
  "packets": 19276999,
  "address": "132.239.154.73",
  "pid": 62430,
  "pktid": 18667937,
  "port": 52730,
  "select": "N4_*/MGENC/M40$|.*(pf|db).**",
  "what": "orb2orb ceusnexport.ucsd.edu:usarray@ :usarray -m N4_*/MGENC/M40$|.*(pf|db).**",
  "errors": 0,
  "perm": "r",
  "read": 266,
  "written": 2981864422,
  "reject": "",
  "nrequests": 6,
  "lagprev": 322010832,
  "started": 1419373130.692626,
  "who": "iadmin",
  "nwrites": 19277003,
  "host": "?",
  "fd": 17,
  "nreads": 6,
  "nreject": 0,
  "nselect": 28,
  "lastpkt": 1421190559.525,
  "thread": 15,
  "bytes": 2095122388
}
```

ANF *rtwebserver* setup

ANF additions: rpy modules

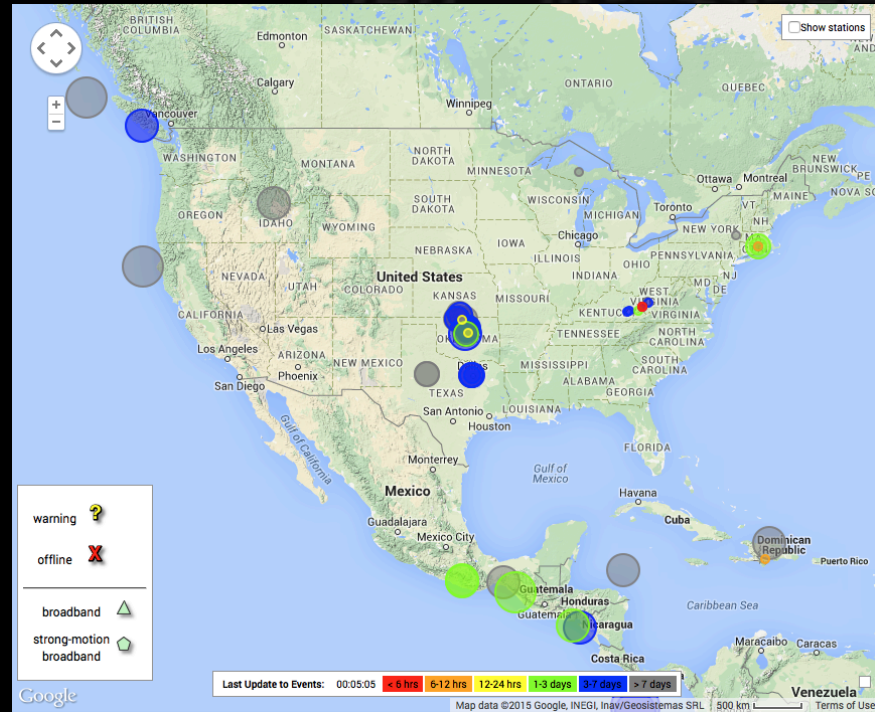
The screenshot shows the EarthScope ANF website for Station TA U51A. The page includes a navigation menu with options like Home, Stations, Tools, Earthquakes, Projects, About, and Admin. Below the navigation, there are two buttons: "DOWNLOAD DATALESS SEED" (with details: STATIONS: TA, U51A, 2014-11-17, (137 MB), Created on: 2014-11-17 15:01:23 UTC) and "STATION DECOMMISSIONED" (with details: This station is no longer contributing data. Decommissioned on: 2014-03-04 15:30:00). A table provides details about the station, including its location (La Falletta, TN, USA), elevation (2.47 km), and various dates. A table below lists communication details, including the type (Catalan Modem), provider (Verizon Wireless), and power (N/A). At the bottom, there are several map thumbnails showing the station's location in different views.

Network	TA - EarthScope Transportable Array Seismic Network
Station	U51A
Location	34.38 N, -84.02 E
Elevation	2.47 km

USArray Onsite	2012151	USArray Offsite	2014058
Equipment Installation Date	2012-05-30	Equipment Removal Date	2014-03-27
ANF Certification Date	2012-07-13	ANF Decommission Date	1939-01-01

Communications	Type	Provider	Power	Duty cycle
Catalan Modem	Verizon Wireless	N/A	N/A	N/A

Instrumentation	Datalogger	Sensor	Infrastruct
Chained instrument	None	None	None



PROBLEMS

