

# **Foreman / Katello Content Host Registration & Repository Validation (CentOS Stream 9)**

## **Overview**

This documentation covers the successful onboarding of a CentOS Stream 9 virtual machine into Foreman (Katello) for centralized host, subscription, and content lifecycle management. The system is registered, assigned to the appropriate lifecycle environment and content view, and validated through both the Foreman web interface and the Linux CLI.

## **Work Performed**

Confirmed the system is present and managed under Foreman Hosts with the correct operating system and virtualization platform. Verified the same system appears under Content Hosts, confirming enrollment for subscription and content management. Reviewed the Content Host Details page to validate: Registration method and activation source Subscription and entitlement status Lifecycle environment and content view assignment Host inventory, networking, and system metadata Successful check-in and reporting status Validated repository access from the VM using the command line by confirming enabled repositories, metadata refresh times, and available package counts.

## **Outcome**

The host is fully registered and entitled in Foreman/Katello. Lifecycle environment and content view assignments are correctly applied. Repository access and package availability are confirmed from the system. The VM is ready for controlled updates, patching, and lifecycle promotion using centralized content management.

## **Sanitation Disclaimer**

All screenshots and command outputs have been sanitized prior to publication. IP addresses, hostnames, domain names, URLs, subscription UUIDs, activation keys, organization names, lifecycle environments, and user identifiers have been replaced with non-identifiable placeholders to protect internal infrastructure and sensitive configuration details.

A successful SSH connection was established to the remote system at 10.1.30.24 after resolving an initial hostname issue by connecting directly via IP address. The host key was verified and added to the known hosts file, a user home directory was created on first login, and privilege escalation to the root account was completed, confirming administrative access to the target server.

```
root@stage-foreman:~  
[egarrido@dev-app-eg3 ~]$ ssh egarrido @10.1.30.24  
sss_ssh_knownhostsproxy: Could not resolve hostname egarrido  
kex_exchange_identification: Connection closed by remote host  
Connection closed by UNKNOWN port 65535  
[egarrido@dev-app-eg3 ~]$ ssh egarrido@10.1.30.24  
The authenticity of host '10.1.30.24 (<no hostip for proxy command>)' can't be established.  
ED25519 key fingerprint is SHA256:ITlIAXhQmEWtrthzU+RKnrwW3b+xrww7diSe5qHX4BY.  
This key is not known by any other names  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added '10.1.30.24' (ED25519) to the list of known hosts.  
(egarrido@10.1.30.24) Password:  
Creating home directory for egarrido.  
[egarrido@stage-foreman ~]$ su -  
Password:  
Last login: Sat Oct 18 20:40:53 EDT 2025 on pts/0  
[root@stage-foreman ~]#
```

An SSH key-based authentication workflow is being configured and validated. After an initial connection issue, a public key was successfully copied to the remote host using `ssh-copy-id`, the host key was verified and trusted, and the key was added to the authorized keys on the target system. A follow-up SSH login confirms access to the remote server, demonstrating successful setup of secure, password-less SSH access for administrative operations.

```
root@dev-app-eg3:~ x egarrido@dev-app-eg3:~ x + v
/bin/ssh-copy-id: ERROR: ssh_exchange_identification: Connection closed by remote host

[root@stage-foreman ~]#
[root@stage-foreman ~]# ssh-copy-id -i ~foreman-proxy/.ssh/id_rsa_foreman_proxy.pub 10.1.31.124
/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/usr/share/foreman-proxy/.ssh/id_rsa_foreman_proxy.pub"
The authenticity of host '10.1.31.124 (<no hostip for proxy command>)' can't be established.
ECDSA key fingerprint is SHA256:bEm0od6D5TxUwSt5/Ka3mDiSwz56ekB542vac8lek0k.
ECDSA key fingerprint is MD5:3a:85:2b:84:18:0e:9e:80:b3:d8:f4:ec:df:17:44:c4.
Are you sure you want to continue connecting (yes/no)? yes
/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
Password:
Password:

Number of key(s) added: 1

Now try logging into the machine, with:  "ssh '10.1.31.124'"
and check to make sure that only the key(s) you wanted were added.

[root@stage-foreman ~]# ssh 10.1.31.124
Password:
Last failed login: Sun Oct 19 15:22:23 EDT 2025 from 10.1.30.24 on ssh:notty
There was 1 failed login attempt since the last successful login.
Last login: Wed Oct 8 18:49:00 2025 from 10.1.31.136
[root@dev-app-eg3 ~]#
```

The system successfully completed a package installation transaction using dnf. Required subscription-manager, Python, and system utility packages were installed, verified, and configured without errors. The process finished cleanly, confirming the system is properly updated and ready for subscription management and related administrative tasks.

```
egarrido@dev-app-eg3:~$ dnf install subscription-manager python3-cloud-what python3-iniparse python3-librepo python3-subscription-manager-rhsm virt-what usermode
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/10
Installing : subscription-manager-rhsm-certificates-20220623-1.el9.noarch 1/10
Installing : python3-iniparse-0.4-45.el9.noarch 2/10
Installing : python3-cloud-what-1.29.47-1.el9.x86_64 3/10
Installing : python3-subscription-manager-rhsm-1.29.47-1.el9.x86_64 4/10
Installing : virt-what-1.27-2.el9.x86_64 5/10
Installing : usermode-1.114-7.el9.x86_64 6/10
Installing : python3-librepo-1.14.5-2.el9.x86_64 7/10
Installing : python3-inotify-0.9.6-25.el9.noarch 8/10
Installing : libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64 9/10
Running scriptlet: subscription-manager-1.29.47-1.el9.x86_64 10/10
Installing : subscription-manager-1.29.47-1.el9.x86_64 10/10
Running scriptlet: subscription-manager-1.29.47-1.el9.x86_64 10/10
Created symlink /etc/systemd/system/multi-user.target.wants/rhsmcertd.service → /usr/lib/systemd/system/rhsmcertd.service.
Verifying : libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64 1/10
Verifying : python3-cloud-what-1.29.47-1.el9.x86_64 2/10
Verifying : python3-iniparse-0.4-45.el9.noarch 3/10
Verifying : python3-inotify-0.9.6-25.el9.noarch 4/10
Verifying : python3-librepo-1.14.5-2.el9.x86_64 5/10
Verifying : python3-subscription-manager-rhsm-1.29.47-1.el9.x86_64 6/10
Verifying : subscription-manager-1.29.47-1.el9.x86_64 7/10
Verifying : subscription-manager-rhsm-certificates-20220623-1.el9.noarch 8/10
Verifying : usermode-1.114-7.el9.x86_64 9/10
Verifying : virt-what-1.27-2.el9.x86_64 10/10
Installed:
libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64
python3-cloud-what-1.29.47-1.el9.x86_64
python3-iniparse-0.4-45.el9.noarch
python3-inotify-0.9.6-25.el9.noarch
python3-librepo-1.14.5-2.el9.x86_64
python3-subscription-manager-rhsm-1.29.47-1.el9.x86_64
subscription-manager-1.29.47-1.el9.x86_64
subscription-manager-rhsm-certificates-20220623-1.el9.noarch
usermode-1.114-7.el9.x86_64
virt-what-1.27-2.el9.x86_64
Complete!
egarrido@dev-app-eg3:~$
```

