Metric Correlation and Analysis: Use cases

- Access, transform and represent disjoint metrics data
- Infrastructure to bridge providers of monitoring/status information
- Summarization of metrics on at-a-glance view
- Toolkit for building and hosting time series, health bar graphs, and image displays

- **Collect.**
  - Warehouse data from different sources coming in HTML,XML,CSV formats
- **Workflow.**
  - Build rules to reduce, mine or merge data into analyzable content
- **Export.**
  - View results of the rule based application process via REST urls
- **Compose UI.**
  - Use collection of ***standard*** REST enabled UI elements (tables, image displays, bar graphs, time series) to create dashboards

Case in point: CMS facility

- Collect data from dCache info providers , Condor and srmwatch
- Setup summarization
- Setup health status reporting rules over summarized samples
- Arrange UI layout.

http://mcas-int.fnal.gov:8080/portal/portal/cmsDcache

Most Visited | Fermi Linux | Fermilab | FermiLinux | Linux Distros | FINM 33100 (Winter ...

JBoss Portal

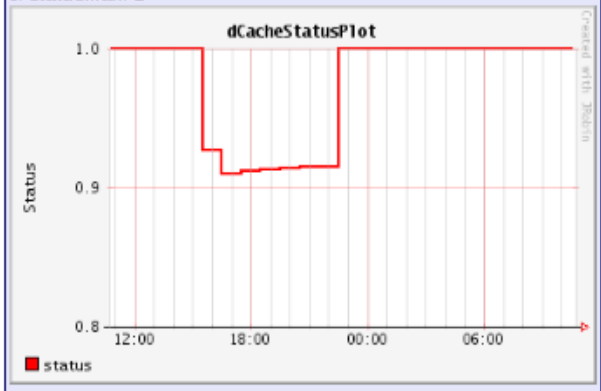
default

Cms Facility Health

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

dCache

Total Value: 1
Green Value: 1
Graph URL: http://chart.apis.google.com/chart?cht=bhs&chs=328x40&chd=t:1|0&chf=bg,s,E6E6FA|c,s,E6E6FA&chco=00FF00,FF0000,E6E6FA&chbh=10&chts=000000,11&chds=0,1&chxt=x&chxr=0,0,1
1. name: dCache
2. status: 1
3. statusMax: 1



0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

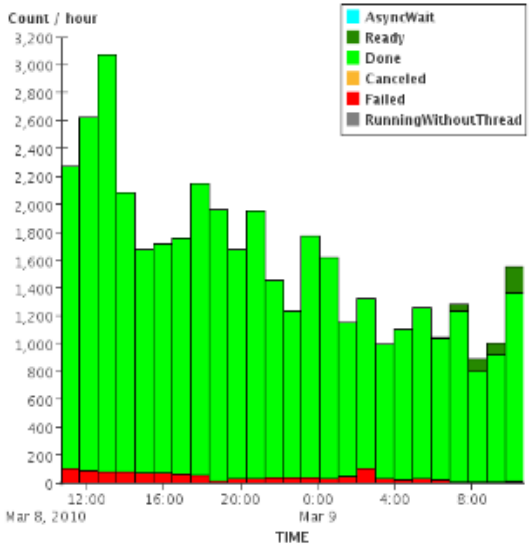
SRM

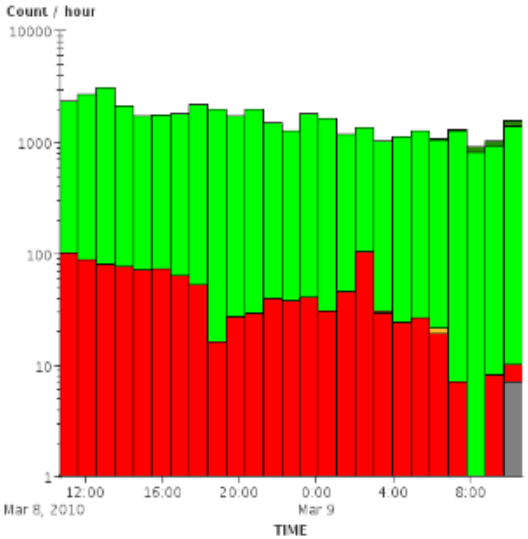
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

Pools

CMSSRMDetailImages

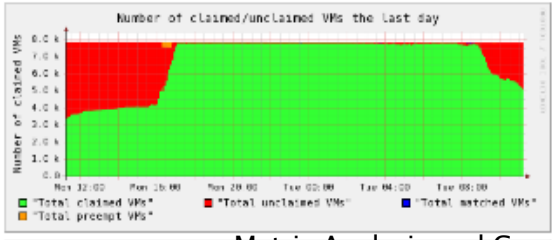
Click the image to show it in original size

