**Standard Operating Process**

**(SOP) for**

**Wipro Tech Transition\_Unix\_Linux\_ New RedHat Satellite Server 6.14. configuration**

**Prepared By**

****

**Jitendra Kumar Singh, Wipro Technologies**

# 

# Contents

[1.](https://wipro365-my.sharepoint.com/l) Introduction 3

[2.](https://wipro365-my.sharepoint.com/l) Purpose 3

[3.](https://wipro365-my.sharepoint.com/l) Scope 3

[4.](https://wipro365-my.sharepoint.com/l) Responsibilities 3

[5.](https://wipro365-my.sharepoint.com/l) Summary 3

[6.](https://wipro365-my.sharepoint.com/l) Procedure 3

[7.](https://wipro365-my.sharepoint.com/l) Verify Requested Configuration 3

[8.](https://wipro365-my.sharepoint.com/l) Virtual Machine prerequisites details 3

[9.](https://wipro365-my.sharepoint.com/l) Subscription & registration on Server 4

[10.](https://wipro365-my.sharepoint.com/l) Satellite Component installation 5

[11.](https://wipro365-my.sharepoint.com/l) Ports enablement for client to Satellite communication 6

[12.](https://wipro365-my.sharepoint.com/l) Diagnose Satellite Services 7

[13.](https://wipro365-my.sharepoint.com/l) Satellite Client repository enablement 8

[14.](https://wipro365-my.sharepoint.com/l) Close Server Request Form 9

[15.](https://wipro365-my.sharepoint.com/l) Close Help Desk Case 9

[16.](https://wipro365-my.sharepoint.com/l) Communicate handoff to customer 9

# Document Details

|  |  |
| --- | --- |
| Project Name | Wipro Tech Transition\_Unix\_Linux\_ New RedHat Satellite Server 6.14. configuration |
| Account |  |
| Current Version | 1.0.0 |
| List of Contributors | Linux |
| Document Name/ID | Wipro Tech Transition\_Unix\_Linux\_ New RedHat Satellite Server version 6.14. configuration \_v1.0.docx |

# Revision History

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Version | Date of Revision | Next Review Date | Description | Author  (Wipro) | Reviewed By (Wipro) | Approved By  (XXXXXX) |
| 1.0.0 | 18-March-2024 | 18-April -2024 | Unix Linux\_ New RedHat Satellite Server 6.14. configuration \_v1.0.docx | Jitendra Kumar Singh | Manish Sahi |  |

**Introduction**

New RedHat Satellite Server version 6.14. installation and configuration**.**

**Purpose**

The purpose of this document is to describe the procedures that are required to install and configure RedHat Satellite Server version 6.14. And register the hosts to satellite server so that host will get latest patches from red hat satellite server.

**Scope**

This document encompasses all the activities that a systems admin completes the red hat server patching to update and upgraded the servers.

**Responsibilities**

The Systems Administrator Performs the Activity and update this documents on timely manner .

**Summary**

This describes red hat satellite server configuration and installation

**Procedure**

**Setting up a new RedHat Satellite Server requires the following steps:**

**New RedHat Satellite Server version 6.14 configuration.**

**8. Virtual Machine prerequisites details:**

25 GB RAM,

8 core 2.0 GHz CPU,

1 x 100GB disk for rootvg

1 x 400 GB disk datavg.

Install RHEL 8.9 latest operating system on this VM with below file systems:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OS File Systems** | **Size (in GB)** | | **File System type** | | **Mount Option** |
| / | 20G | | Xfs | | Defaults |
| /home | 10G | | Xfs | | defaults, nodev |
| /boot | 2GB | | Xfs | | Defaults |
| /tmp | 20G | | Xfs | | defaults, strictatime, noexec, nodev, nosuid |
| /opt | 10G | | Xfs | | Defaults |
| /var | 19G | | Xfs | | Defaults |
| /var/crash | 34G | | Xfs | | Defaults |
| /var/tmp | 5G | | Xfs | | defaults, strictatime, noexec, nodev, nosuid |
| Swap | 8G | | Swap | | Defaultsy |
| **Directory** | | **Installation Size** | | **Runtime Size** | |
| /var/log | | 10 MB | | 10 GB | |
| /var/lib/pgsql | | 100 MB | | 20 GB | |
| /usr | | 5 GB | | Not Applicable | |
| /opt/puppetlabs | | 500 MB | | Not Applicable | |
| /var/lib/pulp | | 1 MB | | 300 GB | |
| /var/lib/qpidd | | 25 MB | | 10GB | |

SE-Linux must be enabled, either in enforcing or permissive mode.

