

Publishing to Nagios of Experiment Specific Tests submitted via Experiment framework

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Nagios®

Core Objectives

Allow Nagios to consume external tests (for some Experiment specific tests):

- Why: Improve reliability of the Nagios Service Monitoring by exploiting experiment specific tests running under exp framework.
- Publish tests results directly into the MSG
 - WLCG complaint format == Nagios-box can fetch the services results
- Configure Nagios Box to collect those results



Nagios External Experiment Tests

Experiment Test

(GangaRobot)

- Test result:

*ce05.pic.es,pic,PIC_MCDISK,completed,1,572,Job terminated successfully,UA 15.6.9 LCG DQ2
Filestager,mc09_7TeV115123.Pythia_Compositness_L1000GeV_J5.merge.AOD.e562_s76
5_s767_r1336_r1306_tid150661_00,2010-08-16_08:13:34,2010-08-16_08:18:44*

- Different tests same host:

LatestResults_ce05.pic.es@wms.out

LatestResults_ce05.pic.es@panda.out

- http://hammercloud.cern.ch/sam/LatestResult*

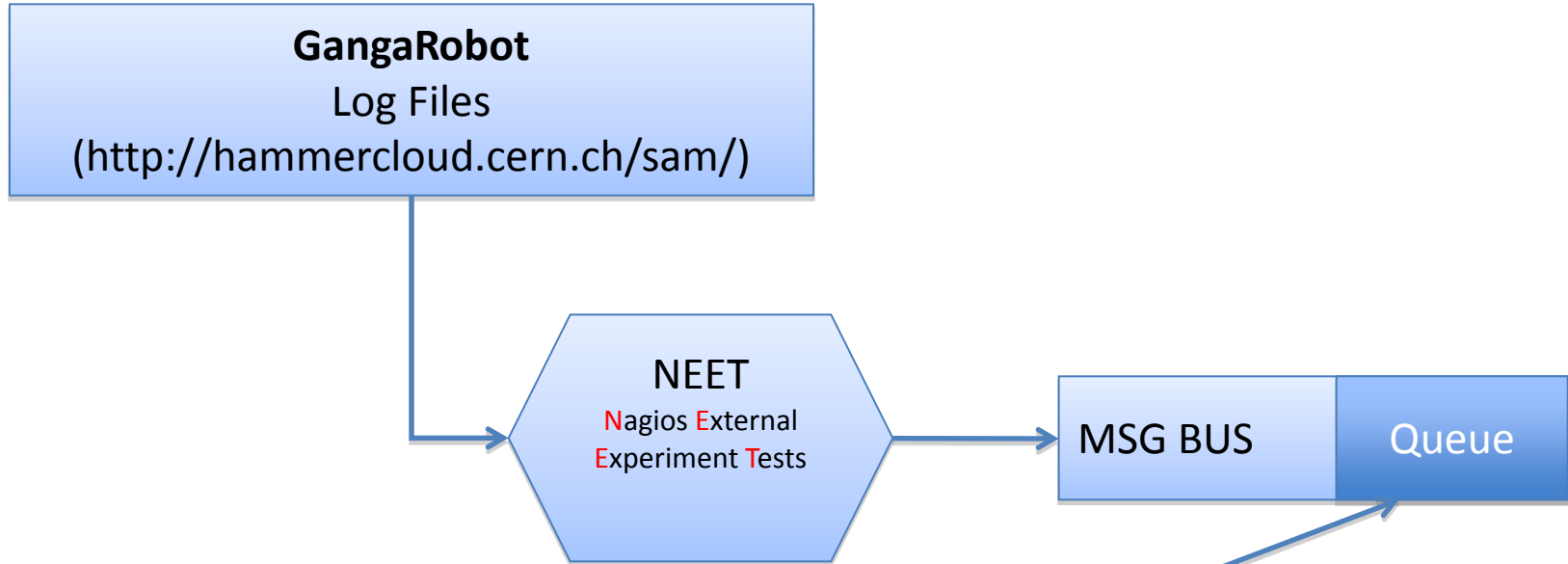
- @panda.out

- @wms.out

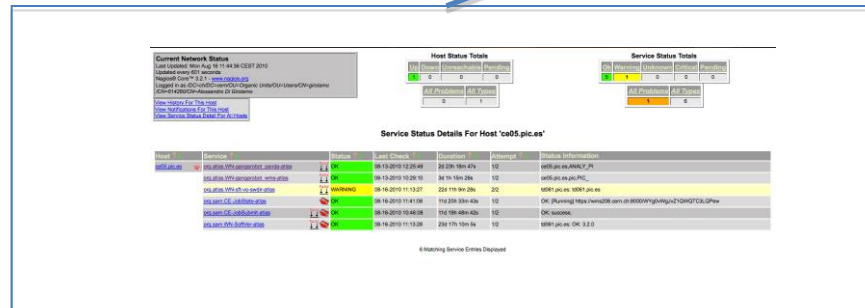


Architecture

Experiment Test



Nagios Box



NEET 1/2

(Nagios External Experiment Test)

