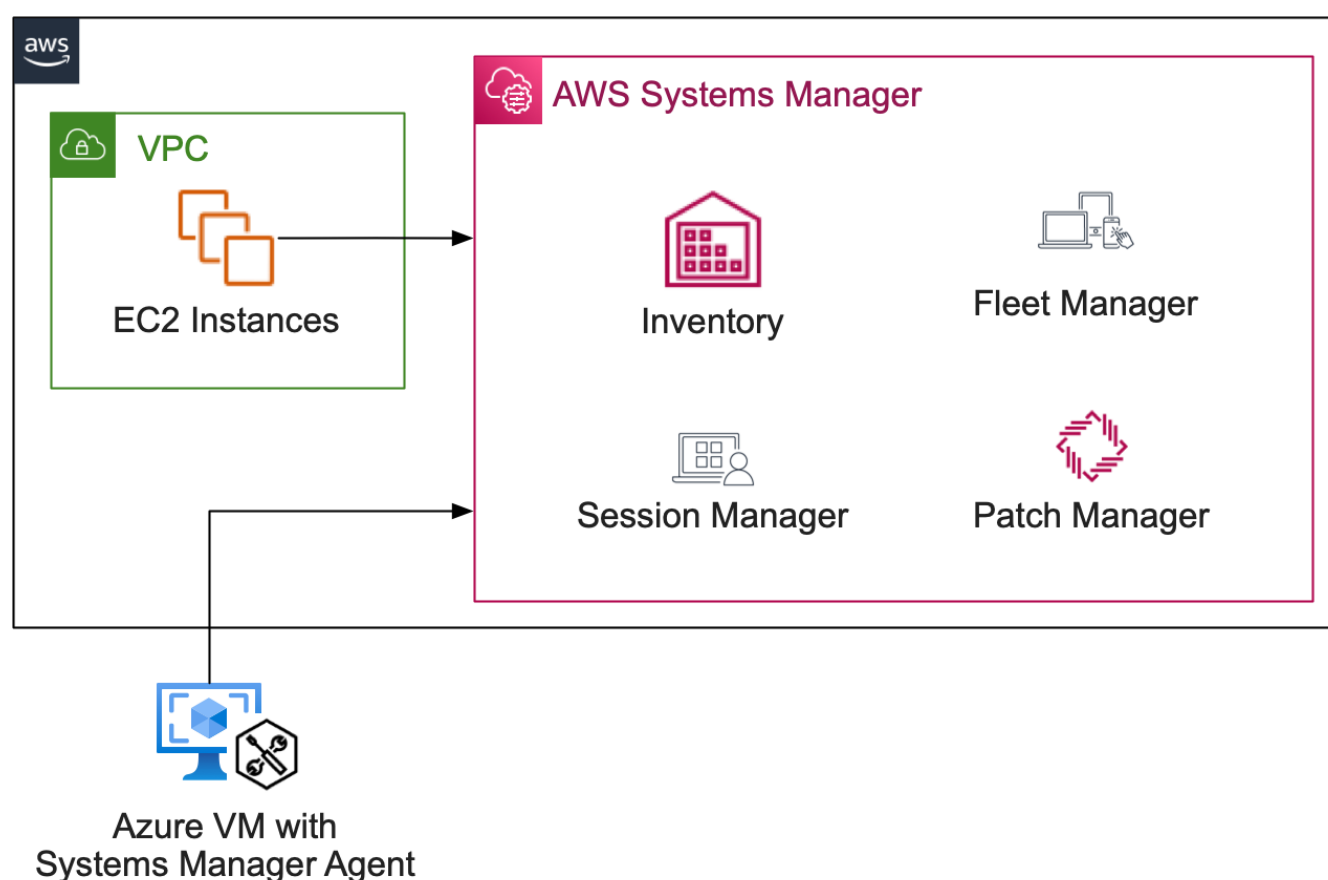


40°

Lab - AWS re/Start Uso de AWS Systems Manager





Interactuando con AWS System Manager

A continuación, se muestra los objetivos del laboratorio:

- Utilizar **AWS Systems Manager Inventory** para verificar las *configuraciones* y los *permisos*
- Utilizar **AWS Systems Manager Run Command** para *ejecutar tareas* en varios servidores
- Utilizar **AWS Systems Manager Parameter Store** para *actualizar los ajustes* o configuraciones de la aplicación
- Utilizar **AWS Systems Manager Session Manager** para acceder a la *línea de comandos en una instancia*

Nota. AWS Systems Manager es una colección de capacidades para configurar y administrar sus instancias de Amazon EC2, servidores en las instalaciones y máquinas virtuales y otros recursos de AWS a escala.