**9. Subscription & registration on Server:**

**Once VM is ready with RHEL 8 OS installed then register the server by using the subscription-manager register command with your Red Hat account with a valid Satellite entitlement.**

# **subscription-manager register**

Find a subscription that provides Red Hat Satellite, Red Hat Enterprise Linux, and Red Hat Software Collections. You must enable the subscription by using the proper pool ID.

# **subscription-manager list --all --available --matches 'Red Hat Satellite Infrastructure Subscription'**

Pool ID: **xxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**#subscription-manager attach --pool= xxxxxxxxxxxxxxxxxxxxxxxxxxxxx**  
Successfully attached a subscription for: Red Hat Satellite Infrastructure Subscription

**To accurately control the installed Red Hat Satellite software version and to avoid installing non-Satellite software, disable all existing repositories and enable the needed ones. Enable the Red Hat Satellite, Red Hat Enterprise Linux, and Red Hat Software Collections repositories.**

# **subscription-manager repos --disable "\*"**

# **subscription-manager repos \**  
**--enable=rhel-8-for-x86\_64-baseos-rpms \**  
**--enable=rhel-8-for-x86\_64-appstream-rpms \**  
**--enable=satellite-6.11-for-rhel-8-x86\_64-rpms \**  
**--enable=satellite-maintenance-6.11-for-rhel-8-x86\_64-rpms**

**Before you install the satellite package, ensure that all previously released errata that are relevant to the system are applied.**

# **dnf update**

**10.Satellite Component installation**

# **dnf install satellite**

**#########################################################################################**

**Satellite Server configuration:**

[root@satellite ~]# **dnf install chrony**  
[root@satellite ~]# **systemctl enable chronyd –now**

[root@satellite ~]# **dnf install sos**

[root@satellite ~]# **satellite-installer --list-scenarios**  
Available scenarios  
 Capsule (use: --scenario capsule)  
 Install a stand-alone Satellite Capsule.  
 Satellite (use: --scenario satellite)  
 Install Satellite server

**Execute the satellite-installer command as the root user. You can use the --foreman-initial-admin-username and --foreman-initial-admin-password options to configure the initial password for the admin user in Satellite Server. On completion, the command provides the following output:**

[root@satellite ~]# **satellite-installer \**  
**--scenario satellite \**  
**--foreman-initial-admin-username admin \**  
**--foreman-initial-admin-password redhat**  
 Installing Done [100%] [...................................]  
 Success!  
 \* Satellite is running at https://satellite.example.com  
 Initial credentials are admin / redhat  
 \* To install additional capsule on separate machine continue by running:  
  
 capsule-certs-generate --capsule-fqdn "$CAPSULE" --certs-tar "~/$CAPSULE-certs.tar"  
  
 The full log is at /var/log/foreman-installer/satellite.log

####Optionally to reset the password of satellite server admin#####

[root@satellite ~]# **foreman-rake permissions:reset password=redhat123**  
Reset to user: admin, password: redhat123

**11. Ports enablement for client to Satellite communication**

**Open the ports for client to Satellite communication, enter the following command on the base operating system that you want to install Satellite on:**

# firewall-cmd \  
--add-port="53/udp" --add-port="53/tcp" \  
--add-port="67/udp" \  
--add-port="69/udp" \  
--add-port="80/tcp" --add-port="443/tcp" \  
--add-port="5647/tcp" \  
--add-port="8000/tcp" --add-port="9090/tcp" \  
--add-port="8140/tcp"

Make the changes persistent:

# firewall-cmd --runtime-to-permanent

**Verification**

Enter the following command:

# firewall-cmd --list-all

#### **12. Diagnose Satellite Services**

[root@satellite ~]# **satellite-maintain service list**  
Running Service List  
================================================================================  
List applicable services:  
dynflow-sidekiq@.service indirect  
foreman-proxy.service enabled  
foreman.service enabled  
httpd.service enabled  
postgresql.service enabled  
pulpcore-api.service enabled  
pulpcore-content.service enabled  
pulpcore-worker@.service indirect  
redis.service enabled  
tomcat.service enabled  
  
All services listed [OK]  
--------------------------------------------------------------------------------

The satellite-maintain health check command runs various health checks in the Satellite Server installation.