A package was successfully downloaded using curl, retrieving the katello-ca-consumer RPM from the Foreman server. The transfer completed without errors, confirming network connectivity and preparing the system for Foreman/Katello client registration and subscription management.

```
egarrido@dev-app-eg3:~$ curl --insecure --output katello-ca-consumer-latest.noarch.rpm https://stage-foreman.proco
re.prod/pub/katello-ca-consumer-latest.noarch.rpm
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %             %         Dload  Upload  Total   Spent    Left   Speed
100 7366 100 7366    0     0 79204      0 --:--:-- --:--:-- --:--:-- 80065
[egarrido@dev-app-eg3 ~]$
```



The Katello CA consumer package was successfully installed on the system using yum localinstall. Despite initial warnings about subscription registration and a skipped MariaDB repo, the transaction completed cleanly, updated the trusted CA certificates, and prepared the host for registration with the Foreman/Katello server for repository and subscription management.

```
egarrido@dev-app-eg3:~$ sudo yum localinstall katello-ca-consumer-latest.noarch.rpm
Not root, Subscription Management repositories not updated
Warning: failed loading '/etc/yum.repos.d/MariaDB.repo', skipping.
Error: This command has to be run with superuser privileges (under the root user on most systems).
[egarrido@dev-app-eg3 ~]$ sudo yum localinstall katello-ca-consumer-latest.noarch.rpm
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Warning: failed loading '/etc/yum.repos.d/MariaDB.repo', skipping.
Last metadata expiration check: 1:14:21 ago on Sun 19 Oct 2025 02:47:02 PM EDT.
Dependencies resolved.

Package                               Architecture Version      Repository      Size
-----
Installing:
katello-ca-consumer-stage-foreman.procore.prod  noarch      1.0-1        @commandline    7.2 k

Transaction Summary
-----
Install 1 Package

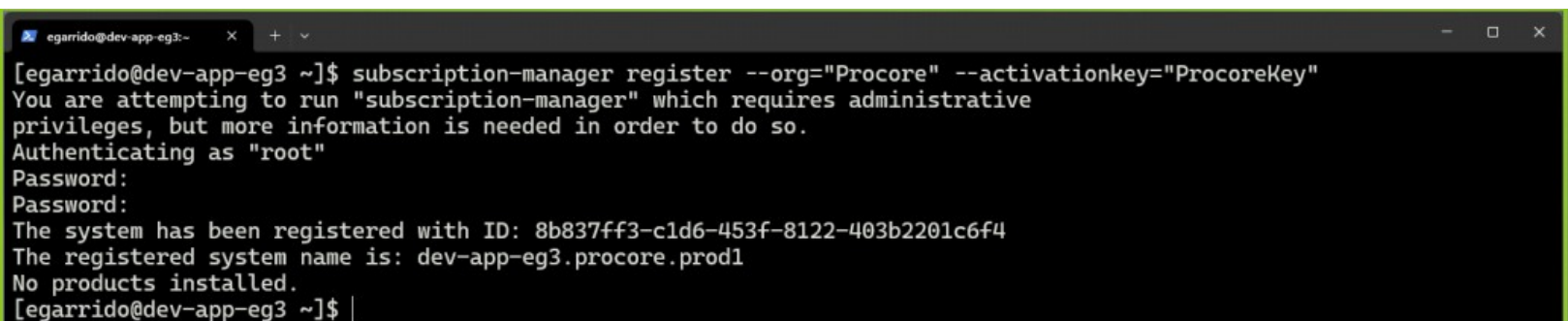
Total size: 7.2 k
Installed size: 16 k
Is this ok [y/N]: y
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      : katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
  Installing     : katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
  Running scriptlet: katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
Warning: 'enable' is a deprecated argument. Use 'update-ca-trust extract' in future. See 'update-ca-trust --help' for usage.

Proceeding with extraction anyway for backwards compatibility.

  Verifying      : katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
Installed products updated.

Installed:
katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch
```

The system is being registered to a Foreman/Katello server using subscription-manager with an organization and activation key. Administrative authentication is performed successfully, and the host is assigned a unique system ID and registered hostname, confirming successful enrollment with the subscription management platform.

A terminal window with a dark background and light green text. The window title bar shows 'egarrido@dev-app-eg3:~' and standard window controls. The terminal output shows the execution of 'subscription-manager register' with specific organization and activation key parameters. It prompts for a password, displays the assigned system ID and hostname, and confirms that no products are installed.

```
egarrido@dev-app-eg3:~$ subscription-manager register --org="Procore" --activationkey="ProcoreKey"
You are attempting to run "subscription-manager" which requires administrative
privileges, but more information is needed in order to do so.
Authenticating as "root"
Password:
Password:
The system has been registered with ID: 8b837ff3-c1d6-453f-8122-403b2201c6f4
The registered system name is: dev-app-eg3.procore.prod1
No products installed.
[egarrido@dev-app-eg3 ~]$ |
```

An SSH connection is established to a remote Linux system, followed by the installation of the Katello client repository package using yum. Subscription management repositories are updated, dependencies are resolved, and the katello-client-repos package installs successfully, confirming the system is prepared to receive Katello-managed repositories.

```
egarrido@dev-app-eg3:~$ ssh egarrido@10.1.31.124
(egarrido@10.1.31.124) Password:
Last login: Sun Oct 19 18:04:44 2025 from 10.1.10.112
[egarrido@dev-app-eg3 ~]$ sudo yum -y install http://fedorapeople.org/groups/katello/releases/yum/3.2
/client/el7/x86_64/katello-client-repos-latest.rpm
[sudo] password for egarrido:
Updating Subscription Management repositories.
Warning: failed loading '/etc/yum.repos.d/MariaDB.repo', skipping.
Updates_x86_64                29 kB/s | 2.1 kB      00:00
OS_x86_64                     29 kB/s | 2.1 kB      00:00
Extras_x86_64                  16 kB/s | 2.1 kB      00:00
katello-client-repos-latest.rpm 29 kB/s | 8.6 kB      00:00
Dependencies resolved.
```

Package	Architecture	Version	Repository	Size
Installing:				
katello-client-repos	noarch	3.2.0-4.el7	@commandline	8.6 k