Tarea 01



Lo primero, utilizaremos **AWS Systems Fleet Manager** para recuperar el inventario de una instancia EC2 (también se podría de máquinas virtuales o servidores locales en tu entorno híbrido). Cabe recalcar que el inventario incluye metadatos del sistema operativo, aplicaciones, configuraciones y permisos. Empezamos seteando uno:

[AWS Systems Manager](#) > [Inventory](#) > Setup Inventory

Setup Inventory

Create an inventory association to collect information about software and settings for a target set of managed instances.

Provide inventory details

Name - *Optional*

Provide a name for your Inventory.

Targets

Specify targets by

☐ Selecting all managed instances in this account

☐ Specifying a tag

☒ Manually selecting instances

X

< 1 >

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Availability zone	Ping status	Last ping time (UTC)
<input checked="" type="checkbox"/>	Managed Instance	i-09f7fd77a99dd548b	running	us-west-2a	Online	Sun, 03 Mar 2024 16:54:27 GMT

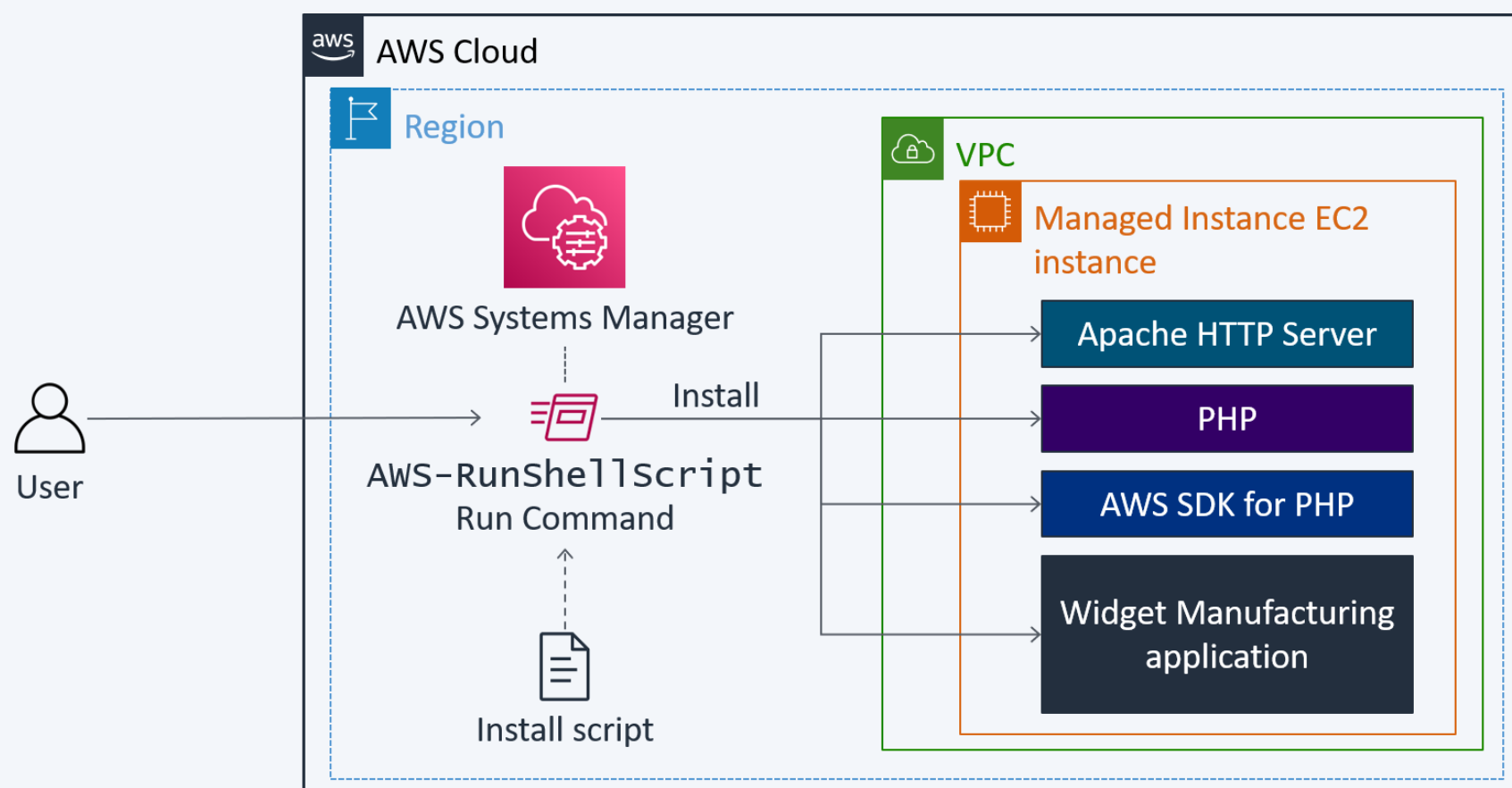
Tarea 01



Y este es el resultado:

Name	Application Type	Publisher	Version	Release	Epoch	Installed Time	Architecture	URL
libseccomp	System Environment/Libraries	Amazon Linux	2.5.2	1.amzn2.0.1	-	2024-02-23T05:25:39Z	x86_64	https://github.com/seccomp/libseccomp
kbd-legacy	System Environment/Base	Amazon Linux	1.15.5	15.amzn2	-	2024-02-23T05:25:33Z	noarch	http://ftp.altlinux.org/pub/people/legion/kbd
libpath_utils	Development/Libraries	Amazon Linux	0.2.1	29.amzn2	-	2024-02-23T05:25:40Z	x86_64	https://pagure.io/SSSD/ding-lib
libgcc	System Environment/Libraries	Amazon Linux	7.3.1	17.amzn2	-	2024-02-23T05:25:34Z	x86_64	http://gcc.gnu.org
pth	System Environment/Libraries	Amazon Linux	2.0.7	23.amzn2.0.2	-	2024-02-23T05:25:41Z	x86_64	http://www.gnu.org/software/pth/
pcre	System Environment/Libraries	Amazon Linux	8.32	17.amzn2.0.3	-	2024-02-23T05:25:34Z	x86_64	http://www.pcre.org/
openssl-lib	System Environment/Libraries	Amazon Linux	1.0.2k	24.amzn2.0.11	1	2024-02-23T05:25:41Z	x86_64	http://www.openssl.org/
