

Sites monitoring for BES3

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Analysis

There are several type of fails:

- Fail of site(service): The goal of SAM Tests
- Fail of host machine: Not for SAM Tests
- Fail of user job: out of control
- Fail of hardware: out of control

The aim:

- To show system malfunction before fails occure.
- To make fail reasons clear for operation people

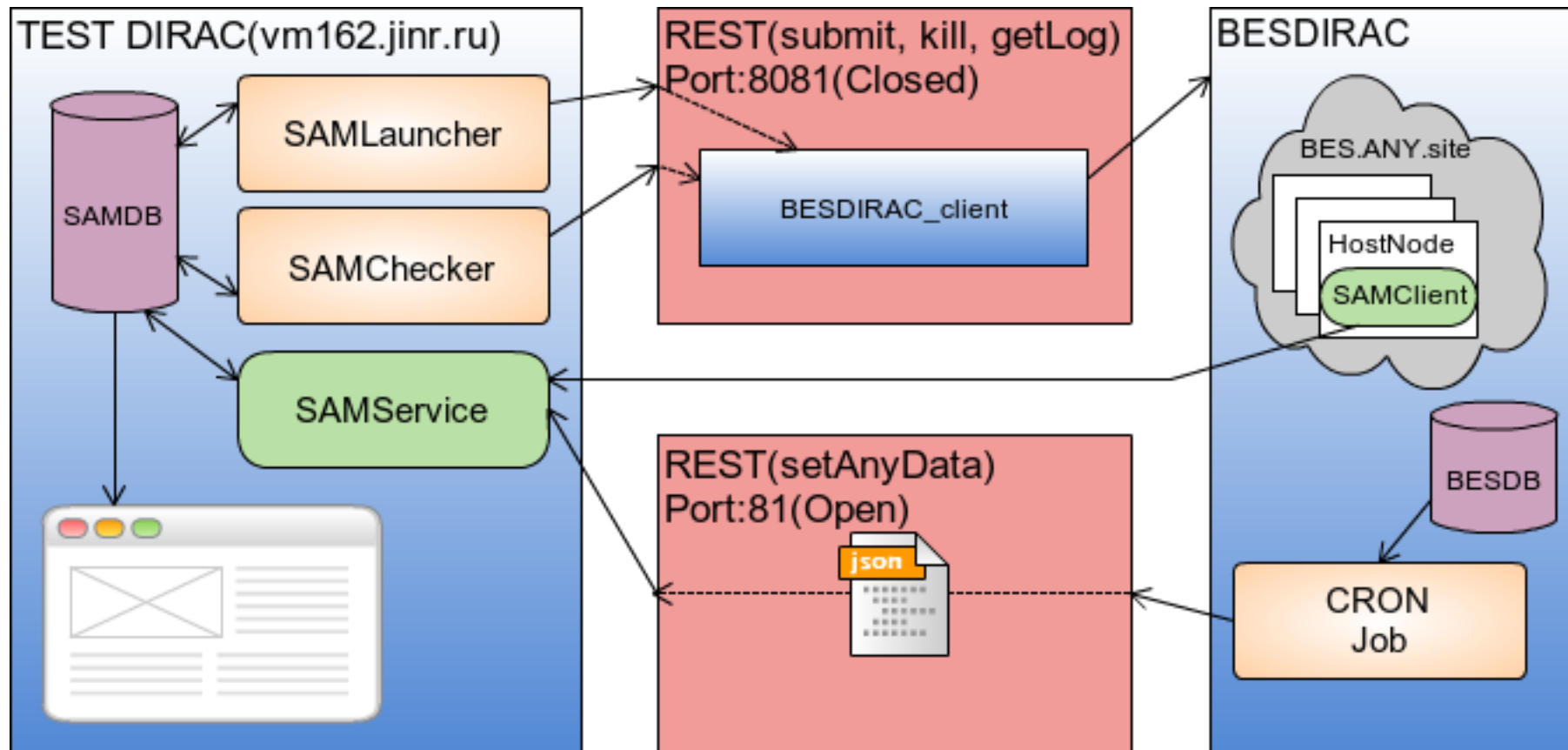
How perform tests

- To send jobs to the specific site
 - + Require nothing to change in BES DIRAC
 - + Easy to test service (SAM test)
 - BES DIRAC statistics dilution
 - Everything is bound to WMS
- Running some scripts on the BES DIRAC headnode
 - + Gets unique information from JobDB
 - + Takes less time
 - Require access to the headnode

This required

- Create new DIRAC server instance (Monitoring DIRAC called here vm162.jinr.ru)
- New Service, Client and DB
- Mechanism for initiating new jobs
 - Install BES Client
 - Required REST and DIRAC API use
 - Two agents for initiating and killing job
- REST for pushing data from head node

BES3 monitoring architecture



Test job

```
import DIRAC.Core.DISET.RPCClient as A
import DIRAC.Core.DISET.private.BaseClient as B
def foo(serviceName, serviceTuple = False, setup =
False ):
    print 'Hey'
    return 'dips://vm162.jinr.ru:2170/Framework/SAM'

B.getServiceURL = foo
x = A.RPCClient("Framework/SAM")
import socket
hostname = socket.gethostname()

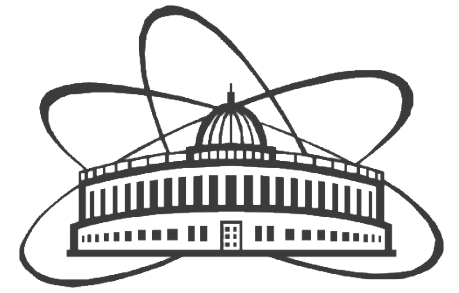
import sys
result = x.setResult('Success', int(sys.argv[1]), 'Remote
call', hostname)
print result
```

Test job

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```

Concerns

- Security issues for REST pushing data to the database
- Use of custom pilot
- Possibility for rich web interface
- Statistics dilution



Thank you for your attention!