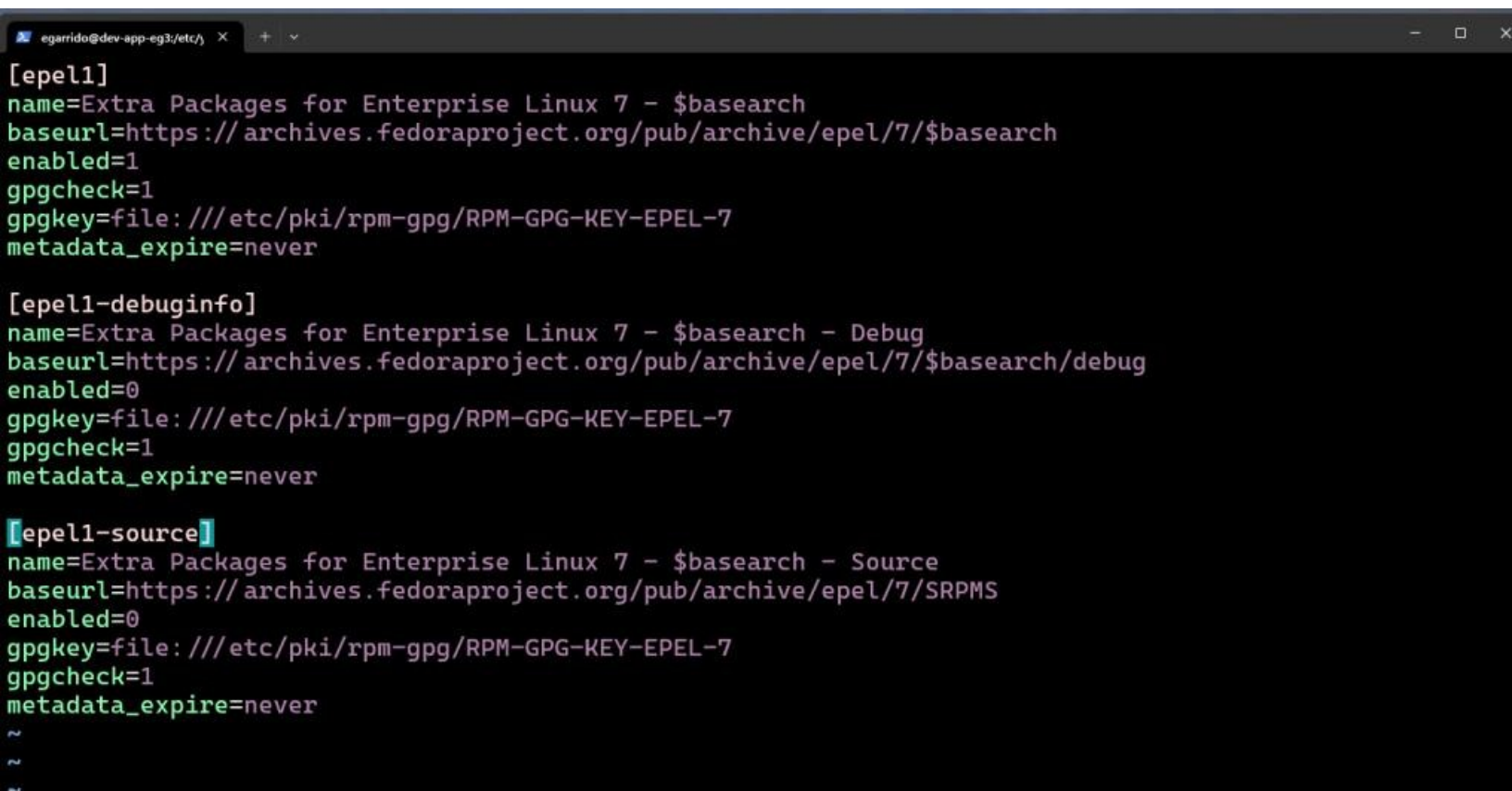
```
Transaction Summary
Install 1 Package

Total size: 8.6 k
Installed size: 1.4 k
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      : 1/1
  Installing     : katello-client-repos-3.2.0-4.el7.noarch 1/1
  Verifying      : katello-client-repos-3.2.0-4.el7.noarch 1/1
Installed products updated.

Installed:
katello-client-repos-3.2.0-4.el7.noarch
```

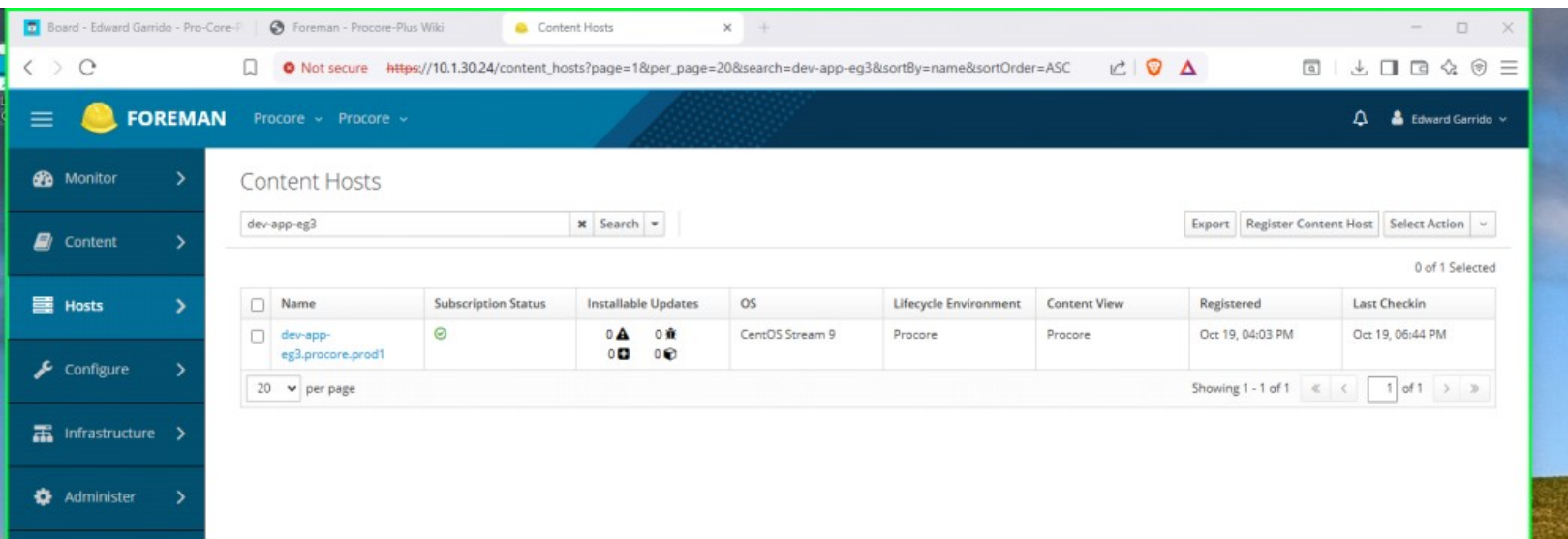


An EPEL repository configuration file is being viewed or edited, defining the EPEL 7 base, debuginfo, and source repositories. The configuration specifies archive URLs, GPG key verification, enabled states for each repo, and disables metadata expiration to ensure consistent package availability.

A terminal window with a dark background and light-colored text. The window title bar shows 'egarrido@dev-app-eg3:/etc/y' and standard window controls. The terminal content displays the configuration for three EPEL repositories: 'epel1', 'epel1-debuginfo', and 'epel1-source'. Each section lists parameters like name, baseurl, enabled status, gpgcheck, gpgkey, and metadata\_expire.

```
egarrido@dev-app-eg3:/etc/y X + - [epel1] name=Extra Packages for Enterprise Linux 7 - $basearch baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/$basearch enabled=1 gpgcheck=1 gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7 metadata_expire=never [epel1-debuginfo] name=Extra Packages for Enterprise Linux 7 - $basearch - Debug baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/$basearch/debug enabled=0 gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7 gpgcheck=1 metadata_expire=never [epel1-source] name=Extra Packages for Enterprise Linux 7 - $basearch - Source baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/SRPMS enabled=0 gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7 gpgcheck=1 metadata_expire=never ~ ~ ~
```

The Foreman web interface is displaying the Content Hosts page, showing a registered host named dev-app-eg3.procore.prod1. The system is listed as running CentOS Stream 9, successfully registered to the Procore organization and lifecycle environment, associated with a defined content view, and reporting a healthy subscription status with recent check-in activity.



The Foreman Content Host details page is displayed for dev-app-eg3.procore.prod1, showing the system fully registered and entitled. The host is running CentOS Stream 9 on a VMware virtual machine, registered through the stage-foreman.procore.prod server using an activation key. Subscription status is healthy, the host is associated with the Procore lifecycle environment and content view, and recent check-in activity confirms active communication with Foreman.

