Jenkins.... formerly known as Hudson

Jenkins

We are currently running Jenkins **2.73.2** on scalnx-v06: http://srs.slac.stanford.edu/hudson

Upgrades

To upgrade the version of Jenkins:

- download the war file from http://jenkins-ci.org/
- stop the tomcat server on scalnx-v06
- copy the hudson directory and the hudson.war file in the webapps directory somewhere else, as a backup
- move the war file you downloaded to webapps/hudson.war
- restart the tomcat server

Jenkins Home

The **home** directory where Jenkins keeps its configuration files and build results is located at `/gpfs/slac/staas/fs1/g/g.srs/services/jenkins/home`

Jenkins Settings

For SRS the Jenkins settings (primarily for the slaves) are located under `/nfs/slac/g/srs/hudson`

Worker Nodes

There are a few worker nodes that are running experiment specific builds. The **slave.jar** file must be kept synchronized with the version of the hudson war file when upgrades are performed. To do this it is necessary to shut down the worker node by loggin in on the machine on which the worker node is running and killing the java process.

To find which server a worker node is running on follow: **Manage Hudson -> Manage Nodes -> NODE_NAME -> System Information** There you can look for HOST.

How do we run the monitor script?

	Worker Node	Account	Directory	Host	Comment
ok	exo-build01	exodata	/nfs/slac/g/exo/software/hudson/exo-build01	scalnx01	crontab ok from ~exodata/crontabs/scalnx01
	exo-build02	exodata	~/hudson	www.exo200.org	
ok	exo-build-srcf-01	exodata	/home/exodata/jenkins	SRCF (slurm)	This agent is started on-demand via ssh
ok	exo-build-rhel6-64k	exodata	/nfs/slac/g/exo/software/hudson/exo-build-rhel6-64k	rhel6-64j	Runs rhel6-64. This agent is started on-demand via ssh
ok	srs-build01	srs	/gpfs/slac/staas/fs1/g/g.srs/hudson/srs-build01	scalnx-v06	cronjob ok from ~srs/crontabs/scalnx-v06
ok	srs-build02	srs	/gpfs/slac/staas/fs1/g/g.srs/hudson/srs-build02	scalnx-v02	crontab ok from ~srs/crontabs/scalnx-v02
ok	lsst-build01	srs	/gpfs/slac/staas/fs1/g/g.srs/hudson/lsst-build01	scalnx01	cronjob ok from ~srs/crontabs/scalnx01. Running java at 32 bits.
ok	lsst-build02	srs	/gpfs/slac/staas/fs1/g/g.srs/hudson/lsst-build02	scalnx-v02	crontab ok from ~srs/crontabs/scalnx-v02
ok	freehep-build01	freehep	/nfs/slac/g/jas/hudson/freehep-build01	scalnx01	cronjob ok from ~freehep/crontabs/scalnx01
ok	fermi-build01	glast	/nfs/slac/g/glast/ground/software/hudson/	fermilnx-v03	cronjob ok from ~glast/crontabs/fermilnx-v03
ok	hps-build01	lcdprod	/gpfs/slac/staas/fs1/g/g.lcd.mc/prj/sw/hudson/hps-build01	scalnx-v06	no crontab

ok	lcsim-build01	lcdprod	/gpfs/slac/staas/fs1/g/g.lcd.mc/prj/sw/hudson/lcsim-build01	scalnx-v02	no crontab
	cta-build01	ctadata	/nfs/slac/g/agis/repo/hudson/rhel5-64/	scalnx01	Temporarily off since scalnx01 was updated to Rhel6
	fermi-ppa-pc90719	glastrm	/Users/glastrm/jenkins	ppa-pc90719	This is now started using launchd from ~glastrm/Library/LaunchDaemons/monitor-jenkins.plist, but does not start automatically after a reboot. Instructions to start: ssh glastrm@ppa-pc90719 (password in escrow as macglastrm) ppa-pc90719:~ glastrm$ cd /Users/glastrm/Library/LaunchDaemons ppa-pc90719:LaunchDaemons glastrm$ launchctl load monitor-jenkins.plist ppa-pc90719:LaunchDaemons glastrm$ launchctl start monitor_jenkins
	fermi-win04	glast	d:\jenkins	glast-win04	This has been configured to run as a windows service using the instructions here: https://wiki.jenkins-ci.org/display/JENKINS/Installing+Jenkins+as+a+Windows+service. **Note:** When the windows glast password is changed it must be updated in the windows service manager or the service will fail to start on reboot.
	fermi-bldlnx06	glastrm	/u/gl/glastrm/hudson/bldlnx06	bldlnx06	
	fermi-bldlnx11	glastrm	/u/gl/glastrm/hudson/bldlnx11	bldlnx11	
	fermi-bldlnx12	glastrm	/u/gl/glastrm/hudson/bldlnx12	bldlnx12	
	cdms-build-rhel6-64d	cdmsdata	/u/dm/cdmsdata/jenkins	rhel6-64d	

Launching Jobs

Most jobs are configured to start on SCM changes by polling the repository with scheduled tasks. The SCM polling has been causing problems, so we have migrated to a different strategy: triggering the jobs remotely upon SCM changes.

SVN repositories

For the FreeHEP and the SRS repositories we have installed post-commit hooks to notify Jenkins of SCM changes. Jenkins will the internally figure out which jobs to start.

The scripts are installed in the following locations:

SRS: /nfs/slac/g/srs/subversion/hooks

Freehep: /nfs/slac/g/jas/svnbackup/svnrepositories/svn/hooks

CVS repositories

CVS hooks work differently than SVN hooks. SVN hooks are triggered at different stages of the commit, while CVS hooks are triggered for each commit. For Fermi we modified the file /nfs/slac/g/glast/ground/javacvs/CVSROOT/loginfo (has to be checked out, don't modify it on the file system directly). Each time there is a commit we execute the script /nfs/slac/g/glast/ground/jenkins/post-commit-hook which touches a file in /nfs/slac/g/glast/ground/jenkins/jobs with the name of the module that was modified. We have then installed a cronjob on fermilnx-v07 that runs the script /nfs/slac/g/glast/ground/jenkins/launch_jenkins_builds that is responsible to launching the corresponding jobs in Jenkins.