xz-lib	System Environment/Libraries	Amazon Linux	5.2.2	1.amzn2.0.3	-	2024-02-23T05:25:35Z	x86_64	http://tukaani.org/xz/
glib2	Unspecified	Amazon Linux	2.56.1	9.amzn2.0.6	-	2024-02-23T05:25:43Z	x86_64	http://www.gtk.org
libdb	System Environment/Libraries	Amazon Linux	5.3.21	24.amzn2.0.4	-	2024-02-23T05:25:35Z	x86_64	http://www.oracle.com/database/berkeley-db

Ahora, procedemos a instalar una aplicación web personalizada en una instancia EC2, esto mediante la ejecución de tareas de **AWS Systems Manager Run Command**



Tarea 01



Esta es la configuración:

AWS Systems Manager

>

Run Command

>

Run a command

Run a command

Command document

Select the type of command that you want to run.

Search by keyword or filter by tag or attributes

Owner: Owned by me

Clear filters

< 1 >

Name	Owner	Platform types
<div><div></div><div>c98436a224041116017506t1w211125535015-InstallDashboardApp-RUjzTahG9oEc</div><div></div></div>	211125535015	Linux, MacOS

Description

Install Dashboard App

Document version

Choose the document version you want to run.

1 (Default)

Target selection

Target selection

Choose a method for selecting targets.

Specify instance tags

Specify one or more tag key-value pairs to select instances that share those tags.

Choose instances manually

Manually select the instances you want to register as targets.

Choose a resource group

Choose a resource group that includes the resources you want to target.

i-09f7fd77a99dd548b

Instances

< 1 >

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Availability zone	Ping status	Last ping time	Agent version
<input checked="" type="checkbox"/>	Managed Instance	i-09f7fd77a99dd548b	running	us-west-2a	Online	3/3/2024 at 12:19:27 GMT-0500 (Peru Standard Time)	3.2.2222.0

▼ AWS command line interface command

You can perform the same actions on this page by using the AWS Command Line Interface (CLI) tools. Learn more about the [AWS CLI tools](#).

Platform

Choose the platform from which you'll be running this command. The command parameters may be specified differently depending on the platform. Learn more about [specifying parameter values](#).