Board - Edward Garrido - Pro-Core-1

Foreman - Procore-Plus Wiki

Content Host dev-app-eg3.procore.prod1

Not secure https://10.130.24/content\_hosts/641

FOREMAN

Procore Procore

Edward Garrido

Monitor

Content

Hosts

Configure

Infrastructure

Administer

dev-app-eg3.procore.prod1

Unregister Host

Details

Provisioning Details

Subscriptions

Host Collections

Tasks

Packages

Errata

Module Streams

Traces

Repository Sets

Basic Information

Installable Errata

Content Host Content

Content Host Status

Networking

Subscriptions

System Purpose

Content Host Properties

Installed Products

Name:

dev-app-eg3.procore.prod1

Subscription UUID:

8b837f3-c1d6-453f-8122-403b2201c6f4

Bios UUID:

85280842-409D-0F0F-952B-A56F0C48AD6

Description:

Type:

vmware

Katello Agent :

Not installed

Virtual Guests:

0 Content Hosts

Registered Through:

stage-foreman.procore.prod

Security:

0

Bug Fix:

0

Enhancement:

0

Release Version:

Content View:

Procore

Lifecycle Environment :

Library

Procore

Registered:

Oct 19, 04:03 PM

Registered By:

Activation Key

ProcoreKey

Last Checkin:

Oct 19, 06:44 PM

Hostname:

dev-app-eg3.procore.prod1

IPv4 Address:

10.1.31.124

IPv6 Address:

fe80::b08e:131:b7c0:3891

Interfaces:

+ ens192

System Purpose Status:

Not Specified

Service Level (SLA):

Usage Type:

Role:

Add ons:

OS

CentOS Stream 9

Architecture

x86\_64

Number of CPUs

1

Sockets

1

Cores per Socket

1

RAM (GB)

1.23

Virtual Guest

Yes

You do not have any installed Products

An SSH public key is copied to a remote host using `ssh-copy-id`, with the host key verified and trusted during the first connection. The key is successfully added to the remote system, and a follow-up SSH login as root confirms access to the target server, indicating that key-based authentication is functioning correctly.

```
root@dev-performance-eg3: ~  
[root@stage-foreman ~]# ssh-copy-id -i ~foreman-proxy/.ssh/id_rsa_foreman_proxy.pub 10.1.31.135  
/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/usr/share/foreman-proxy/.ssh/id_rsa_foreman_proxy.pub"  
The authenticity of host '10.1.31.135 (<no hostip for proxy command>)' can't be established.  
ECDSA key fingerprint is SHA256:G6Q6RLr1WY+wMJ8k0GeVFG/xaUpcUF3CyT2F8BkMAC8.  
ECDSA key fingerprint is MD5:19:eb:c1:5a:b7:48:bb:71:eb:9b:f0:e7:39:8a:15:9e.  
Are you sure you want to continue connecting (yes/no)? yes  
/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed  
/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys  
Password:  
Password:  
  
Number of key(s) added: 1  
  
Now try logging into the machine, with:  "ssh '10.1.31.135'"  
and check to make sure that only the key(s) you wanted were added.  
  
[root@stage-foreman ~]# ssh root@10.1.31.135  
Password:  
Last failed login: Sun Oct 19 16:10:14 EDT 2025 from 10.1.30.24 on ssh:notty  
There was 1 failed login attempt since the last successful login.  
Last login: Thu Oct 9 09:58:32 2025  
[root@dev-performance-eg3 ~]#
```

The /etc/hosts file is being reviewed and maintained as part of a sanitation step to ensure clean and consistent hostname resolution. Static IP-to-hostname mappings are defined for key internal systems (IPA, application, performance, web, Ansible, logging, backup, and Foreman hosts), helping prevent DNS-related issues and ensuring the environment remains stable and properly sanitized before further configuration or automation tasks.

```
root@dev-performance-eg3: ~  
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4  
::1         localhost localhost.localdomain localhost6 localhost6.localdomain6  
  
10.1.15.13 ipa.procure.dev  
10.1.31.124 dev-app-eg3.procure.prod1 dev-app-eg3  
10.1.31.135 dev-performance-eg3.procure.prod1 dev-performance-eg3  
10.1.30.41 dev-ansible.procure.prod1 dev-ansible  
10.1.31.136 stage-web-eg3.procure.prod1 stage-web-eg3  
10.1.30.51 stage-graylog.procure.dev  
10.1.30.43 prod-bacula.procure.prod1 prod-bacula  
10.1.31.24 stage-foreman.procure.prod  
~  
~  
~  
~  
~
```



The /etc/hosts file is shown with updated static IP-to-hostname mappings for multiple internal systems. These entries standardize name resolution across application, performance, web, Ansible, logging, backup, IPA, and Foreman servers, serving as a sanitation step to keep hostname resolution clean, consistent, and reliable within the environment.



```
root@dev-performance-eg3: ~  
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4  
::1         localhost localhost.localdomain localhost6 localhost6.localdomain6  
  
10.1.15.13 ipa.procore.dev  
10.1.31.124 dev-app-eg3.procore.prod1 dev-app-eg3  
10.1.31.135 dev-performance-eg3.procore.prod1 dev-performance-eg3  
10.1.30.41 dev-ansible.procore.prod1 dev-ansible  
10.1.31.136 stage-web-eg3.procore.prod1 stage-web-eg3  
10.1.30.51 stage-graylog.procore.dev  
10.1.30.43 prod-bacula.procore.prod1 prod-bacula  
10.1.31.24 stage-foreman.procore.prod  
~  
~  
~  
~  
~
```

System packages related to subscription management are being installed on the host. Multiple dependencies are downloaded and verified, the transaction completes successfully, and required services are enabled via systemd. This step serves as a sanitation action, ensuring the system is clean, properly registered, and prepared for managed repositories and future updates.

```
egarrido@stage-web-eg3:~$ sudo dnf install subscription-manager
Install 10 Packages

Total download size: 1.5 M
Installed size: 5.4 M
Downloading Packages:
(1/10): libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64.rpm 47 kB/s | 35 kB 00:00
(2/10): python3-cloud-what-1.29.47-1.el9.x86_64.rpm 68 kB/s | 56 kB 00:00
(3/10): python3-iniparse-0.4-45.el9.noarch.rpm 53 kB/s | 47 kB 00:00
(4/10): python3-inotify-0.9.6-25.el9.noarch.rpm 187 kB/s | 53 kB 00:00
(5/10): python3-librepo-1.14.5-3.el9.x86_64.rpm 223 kB/s | 48 kB 00:00
(6/10): subscription-manager-rhsm-certificates-20220623-1.el9.noarch 107 kB/s | 21 kB 00:00
(7/10): python3-subscription-manager-rhsm-1.29.47-1.el9.x86_64.rpm 338 kB/s | 141 kB 00:00
(8/10): virt-what-1.27-2.el9.x86_64.rpm 229 kB/s | 42 kB 00:00
(9/10): usermode-1.114-7.el9.x86_64.rpm 479 kB/s | 188 kB 00:00
(10/10): subscription-manager-1.29.47-1.el9.x86_64.rpm 584 kB/s | 897 kB 00:01

Total 520 kB/s | 1.5 MB 00:02
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing : 1/1
  Installing : subscription-manager-rhsm-certificates-20220623-1.el9.noarch 1/10
  Installing : python3-iniparse-0.4-45.el9.noarch 2/10
  Installing : python3-cloud-what-1.29.47-1.el9.x86_64 3/10
  Installing : python3-subscription-manager-rhsm-1.29.47-1.el9.x86_64 4/10
  Installing : virt-what-1.27-2.el9.x86_64 5/10
  Installing : usermode-1.114-7.el9.x86_64 6/10
  Installing : python3-librepo-1.14.5-3.el9.x86_64 7/10
  Installing : python3-inotify-0.9.6-25.el9.noarch 8/10
  Installing : libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64 9/10
Running scriptlet: subscription-manager-1.29.47-1.el9.x86_64 10/10
  Installing : subscription-manager-1.29.47-1.el9.x86_64 10/10
Running scriptlet: subscription-manager-1.29.47-1.el9.x86_64 10/10
Created symlink /etc/systemd/system/multi-user.target.wants/rhsmcertd.service → /usr/lib/systemd/system/rhsmcertd.service.
```

