PuppetCamp 2012

Luke Harris
@ Telstra BigPond
Senior Technology Specialist, RHCE
Splunk and Nagios Developer

Nagios Plugins

Check EMC Celerra ☆☆☆☆☆

verypowerful.info

Checks include: Anti Virus Checker, CIFS Servers, Checkpoints, Data Mover, File System, Hardware Status, Load, NFS Exports, NRPE Availability, NTP, Processes, Quota, Replication, SAVVOL, SSH, User Mapper Support has been added for Nagios Plugin Perform ...

/Category: **SAN and NAS**

License GPL

Check CPU Performance ★★★★☆

verypowerful.info

Nagios plugin to check CPU performance statistics. This script has been tested on the following Linux and Unix platforms: RHEL 4, RHEL 5, RHEL 6, CentOS 4, CentOS 5, CentOS 6, SUSE, Ubuntu, Debian, AIX 5, AIX 6, FreeBSD 7, Solaris 8, Solaris 9 and Sol ...

/Category: **CPU Usage and Load**

License GPL

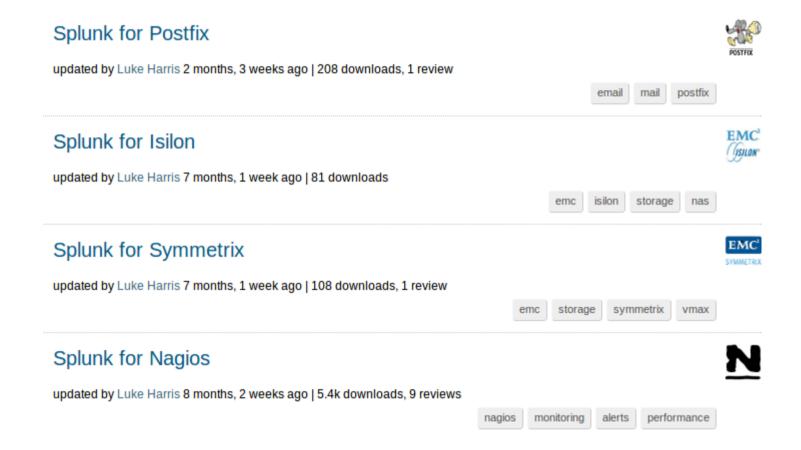**Check EMC Isilon** ☆☆☆☆☆

verypowerful.info

Checks include: Alerts, Client Connections, Quota Usage, Replication Jobs, Service Status, Snapshot Usage, Storage Usage Support has been added for Nagios Plugin Performance Data for integration with Splunk, NagiosGrapher, PNP4Nagios, opcp, NagioStat ...

/Category: **SAN and NAS**

License GPL

Splunk Apps

Splunk for Postfix

updated by Luke Harris 2 months, 3 weeks ago | 208 downloads, 1 review

email mail postfix

Splunk for Isilon

updated by Luke Harris 7 months, 1 week ago | 81 downloads

emc isilon storage nas

Splunk for Symmetrix

updated by Luke Harris 7 months, 1 week ago | 108 downloads, 1 review

emc storage symmetrix vmax

Splunk for Nagios

updated by Luke Harris 8 months, 2 weeks ago | 5.4k downloads, 9 reviews

nagios monitoring alerts performance

Config Wars

A long time ago in a galaxy far,
far away....

Red Hat Network Satellite

* O/S Provisioning
* RPM Upgrades/Rollbacks
* Configuration Management:
  * Limited features
  * Complex file precedence
  * Lack of templates
  * Lame and Annoying

Chef: The Empire Strikes Back

Proof of Concept in Load Test Environment
* Did the job, dashboard was useful
* Lack of examples on the internets
  * Couchdb crashed... a lot
  * Difficult to get buy-in from Developers
   * Cookbooks, Recipes, Knife
    * Where do I get ingredients?
    * Which knife do I use with the entrée??

Puppet: Return of the Jedi

* Before Puppet: manually maintained all servers
  primarily via rolling customized debs
* Introduced Puppet into Telstra BigPond approx 12 months ago
* Apps :-
    BigPondLive
    Nagios
    Splunk
* Approx 100 Servers managed by Puppet
 * Mix of Physical & Virtual
  * Ubuntu, CentOS, Solaris
* Modules sourced from using AltaVist... umm Google & customization
* Deployment Strategy :-
    * Roll a .deb of puppet repo, add to apt repo, install on non-prod
      puppet master
    * Test puppet clients
    * Execute Order 66: deploy to production puppet master

Puppet Modules

Facter & Custom Variables

Facts:
    hostname => tatooine
    operatingsystem => Ubuntu
    operatingsystemrelease => 12.04

Custom Variables:
    $itsafact = '**Han Shot First!**'

Classes & Environments

Classes:
    We use subclasses quite extensively
    with class inheritance for code re-use.

Environments:
    We also use environments in puppet to promote
    changes from dev, to test, to uat, to production.

Splunk Puppet Module

Used to Deploy and Configure:
 * Splunk Forwarders
 * Splunk Search Heads
 * Splunk Indexers

Use The Force:
 * verypowerful.info
 * twitter.com/skywalka

Splunk Puppet Module Example:
Add Distributed Search Heads

```
$splunk_indexer = [ 'indexer1.internal.awesome.com', 'indexer2.internal.awesome.com' ]
$splunk_admin_port = '8089'
$splunk_admin_password = 'passsword'

define add-distributedsearch() {
  exec { "exec-distributedsearch-$name":
    path    => "/sbin:/bin/:/usr/bin:/usr/sbin:/usr/local/bin/",
    command => "/opt/splunk/bin/splunk add search-server
                    -host ${name}:$splunk_admin_port -auth admin:$splunk_admin_password
                    -remoteUsername admin -remotePassword $splunk_admin_password",
    unless  => "grep -qs ${name} /opt/splunk/etc/system/local/distsearch.conf",
    require => Service['splunk'],
  }
}

if $splunk_search_head == 'true' {
add-distributedsearch{$splunk_indexer: }
}
```

Q&A

1/ Do you think the average stormtrooper knows how to install a toilet main?
   A. all they know is killing and white uniforms.

2/ Were the contractors working on the uncompleted Death Star innocent
   victims when the space station was destroyed by the rebels?
   A. any contractor willing to work on that Death Star knew the risks. If they
      were killed, it was their own fault.

3/ Any other questions?
   A. these aren't the droids you're looking for.