Parse a file log ([LatestResults_ce05.pic.es@wms.out](#))

- *Read the Metrics:*
 - hostName
 - metricName
 - metricStatus
 - timestamp
 - summaryData
 - detailsData
- *Message format:*
 - hostName: ce5.pic.es*
 - metricName: org.atlas.WN-gangarobot_wms-atlas*
 - metricStatus: OK*
 - timestamp:2010-08-16T08:18:44Z*
 - summaryData: UA 15.6.9 LCG..*
 - detailsData: all text*
 - EOT*

Send the Message to MSG in a dedicated queue



NEET 2/2

(Nagios External Experiment Test)

NEET

/afs/cern.ch/user/d/ddmusr03/public/nagios_publisher/neet.py

```
...
def file_Parser(self, _metrics, input_file):
...
    __hostName =
        line[_metrics['hostName']]['field_position']]
...
    self.send ('hostName: '+__hostName+'\n'+
                'metricName: '+__metricName+'\n'+
                'metricStatus: '+__metricStatus+'\n'+
                'timestamp: '+__timeStamp+'\n'+
                'summaryData: '+__summaryData+'\n'+
                'detailsData: '+__detailsData+'EOT\n')
...
    self.conn.send(message,destination=QUEUE, ack='auto')

gangarobot_publisher.sh

wget -r http://hammercloud.cern.ch/sam/
find /afs/cern.ch/user/d/ddmusr03/public/nagios_publisher/hammercloud.cern.ch/sam/ -name 'LatestResults*' -exec
    /afs/cern.ch/user/d/ddmusr03/public/nagios_publisher/neet.py {} \;.

acrontab

*/60 * * * * lplus.cern.ch /afs/cern.ch/user/d/ddmusr03/public/nagios_publisher/gangarobot_publisher.sh >> ...
```



- **code will be put under svn**
- **documentation under development:** other Experiments will be able to use it almost out-of-the-box
<https://twiki.cern.ch/twiki/bin/view/LCG/ExperimentTestsMSGPublisher>

Nagios Box

- Nagios is listening to a specific queue of the MSG
- Metric results aggregated into Nagios gui

Current Network Status

Last Updated: Mon Aug 16 11:44:36 CEST 2010
 Updated every 601 seconds
 Nagios® Core™ 3.2.1 - www.nagios.org
 Logged in as /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=girolamo
 /CN=614260/CN=Alessandro Di Girolamo

[View History For This Host](#)
[View Notifications For This Host](#)
[View Service Status Detail For All Hosts](#)

Host Status Totals

Up	Down	Unreachable	Pending
1	0	0	0
All Problems		All Types	
0		1	

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
5	1	0	0	0
All Problems		All Types		
1		6		

Service Status Details For Host 'ce05.pic.es'

Host	Service	Status	Last Check	Duration	Attempt	Status Information
ce05.pic.es	org_atlas.WN-gangarobot_panda-atlas	OK	08-13-2010 12:25:49	2d 23h 18m 47s	1/2	ce05.pic.es,ANALY_PI
	org_atlas.WN-gangarobot_wms-atlas	OK	08-13-2010 10:29:10	3d 1h 15m 26s	1/2	ce05.pic.es,pic,PIC_
	org_atlas.WN-sft-vo-swdjr-atlas	WARNING	08-16-2010 11:13:27	22d 11h 9m 28s	2/2	td061.pic.es: td061.pic.es
	org_sam.CE-JobState-atlas	OK	08-16-2010 11:41:08	11d 20h 33m 43s	1/2	OK: [Running] https://wms208.cern.ch:9000/WYg0vWgJvZ1QWQTC3LQPew
	org_sam.CE-JobSubmit-atlas	OK	08-16-2010 10:46:08	11d 19h 48m 42s	1/2	OK: success.
	org_sam.WN-SoftVer-atlas	OK	08-16-2010 11:13:28	23d 17h 10m 5s	1/2	td061.pic.es: OK: 3.2.0