Linux/Unix/OS X

CLI command

If you're using the AWS CLI tools, you can copy and paste this command - which includes the parameters you specified on this page - into your command line prompt or terminal. Learn more about the [available AWS CLI commands](#).

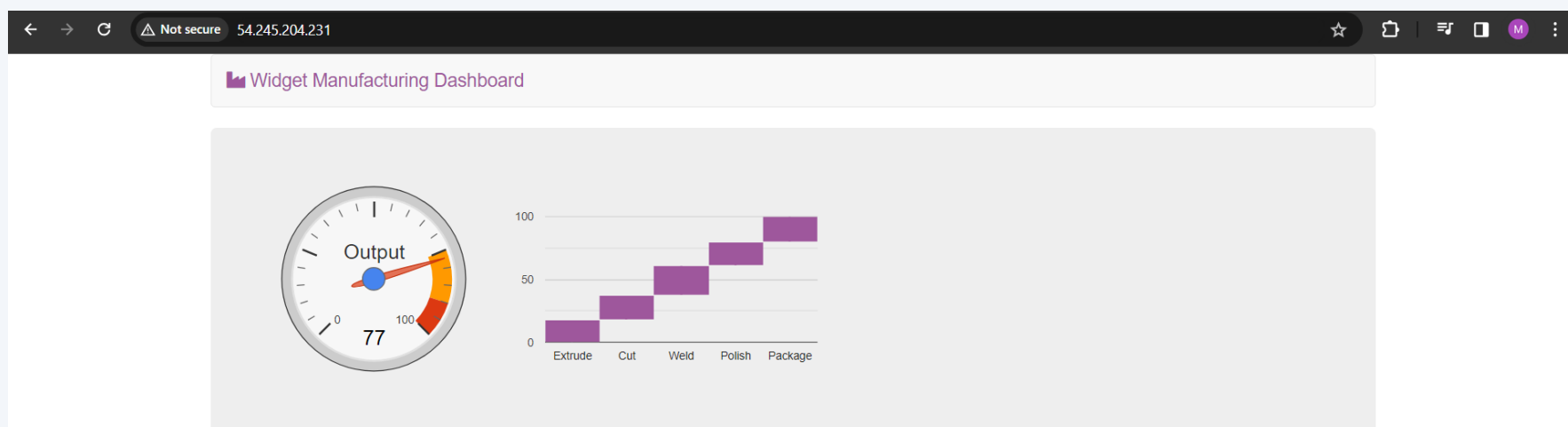
aws ssm send-command --document-name "c98436a224041116017506t1w211125535015-InstallDashboardApp-RUjzTahG9oEc" --document-version "1" --targets '[{"Key": "InstanceIds", "Values": ["i-09f7fd77a99dd548b"]}]' --parameters '{}' --timeout-seconds 600 --max-concurrency "50" --max-errors "0" --region us-west-2

< SWIPE ≡

Tarea 01



Efectivamente, logramos instalar la aplicación web en la instancia EC2 llamada *Managed Instance*



Ahora, utilizaremos la opción de **AWS System Manager Parameter Store**. Proporciona un *almacenamiento seguro* y jerárquico para la *gestión* de datos de *configuración* y la gestión de *secrets*. Puede almacenar datos como *contraseñas*, cadenas de *base de datos* y códigos de *licencia* como valores de parámetros.

AWS Systems Manager > Parameter Store > Create parameter

Create parameter

Parameter details

Name

When naming a parameter, you can use forward slashes (/) to organize it into a hierarchy. [Learn more about hierarchies](#)

Description — Optional

Tier

Parameter Store offers standard and advanced parameters.

☒ **Standard**
Store up to 10,000 standard parameters. Store parameter values up to 4 KB. Parameter policies and sharing with other AWS accounts are not available. No additional charge.

☐ **Advanced**
Store up to 100,000 advanced parameters. Store parameter values up to 8 KB. Add parameter policies. Share with other AWS accounts. Charges apply.

☒ Standard parameters cannot be shared with other AWS accounts. [Learn more](#)

Type

☒ **String**
Any string value.

☐ **StringList**
Separate strings using commas.

☐ **SecureString**
Encrypt sensitive data using KMS keys from your account or another account.