[root@satellite ~]# **satellite-maintain health check**  
Running ForemanMaintain::Scenario::FilteredScenario  
================================================================================  
Check number of fact names in database: [OK]  
--------------------------------------------------------------------------------  
Check whether all services are running: [OK]  
--------------------------------------------------------------------------------  
Check whether all services are running using the ping call: [OK]  
--------------------------------------------------------------------------------  
Check for paused tasks: [OK]  
--------------------------------------------------------------------------------  
Check whether system is self-registered or not: [OK]

[root@satellite ~]# **systemctl status firewalld**

[root@satellite ~]# **firewall-cmd --list-all**

[root@satellite ~]# **systemctl status chronyd**

[root@satellite ~]# **ping -c1 localhost**

[root@satellite ~]# **ping -c1 hostname-fqdn**

[root@satellite ~]# **host <IP-address>**

#### **13. Satellite Client repository enablement**

Enable the Satellite Client 6 repository using the hammer repository-set enable command:

# hammer repository-set enable \  
--basearch="x86\_64" \  
--name "Red Hat Satellite Client 6 for RHEL 8 x86\_64 (RPMs)" \  
--organization "*My\_Organization*" \  
--product "Red Hat Enterprise Linux for x86\_64"

**#####################################################################################**

**Finally, we need to point all hosts to new satellite server.**

**Below steps are performed assuming that host was attached to another satellite server and we need to remove from that satellite server and register to new satellite server .**

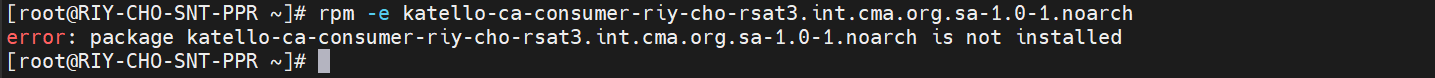
#subscription-manager clean

#rm /etc/rhsm/ca/katello-\*

A screen shot of a computer program

Description automatically generated

#rpm -e katello-ca-consumer-riy-cho-rsat2.int.cma.org.sa-1.0-1.noarch



Edit the /etc/rhsm/rhsm.conf file & update

below parameters

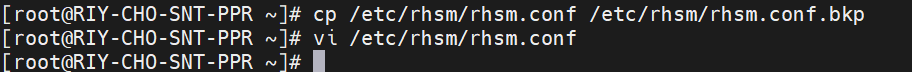
hostname = riy-cho-rsat3.int.cma.org.sa

prefix = /rhsm

no\_proxy = riy-cho-rsat3.int.cma.org.sa

baseurl = https://riy-cho-rsat3.int.cma.org.sa/pulp/content/

repo\_ca\_cert = %(ca\_cert\_dir)skatello-server-ca.pem



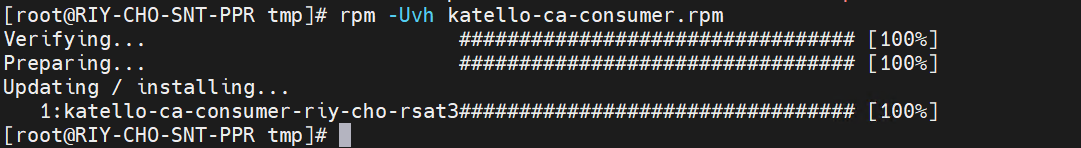
Download the katello-ca-consumer.rpm from new satellite & install it.

#curl -vk -o katello-ca-consumer.rpm <http://riy-cho-rsat3.int.cma.org.sa/pub/katello-ca-consumer-latest.noarch.rpm>

A computer screen with text on it

Description automatically generated

#rpm -Uvh katello-ca-consumer.rpm



Then try to register server to redhat satellite using username & password of redhat satellite WebGUI admin credentials.

#subscription-manager register

#subscription-manager refresh

#subscription-manager list

#yum repolist

**Close Server Request Form**

**Close Help Desk Case**

**Communicate handoff to customer.**