Service State Information

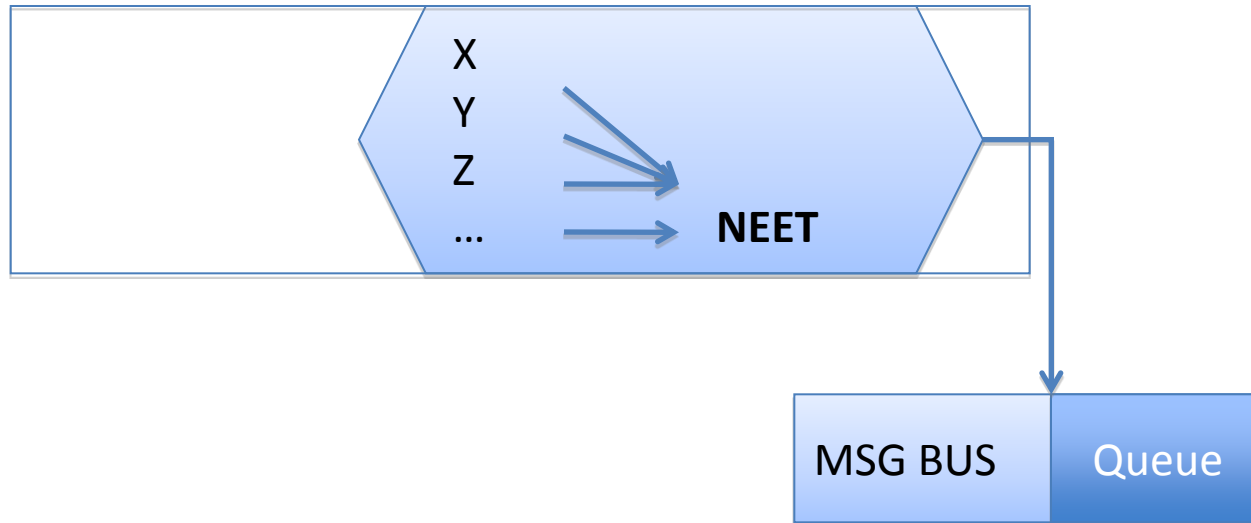
Current Status:	OK (for 3d 1h 15m 31s)
Status Information:	ce05.pic.es,ANALY_PI ce05.pic.es,ANALY_PIC,PIC_MCDISK,completed,1,5110,transExitCode: 0,UA 15.6.9 Panda,mc09_7TeV.105193.CompHepPythia_ZStar_1500_ee.merge.AOD.e522_s765_s767_r1302_r1306_tid140490_00,2010-08-13_10:16:27,2010-08-13_10:25:49
Performance Data:	
Current Attempt:	1/2 (HARD state)
Last Check Time:	08-13-2010 12:25:49
Check Type:	PASSIVE
Check Latency / Duration:	N/A / 0.000 seconds
Next Scheduled Check:	N/A
Last State Change:	08-13-2010 12:25:49
Last Notification:	N/A (notification 0)
Is This Service Flapping?	N/A
In Scheduled Downtime?	NO
Last Update:	08-16-2010 13:41:16 (0d 0h 0m 4s ago)



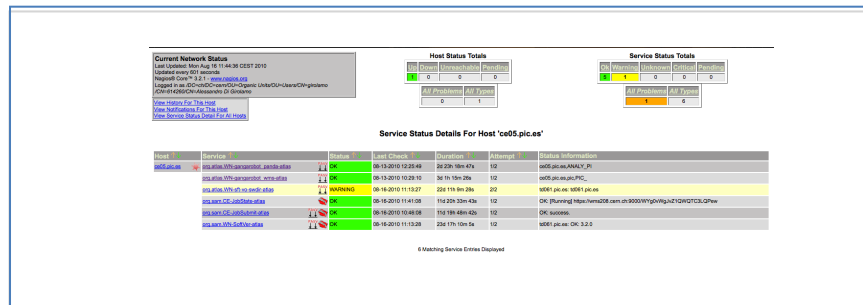
Architecture:

include the NEET into the specific experiment test

Experiment Test



Nagios Box



Future Application

- Other experiments could be interested!
 - if they want we will help them in setting it up!
- Computing Element Service Availability:
 - equip pilot with NEET-like tool to get “*the same*” service availability that the users see.



Aknowledgments

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Thanks for your attention