The Katello CA consumer RPM is downloaded from the Foreman server using curl with SSL verification bypassed. The transfer completes successfully, confirming network connectivity to the Foreman server and preparing the system for trusted certificate installation and subsequent subscription registration as part of the sanitation process.

```
egarrido@stage-web-eg3:~$ sudo curl --insecure --output katello-ca-consumer-latest.noarch.rpm https://stage-foreman.procore.prod/pub/katello-ca-consumer-latest.noarch.rpm
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left     Speed
100 7366  100 7366    0     0  65767      0 --:--:-- --:--:-- --:--:-- 65767
egarrido@stage-web-eg3:~$
```

The katello-ca-consumer package is installed locally using yum localinstall. Despite warnings about the system not yet being registered, the installation completes successfully, updates the trusted CA certificates, and prepares the host for secure registration with the Foreman/Katello server as part of the system sanitation process.

```
egarrido@stage-web-eg3:~$ sudo yum localinstall katello-ca-consumer-latest.noarch.rpm
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Warning: failed loading '/etc/yum.repos.d/CentOS.repo', skipping.
Last metadata expiration check: 3:01:09 ago on Sun 19 Oct 2025 01:53:25 PM EDT.
Dependencies resolved.

Package Arch Version Repository Size
-----
Installing:
katello-ca-consumer-stage-foreman.procore.prod noarch 1.0-1 @commandline 7.2 k

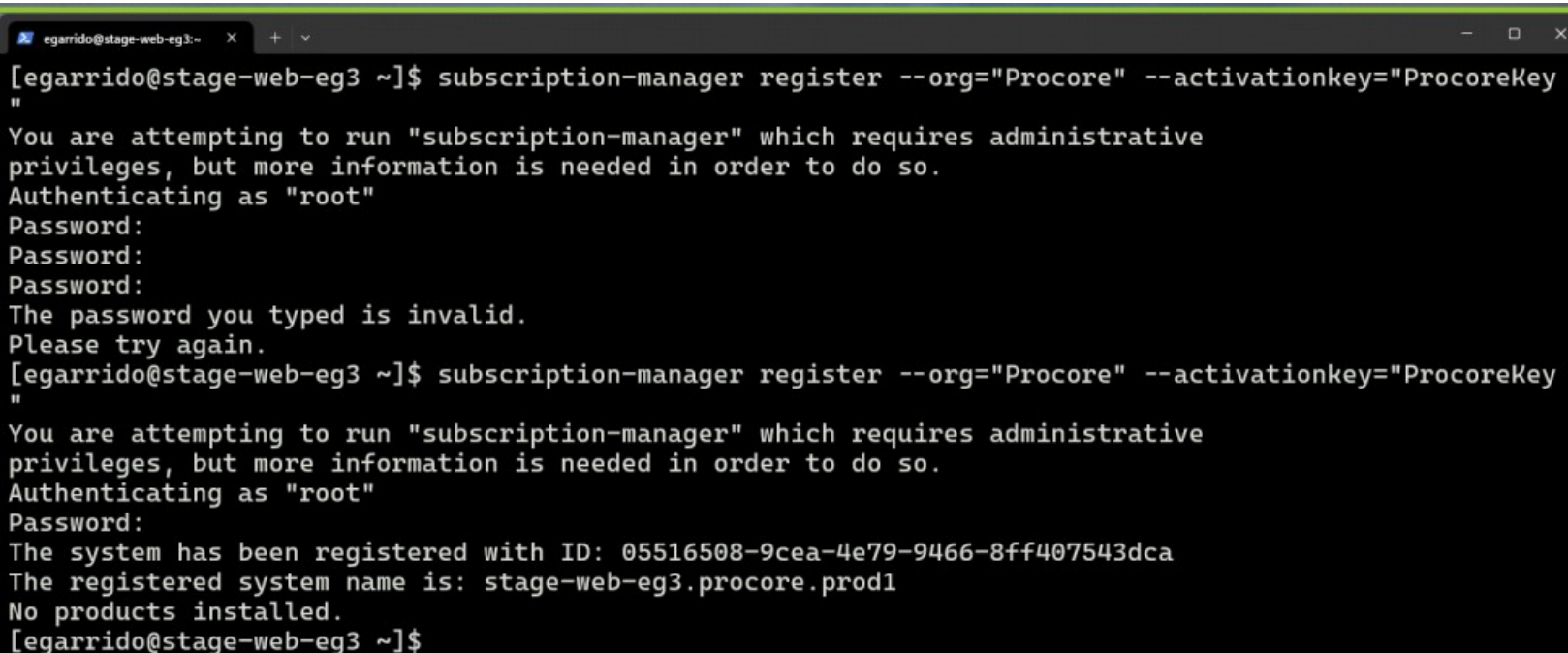
Transaction Summary
-----
Install 1 Package

Total size: 7.2 k
Installed size: 16 k
Is this ok [y/N]: y
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing : 1/1
  Installing : katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
  Running scriptlet: katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
Warning: 'enable' is a deprecated argument. Use 'update-ca-trust extract' in future. See 'update-ca-trust --help' for usage.

Proceeding with extraction anyway for backwards compatibility.

  Verifying : katello-ca-consumer-stage-foreman.procore.prod-1.0-1.noarch 1/1
Installed products updated.
```

The system is registered with the Foreman/Katello server using subscription-manager and an activation key after successful administrative authentication. An initial authentication attempt fails, followed by a successful registration that assigns a unique system ID and confirms the host name stage-web-eg3.procore.prod1, completing the registration step required for managed repositories and updates.

A terminal window with a dark background and light green text. The window title is 'egarrido@stage-web-eg3:~'. The user enters the command 'subscription-manager register --org="Procore" --activationkey="ProcoreKey"'. The system prompts for a password three times, and the user enters an invalid password. The user then re-enters the command. The system successfully registers the machine, displaying the system ID, name, and installed products.

```
egarrido@stage-web-eg3 ~]$ subscription-manager register --org="Procore" --activationkey="ProcoreKey"
You are attempting to run "subscription-manager" which requires administrative
privileges, but more information is needed in order to do so.
Authenticating as "root"
Password:
Password:
Password:
The password you typed is invalid.
Please try again.
[egarrido@stage-web-eg3 ~]$ subscription-manager register --org="Procore" --activationkey="ProcoreKey"
You are attempting to run "subscription-manager" which requires administrative
privileges, but more information is needed in order to do so.
Authenticating as "root"
Password:
The system has been registered with ID: 05516508-9cea-4e79-9466-8ff407543dca
The registered system name is: stage-web-eg3.procore.prod1
No products installed.
[egarrido@stage-web-eg3 ~]$
```



The Foreman web interface is displaying the Content Hosts page filtered for stage-web-eg3. The host stage-web-eg3.procore.prod1 is listed as running CentOS Stream 9, successfully registered in the Procore lifecycle environment and content view, with an active subscription status and a recent check-in timestamp confirming communication with the Foreman server.