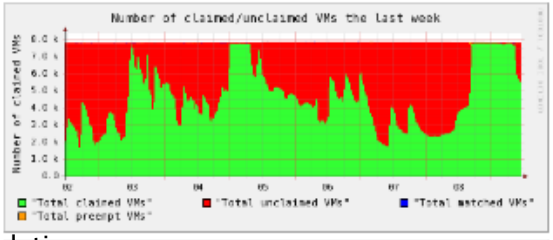


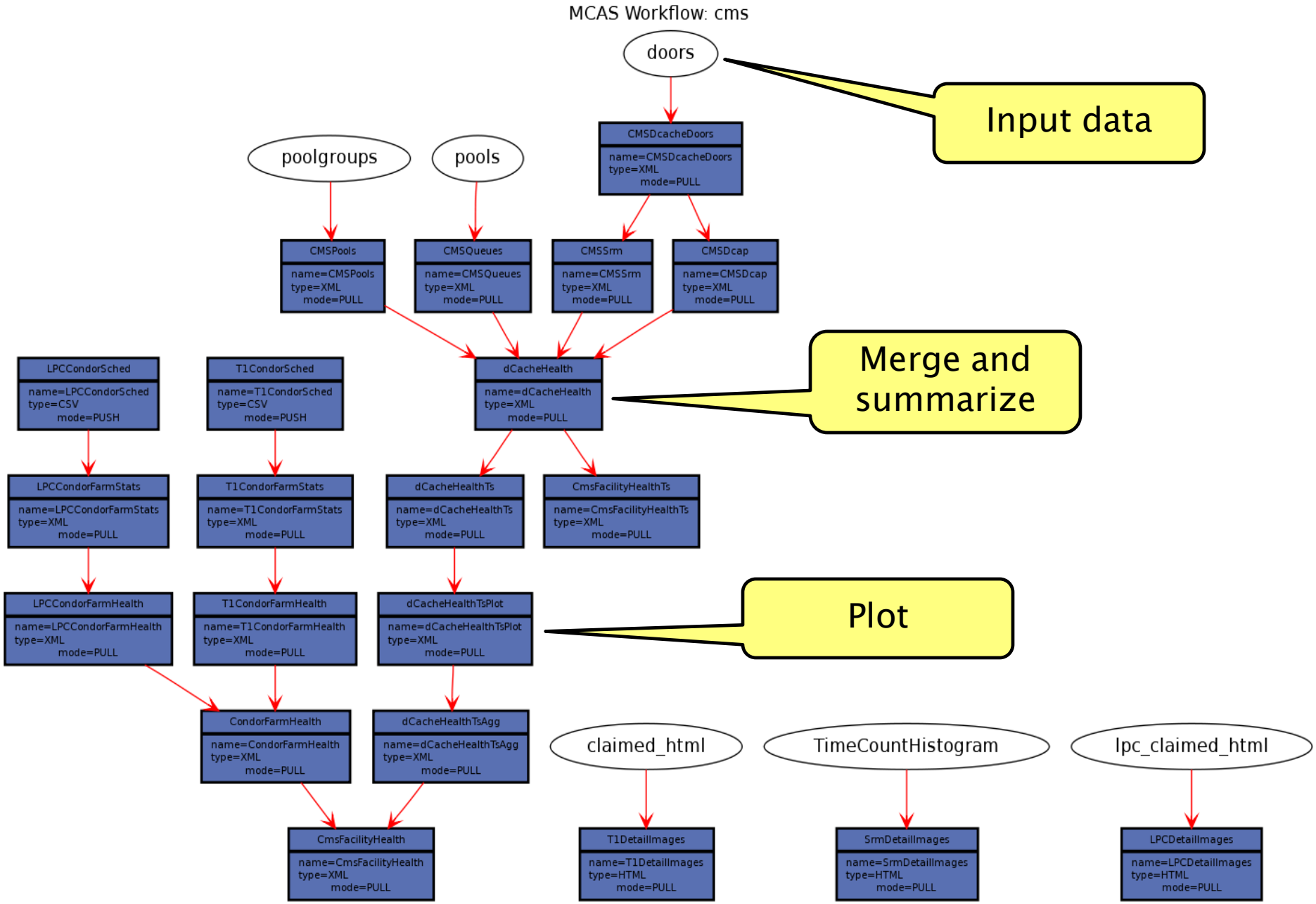


CMST1FarmDetailImages

Click the image to show it in original size






MCAS Workflow: cms
doors
Input data
CMSDcacheDoors
name=CMSDcacheDoors
type=XML
mode=PULL
poolgroups
pools
CMSPools
name=CMSPools
type=XML
mode=PULL
CMSQueues
name=CMSQueues
type=XML
mode=PULL
CMSSrm
name=CMSSrm
type=XML
mode=PULL
CMSDcap
name=CMSDcap
type=XML
mode=PULL
Merge and summarize
LPCCondorSched
name=LPCCondorSched
type=CSV
mode=PUSH
T1CondorSched
name=T1CondorSched
type=CSV
mode=PUSH
dCacheHealth
name=dCacheHealth
type=XML
mode=PULL
LPCCondorFarmStats
name=LPCCondorFarmStats
type=XML
mode=PULL
T1CondorFarmStats
name=T1CondorFarmStats
type=XML
mode=PULL
dCacheHealthTs
name=dCacheHealthTs
type=XML
mode=PULL
CmsFacilityHealthTs
name=CmsFacilityHealthTs
type=XML
mode=PULL
Plot
LPCCondorFarmHealth
name=LPCCondorFarmHealth
type=XML
mode=PULL
T1CondorFarmHealth
name=T1CondorFarmHealth
type=XML
mode=PULL
dCacheHealthTsPlot
name=dCacheHealthTsPlot
type=XML
mode=PULL
CondorFarmHealth
name=CondorFarmHealth
type=XML
mode=PULL
dCacheHealthTsAgg
name=dCacheHealthTsAgg
type=XML
mode=PULL
claimed_html
TimeCountHistogram
lpc_claimed_html
CmsFacilityHealth
name=CmsFacilityHealth
type=XML
mode=PULL
T1DetailImages
name=T1DetailImages
type=HTML
mode=PULL
SrmDetailImages
name=SrmDetailImages
type=HTML
mode=PULL
LPCDetailImages
name=LPCDetailImages
type=HTML
mode=PULL