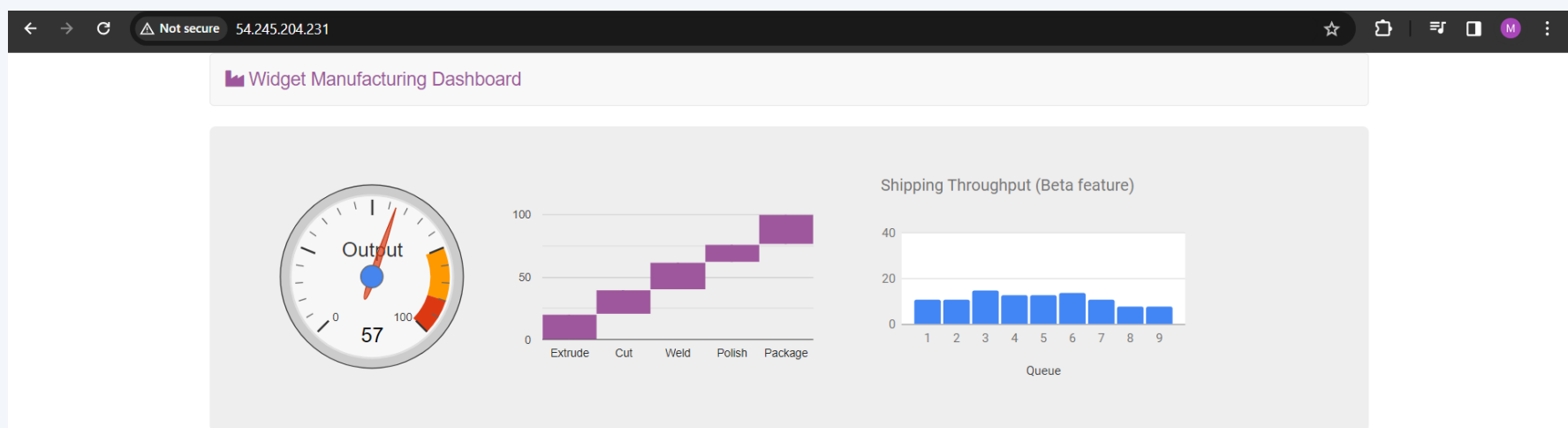
Data type

Value

Tarea 01



Notamos que el **Parameter Store**, nos ayudó a actualizar la configuración de la aplicación web que instalamos en la instancia EC2



Finalmente, probaremos nos conectaremos a la instancia via **Sessions Manager**, sin usar el protocolo SSH.

```
sh-4.2$ ls /var/www/html
aws CHANGELOG.md GuzzleHttp JmesPath LICENSE.md NOTICE.md Psr README.md aws-autoloader.php css get-parameters.php index.php info.php make_zip.sh style.css
sh-4.2$ # Get region
sh-4.2$ AZ=$(curl -s http://169.254.169.254/latest/meta-data/placement/availability-zone)
sh-4.2$ export AWS_DEFAULT_REGION=${AZ::-1}
sh-4.2$
sh-4.2$ # List information about EC2 instances
sh-4.2$ aws ec2 describe-instances
{
  "Reservations": [
    {
      "Instances": [
        {
          "Monitoring": {
            "State": "disabled"
          },
          "PublicDnsName": "ec2-54-245-204-231.us-west-2.compute.amazonaws.com",
          "State": {
            "Code": 16,
            "Name": "running"
          },
          "EbsOptimized": false,
          "LaunchTime": "2024-03-03T16:40:51.000Z",
          "PublicIpAddress": "54.245.204.231",
          "PrivateIpAddress": "10.0.0.175",
          "ProductCodes": [],
          "VpcId": "vpc-063fc37d15213c96e",
          "CpuOptions": {
            "CoreCount": 1,
            "ThreadsPerCore": 2
          },
          "StateTransitionReason": "",
          "InstanceId": "i-09f7fd77a99dd548b",
          "EnaSupport": true,
          "ImageId": "ami-0df345428f234af0c",
          "PrivateDnsName": "ip-10-0-0-175.us-west-2.compute.internal",
          "KeyName": "rockey",
          "SecurityGroups": [
            {
              "GroupName": "AppSecurityGroup",
              "GroupId": "sg-0e5213bccd3288d76"
            }
          ],
          "ClientToken": "c9843-SSMin-WJFPQOY1V88R",
          "SubnetId": "subnet-09c39ac0a8b4197dc",
          "InstanceType": "t3.micro",
          "CapacityReservationSpecification": {
            "CapacityReservationPreference": "open"
          }
        }
      ]
    }
  ]
}
```