Board - Edward Garrido - Pro-Core-3

Resume creation steps

Foreman - Procore-Plus Wiki

Post Attendee - Zoom

Content Hosts

Not securehttps://10.1.30.24/content\_hosts?page=1&per\_page=20&sortBy=name&sortOrder=ASC&search=stage-web-eg3

FOREMAN

ProcoreProcore

Edward Garrido

Monitor

Content

Hosts

Configure

Infrastructure

Administer

Content Hosts

stage-web-eg3Search

ExportRegister Content HostSelect Action

0 of 1 Selected

	Name	Subscription Status	Installable Updates	OS	Lifecycle Environment	Content View	Registered	Last Checkin
<input type="checkbox"/>	stage-web-eg3.procore.prod1		0  0	CentOS Stream 9	Procore	Procore	Oct 19, 04:57 PM	Oct 19, 04:57 PM

20 per pageShowing 1 - 1 of 11 of 1

The Foreman Content Host details page is displayed for stage-web-eg3.procore.prod1, showing the host fully registered and entitled. The system is running CentOS Stream 9 on a VMware virtual machine, registered through stage-foreman.procore.prod using an activation key. Subscription status is healthy, the host is assigned to the Procore lifecycle environment and content view, and recent check-in activity confirms active communication with the Foreman server.

Board - Edward Garrido - Pro-Core

Foreman - Procore-Plus Wiki

Content Host stage-web-eg3.pr

Not secure https://10.1.30.24/content\_hosts/642

FOREMAN

Procore

Any Location

Edward Garrido

Monitor

Content

Hosts

Configure

Infrastructure

Administer

stage-web-eg3.procore.prod1

Unregister Host

Content Hosts

stage-web-eg3.procore.prod1

Details

Provisioning Details

Subscriptions

Host Collections

Tasks

Packages

Errata

Module Streams

Traces

Repository Sets

Basic Information

Name:

stage-web-eg3.procore.prod1

Subscription UUID:

05516508-9cea-4e79-9466-8ff407543dca

Bios UUID:

6B0E0B42-312B-F896-BA9A-3B047DB18EA9

Description:

vmware

Type:

Not installed

Katello Agent:

Content Hosts

Virtual Guests:

stage-foreman.procore.prod

Registered Through:

Installable Errata

Security:

Bug Fix:

Enhancement:

Content Host Content

Release Version:

Content View:

Lifecycle Environment:

Library

Procore

Content Host Status

Registered:

Registered By:

Last Checkin:

Oct 19, 04:57 PM

Activation Key

Oct 19, 07:26 PM

ProcoreKey

Networking

Hostname:

IPv4 Address:

IPv6 Address:

Interfaces:

stage-web-eg3.procore.prod1

10.1.31.136

fe80::fcba:f716:8f4a:5cfe

ens192

Subscriptions

Subscription Status:

Details:

Auto-Attach:

Fully entitled

Yes

System Purpose

System Purpose Status:

Service Level (SLA):

Usage Type:

Role:

Add ons:

Not Specified

Content Host Properties

OS

Architecture

Number of CPUs

Sockets

Cores per Socket

RAM (GB)

Virtual Guest

CentOS Stream 9

x86\_64

1

1

1

0.75

Yes

Installed Products

You do not have any Installed Products

An SSH key is successfully added to the remote host and validated by logging in as root. After access is confirmed, the /etc/hosts file is edited to ensure proper hostname resolution, followed by installing subscription-manager and its dependencies from the base OS repository. The installation completes successfully, preparing the system for registration and managed content access.

```
root@dev-performance-eg3: ~
Password:

Number of key(s) added: 1

Now try logging into the machine, with:  "ssh '10.1.31.135'"
and check to make sure that only the key(s) you wanted were added.

[root@stage-foreman ~]# ssh root@10.1.31.135
Password:
Last failed login: Sun Oct 19 16:10:14 EDT 2025 from 10.1.30.24 on ssh:notty
There was 1 failed login attempt since the last successful login.
Last login: Thu Oct  9 09:58:32 2025
[root@dev-performance-eg3 ~]# sudo vim /etc/hosts
[root@dev-performance-eg3 ~]#
[root@dev-performance-eg3 ~]# yum -y install subscription-manager
Last metadata expiration check: 0:04:53 ago on Sun 19 Oct 2025 04:12:07 PM EDT.
Dependencies resolved.
```

Package	Architecture	Version	Repository	Size
Installing:				
subscription-manager	x86_64	1.29.47-1.el9	baseos	897 k
Installing dependencies:				
libdnf-plugin-subscription-manager	x86_64	1.29.47-1.el9	baseos	35 k
python3-cloud-what	x86_64	1.29.47-1.el9	baseos	56 k
python3-iniparse	noarch	0.4-45.el9	baseos	47 k
python3-inotify	noarch	0.9.6-25.el9	baseos	53 k
python3-librepo	x86_64	1.14.5-2.el9	baseos	48 k
python3-subscription-manager-rhsm	x86_64	1.29.47-1.el9	baseos	141 k
subscription-manager-rhsm-certificates	noarch	20220623-1.el9	baseos	21 k
usermode	x86_64	1.114-7.el9	baseos	188 k
virt-what	x86_64	1.27-2.el9	baseos	42 k

```
Transaction Summary
Install 10 Packages

Total download size: 1.5 M
Installed size: 5.4 M
Downloading Packages:
(1/10): python3-iniparse-0.4-45.el9.noarch.rpm 393 kB/s | 47 kB 00:00
(2/10): libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64.rpm 183 kB/s | 35 kB 00:00
(3/10): python3-cloud-what-1.29.47-1.el9.x86_64.rpm 243 kB/s | 56 kB 00:00
(4/10): python3-inotify-0.9.6-25.el9.noarch.rpm 397 kB/s | 53 kB 00:00
```

An SSH key is successfully added and verified by logging in to the remote host as root. After access is confirmed, the /etc/hosts file is edited to ensure correct hostname resolution, followed by installing subscription-manager and its required dependencies from the base OS repository, with packages resolving and downloading successfully

```
root@dev-performance-eg3: ~
Password:

Number of key(s) added: 1

Now try logging into the machine, with:  "ssh '10.1.31.135'"
and check to make sure that only the key(s) you wanted were added.

[root@stage-foreman ~]# ssh root@10.1.31.135
Password:
Last failed login: Sun Oct 19 16:10:14 EDT 2025 from 10.1.30.24 on ssh:notty
There was 1 failed login attempt since the last successful login.
Last login: Thu Oct  9 09:58:32 2025
[root@dev-performance-eg3 ~]# sudo vim /etc/hosts
[root@dev-performance-eg3 ~]#
[root@dev-performance-eg3 ~]# yum -y install subscription-manager
Last metadata expiration check: 0:04:53 ago on Sun 19 Oct 2025 04:12:07 PM EDT.
Dependencies resolved.
```

