

Scientific Workstation Support

Base Linux system configuration overview

ABSTRACT

This document describes all of the base changes that will be performed on a system that SWS will manage.

FEF/SWS uses the open source product Puppet for the automation of system administration tasks and system configuration management. Below are listed the changes that will occur from the implementation of our base standard Puppet configuration.

- The Nagios check_mk client will be installed
- Disable avhail
- Changes root's. forward to point to the sws-admin mail list
- Point messages to clogger
- Updates locatedb
-
- Creates backup's of the following files
 - MBR
 - fstab
 - passwd
 - group
 - krb5.keytab
- Creates /root/bin
- Create /root/tmp
- Installs
 - SWS-Managed –unmanaged
 - SWS-Managed -repo
 - epel-repo
- Enabling cpuspeed
- Install puppet update cron job
- Configure ssh to only accept Kerberos
- Write mandated MOTD
- Configuring Kerberos
 - kcron
 - Configuring krb5.conf
- Turning off legacy connection services
 - telnet
 - ftp
- Disabling SELinux
- Configuring atd

For reference included is the actual base class

```
# Class all::base
#
# This class installs all the yum repositories and configuration items
# required by the FEF/SWS department for system administration purposes
#
# Parameters:
#
# None
#
# Actions:
#
# Create FEF specific directories used to place scripts and binaries
# Install the SWS-Managed yum repo
# Install the SWS-Managed-Noarch yum repo
# Install the EPEL yum repo
# puppet client
# Configure syslog to send all messages to clogger
# Disable AVAHI
# Configure locate to scan specific directories on the machine
# Configure SSHD
# Put in place a specific MOTD
# Backup the machines MBR's
# Backup the machines passwd/group/fstab
# Copy in the system keytab and krb5.conf
# Configure the root mailforward
# Do not Configure core xinetd services
# Do not Install 9xxx 3-ware utils if a 9xxx card is found
#

# Requires/Includes:
#
# fef::action_directories
# yum::repo_sws-managed
# yum::repo_sws-managed-noarch
# yum::repo_epel
# puppet::client
```

```
# syslog::base
# avahi::base
# locate::base
# ssh::server
# motd::base
# fef_backup::mbr
# fef_backup::general_files
# kerberos::base
# fef::mailforward_root
# fef::action_cpuspeed_service
# fef::action_xinetd_services::disabled
# selinux::base
# The following are disabled
# raid::t_ware::base
# resolv::base
# hosts::base
# fef::k5login_root
# fef::password_root
#
# Example Usage:
#
# include all::base
#
#
class all::base {

    # Required Modules
    require fef::action_directories
    require yum::repo_sws-managed
    require yum::repo_sws-managed-noarch
    require yum::repo_epel::exclude_fnal

    # Included Modules
    include puppet::client
    include syslog::base
    include avahi::base
    include locate::base
    include ssh::server
    include motd::base
    include fef_backup::mbr
    include fef_backup::general_files
    include kerberos::base
```

```
include fef::mailforward_root
include fef::action_cpufreq_service_enable
include fef::action_xinetd_services::disabled
include selinux::base

## Removed until Rennie is ready to turn them on
#include raid::t_ware::base
#include resolv::base
#include hosts::base
#include fef::k5login_root
#include fef::password_root

# include the sws repo
  include yum::repo_sws

#Enable nagios
  include check_mk::base
}
```