Package	Architecture	Version	Repository	Size
Installing:				
subscription-manager	x86_64	1.29.47-1.el9	baseos	897 k
Installing dependencies:				
libdnf-plugin-subscription-manager	x86_64	1.29.47-1.el9	baseos	35 k
python3-cloud-what	x86_64	1.29.47-1.el9	baseos	56 k
python3-iniparse	noarch	0.4-45.el9	baseos	47 k
python3-inotify	noarch	0.9.6-25.el9	baseos	53 k
python3-librepo	x86_64	1.14.5-2.el9	baseos	48 k
python3-subscription-manager-rhsm	x86_64	1.29.47-1.el9	baseos	141 k
subscription-manager-rhsm-certificates	noarch	20220623-1.el9	baseos	21 k
usermode	x86_64	1.114-7.el9	baseos	188 k
virt-what	x86_64	1.27-2.el9	baseos	42 k

```
Transaction Summary
Install 10 Packages

Total download size: 1.5 M
Installed size: 5.4 M
Downloading Packages:
(1/10): python3-iniparse-0.4-45.el9.noarch.rpm 393 kB/s | 47 kB 00:00
(2/10): libdnf-plugin-subscription-manager-1.29.47-1.el9.x86_64.rpm 183 kB/s | 35 kB 00:00
(3/10): python3-cloud-what-1.29.47-1.el9.x86_64.rpm 243 kB/s | 56 kB 00:00
(4/10): python3-inotify-0.9.6-25.el9.noarch.rpm 397 kB/s | 53 kB 00:00
```



An SSH public key from the Foreman proxy is copied to the remote host, initially detected as already present, then re-added using the force option. A successful SSH login to the target system follows, confirming access. The system then checks for subscription-manager, which is already installed, indicating no further package changes are required.

```
root@dev-performance-eg3: ~  
[root@stage-foreman ~]# ssh-copy-id -i ~foreman-proxy/.ssh/id_rsa_foreman_proxy.pub 10.1.31.135  
/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/usr/share/foreman-proxy/.ssh/id_rsa_foreman_proxy.pub"  
/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed  
/bin/ssh-copy-id: WARNING: All keys were skipped because they already exist on the remote system.  
                (if you think this is a mistake, you may want to use -f option)  
[root@stage-foreman ~]# ssh-copy-id -i ~foreman-proxy/.ssh/id_rsa_foreman_proxy.pub 10.1.31.135 -f  
/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/usr/share/foreman-proxy/.ssh/id_rsa_foreman_proxy.pub"  
Password:  
Password:  
Number of key(s) added: 1  
Now try logging into the machine, with: "ssh '10.1.31.135'"  
and check to make sure that only the key(s) you wanted were added.  
[root@stage-foreman ~]# ssh 10.1.31.135  
Password:  
Password:  
Last failed login: Sun Oct 19 17:02:52 EDT 2025 from 10.1.30.24 on ssh:notty  
There were 2 failed login attempts since the last successful login.  
Last login: Sun Oct 19 16:36:31 2025 from 10.1.30.24  
[root@dev-performance-eg3 ~]# sudo yum -y install subscription-manager  
Updating Subscription Management repositories.  
Unable to read consumer identity  
This system is not registered with an entitlement server. You can use subscription-manager to register.  
Last metadata expiration check: 0:51:20 ago on Sun 19 Oct 2025 04:12:07 PM EDT.  
Package subscription-manager-1.29.47-1.el9.x86_64 is already installed.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[root@dev-performance-eg3 ~]#
```



An EPEL 7 repository configuration file is displayed, showing the base, debuginfo, and source repositories. The configuration defines archive URLs, enables the main EPEL repository, disables debug and source repos, enforces GPG signature verification, and sets metadata to never expire, ensuring consistent and sanitized package availability for legacy dependencies.

```
root@dev-performance-eg3/ X + - x
[epel1]
name=Extra Packages for Enterprise Linux 7 - $basearch
baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/$basearch
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7
metadata_expire=never

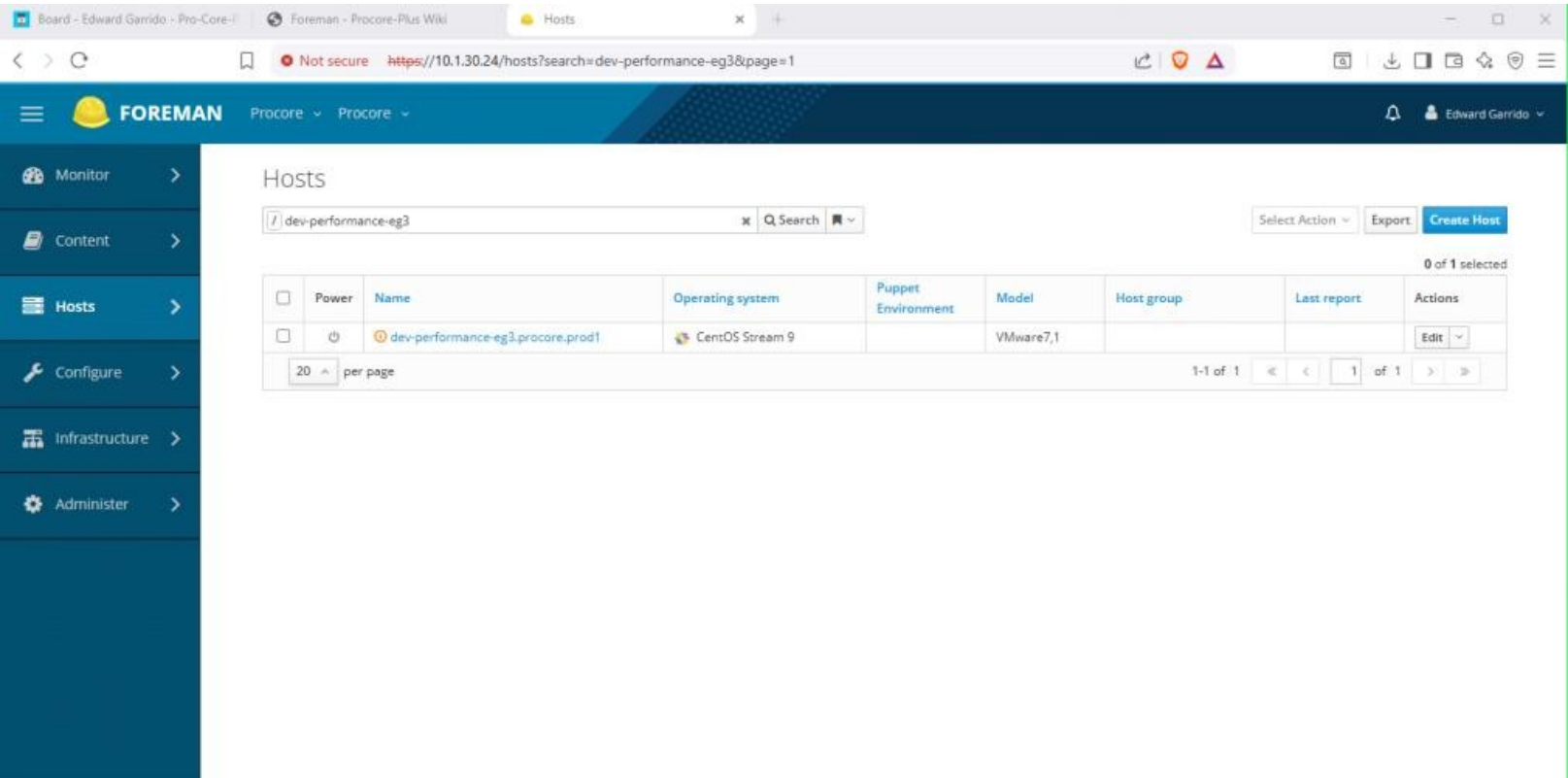
[epel1-debuginfo]
name=Extra Packages for Enterprise Linux 7 - $basearch - Debug
baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/$basearch/debug
enabled=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7
gpgcheck=1
metadata_expire=never

[epel1-source]
name=Extra Packages for Enterprise Linux 7 - $basearch - Source
baseurl=https://archives.fedoraproject.org/pub/archive/epel/7/SRPMS
enabled=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7
gpgcheck=1
metadata_expire=never
~
~
```

Lists enabled YUM repositories on a CentOS Stream 9 system, including extras-common, ExtremeIX EPEL, and katello-client. For each repo, it displays metadata such as repository ID and name, revision, last update time, package counts, repository size, base URL or metalink, cache expiration, and the source .repo file. The output ends with a total of 62,614 packages available across all configured repositories.

```
root@dev-performance-eg3: ~  
Repo-id           : extras-common  
Repo-name         : CentOS Stream 9 - Extras packages  
Repo-revision     : 1757961163  
Repo-updated      : Mon 15 Sep 2025 02:32:43 PM EDT  
Repo-pkgs         : 98  
Repo-available-pkgs: 98  
Repo-size         : 935 k  
Repo-metalink     : https://mirrors.centos.org/metalink?repo=centos-extras-sig-extras-common-9-stream&arch=x86_64&protocol=https,http  
  Updated         : Sun 19 Oct 2025 06:33:28 PM EDT  
Repo-baseurl      : http://mirrors.iu13.net/centos-stream/SIGs/9-stream/extras/x86_64/extras-common/  
                  : (42 more)  
Repo-expire       : 21,600 second(s) (last: Sun 19 Oct 2025 06:33:28 PM EDT)  
Repo-filename     : /etc/yum.repos.d/centos-addons.repo  
  
Repo-id           : extreme-epel  
Repo-name         : ExtremeIX EPEL Repo  
Repo-revision     : 1760860413  
Repo-updated      : Sun 19 Oct 2025 06:44:52 AM EDT  
Repo-pkgs         : 10,357  
Repo-available-pkgs: 10,357  
Repo-size         : 20 G  
Repo-baseurl      : http://repos.del.extreme-ix.org/epel/8/Everything/x86_64/  
Repo-expire       : 172,800 second(s) (last: Sun 19 Oct 2025 06:34:01 PM EDT)  
Repo-filename     : /etc/yum.repos.d/yum.repo  
  
Repo-id           : katello-client  
Repo-name         : Katello Client 3.2  
Repo-revision     : 1482351121  
Repo-updated      : Wed 21 Dec 2016 03:12:03 PM EST  
Repo-pkgs         : 16  
Repo-available-pkgs: 16  
Repo-size         : 957 k  
Repo-baseurl      : https://fedorapeople.org/groups/katello/releases/yum/3.2/client/el7/x86_64/  
Repo-expire       : 172,800 second(s) (last: Sun 19 Oct 2025 06:33:39 PM EDT)  
Repo-filename     : /etc/yum.repos.d/katello-client.repo  
Total packages: 62,614  
[root@dev-performance-eg3 yum.repos.d]#
```

Displays the Foreman Hosts inventory filtered to a single system, dev-performance-eg3.procore.prod1. The host is registered and reachable, running CentOS Stream 9 on a VMware 7.1 platform, and is associated with a defined host group. Management actions such as Edit, Export, and Create Host are available from the interface, confirming the system is successfully onboarded and managed within Foreman.



Shows the Content Hosts view in Foreman filtered to dev-performance-eg3.procore.prod1. The system is registered with an active subscription, running CentOS Stream 9, and assigned to the Procore lifecycle environment and Procore content view. Package update status indicators are visible, and the host has recently checked in, confirming successful content management and repository synchronization.

Board - Edward Garrido - Pro-Core-Plus Wiki

Foreman - Procore-Plus Wiki

Content Hosts

Not secure https://10.130.24/content\_hosts?page=1&per\_page=20&sortBy=name&sortOrder=ASC&search=dev-performan...

FOREMAN

ProcoreProcore

Edward Garrido

Monitor

Content

Hosts

Configure

Infrastructure

Administer

Content Hosts

dev-performance-eg3

Search

ExportRegister Content HostSelect Action

0 of 1 Selected

	Name	Subscription Status	Installable Updates	OS	Lifecycle Environment	Content View	Registered	Last Checkin
<input type="checkbox"/>	dev-performance-eg3.procore.prod1		0  0	CentOS Stream 9	Procore	Procore	Oct 19, 06:21 PM	Oct 19, 06:33 PM

20 per pageShowing 1 - 1 of 11 of 1

Provides a detailed Content Host profile for dev-performance-eg3.procore.prod1 in Foreman. The system is registered via an activation key, fully entitled with subscriptions, and running CentOS Stream 9 on a VMware virtual platform. It is assigned to the Procore lifecycle environment and content view, with current check-in status confirmed. Hardware, networking, and OS attributes are visible, along with installable errata counts, showing the host is properly enrolled for centralized content, patching, and lifecycle management.

Board - Edward Garrido - Pro-Core-1

Foreman - Procore-Plus Wiki

Content Host dev-performance-1

Not secure https://10.1.30.24/content\_hosts/643

FOREMAN

Procore

Procore

Edward Garrido

Monitor

Content

Hosts

Configure

Infrastructure

Administer

dev-performance-eg3.procore.prod1

Unregister Host

Content Hosts > dev-performance-eg3.procore.prod1

Details

Provisioning Details

Subscriptions

Host Collections

Tasks

Packages

Errata

Module Streams

Traces

Repository Sets

Basic Information

Installable Errata

Content Host Content

Content Host Status

Networking

Subscriptions

System Purpose

Content Host Properties

Installed Products

Name:

dev-performance-eg3.procore.prod1

✎

Subscription UUID:

c25a3c08-c885-4c46-a7b8-3a994c61eae6

Bios UUID:

26960842-C871-B348-59B9-2A1AD6C854E1

✎

Description:

✎

Type:

vmware

Katello Agent :

Not installed

Virtual Guests:

0 Content Hosts

Registered Through:

stage-foreman.procore.prod

Security:

0

Bug Fix:

0

Enhancement:

0

Release Version:

✎ ✕

Content View:

Procore

✎

Lifecycle Environment :

Library

Procore

Registered:

Oct 19, 06:21 PM

Registered By:

Activation Key

ProcoreKey

Last Checkin:

Oct 19, 06:33 PM

Hostname:

dev-performance-eg3.procore.prod1

IPv4 Address:

10.1.31.135

IPv6 Address:

fe80::4f24:3568:5f56:3834

Interfaces:

+ ens192

Subscription Status:

Fully entitled

Details:

Auto-Attach:

Yes

✎

System Purpose Status:

Not Specified

Service Level (SLA):

✎ ✕

Usage Type:

✎ ✕

Role:

✎ ✕

Add ons:

OS

CentOS Stream 9

Architecture

x86\_64

Number of CPUs

1

Sockets

1

Cores per Socket

1

RAM (GB)

0.75

Virtual Guest

Yes

You do not have any Installed Products



## Summary

The screenshots collectively document the end-to-end onboarding and validation of a CentOS Stream 9 virtual machine in Foreman/Katello. They show the host being discovered and managed in Foreman, registered as a Content Host with active subscriptions, and assigned to the correct lifecycle environment and content view. The images also confirm successful system check-ins, visibility of installable errata, and accurate host inventory details such as operating system, architecture, networking, and virtualization platform. Finally, command-line validation demonstrates that the VM can access the expected repositories and retrieve package metadata, confirming that centralized content, patching, and lifecycle management are functioning as intended.