

Lab 1: Using AWS Systems Manager

Spurthy Mutturaj

Information Technology, Arizona State University

IFT562: Cloud Security & Operations for IT

Daniel Wells

Sep 3, 2023

Lab 1: Using AWS Systems Manager

Figure 1

A screenshot of task 1's inventory list

The screenshot displays the AWS Systems Manager console interface. The breadcrumb navigation at the top reads: **Systems Manager** > **Fleet Manager** > **Managed nodes** > **i-07b7de77ab3002168** > **Inventory**. The main header shows **Managed Instance** with a **Running** status badge and a **Node actions** dropdown menu.

On the left, the **Details** sidebar is expanded to show **Properties**, with sub-items: General, Tags, **Inventory** (selected), Associations, Patches, and Configuration compliance. Under **Tools**, options include File system, Performance counters, Processes, Users and groups, Execute run command, and Patch node.

The main content area is titled **Inventory**. It features a dropdown for **Inventory type** set to **AWS:Application**. Below this, it shows **AWS:Application (453)** with a refresh icon. A search bar labeled **Filter** is present. A pagination bar indicates items 1 through 46. The following table lists the first eight applications:

Name	Application Type	Publisher	Version	Release	Epoch	Installed
libdaemon	System Environment/Libraries	Amazon Linux	0.14	7.amzn2.0.2	-	2023-08-
kbd-legacy	System Environment/Base	Amazon Linux	1.15.5	15.amzn2	-	2023-08-
jansson	System Environment/Libraries	Amazon Linux	2.10	1.amzn2.0.2	-	2023-08-
bash	System Environment/Shells	Amazon Linux	4.2.46	34.amzn2	-	2023-08-
python	Development/Languages	Amazon Linux	2.7.18	1.amzn2.0.6	-	2023-08-
pcre	System Environment/Libraries	Amazon Linux	8.32	17.amzn2.0.3	-	2023-08-
gzip	Applications/File	Amazon Linux	1.5	10.amzn2.0.1	-	2023-08-
xz-libs	System Environment/Libraries	Amazon Linux	5.2.2	1.amzn2.0.3	-	2023-08-

The footer contains links for **Feedback**, **Language**, and copyright information: © 2023, Amazon Web Services, Inc. or its affiliates. It also includes links for **Privacy**, **Terms**, and **Cookie preferences**.

Figure 2

The web page of Widget Manufacturing Dashboard

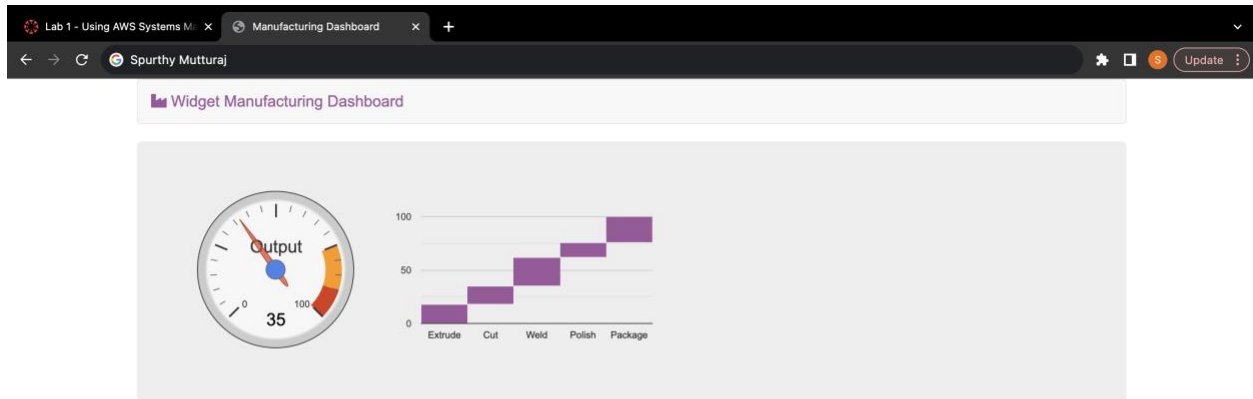


Figure 3

Screenshot of list of parameters.

The figure consists of two screenshots from the AWS Systems Manager console, illustrating the process of creating and viewing a parameter.

Top Screenshot: Create parameter

This screenshot shows the 'Create parameter' form in the AWS Systems Manager console. The form includes the following fields and options:

- Name:** A text input field containing `/dashboard/show-beta-features`.
- Description — Optional:** A text input field containing `Display beta features (Spurthy Mutturaj)`.
- Tier:** Two radio button options: **Standard** (selected) and **Advanced**. The **Standard** option is described as 'Limit of 10,000 parameters. Parameter value size up to 4 KB. Parameter policies are not available. No additional charge.' The **Advanced** option is described as 'Can create more than 10,000 parameters. Parameter value size up to 8 KB. Parameter policies are available. Charges apply.'
- Type:** Three radio button options: **String** (selected), **StringList**, and **SecureString**. The **String** option is described as 'Any string value.' The **StringList** option is described as 'Separate strings using commas.' The **SecureString** option is described as 'Encrypt sensitive data using KMS keys from your account or another account.'
- Data type:** A dropdown menu set to `text`.
- Value:** A text input field containing `True`.
- Tags — Optional:** A section with a note 'You can use tags to organize and restrict access to your parameter.' and an **Add tag** button.
- Buttons:** **Cancel** and **Create parameter** buttons at the bottom right.

Bottom Screenshot: Overview

This screenshot shows the 'Overview' page for the parameter `/dashboard/show-beta-features`. The page includes a breadcrumb trail: `AWS Systems Manager > Parameter Store > /dashboard/show-beta-features > Overview`. There are **Edit** and **Delete** buttons at the top right. The page has three tabs: **Overview** (selected), **History**, and **Tags**.

The **Overview** tab displays a table with the following details:

Name	<code>/dashboard/show-beta-features</code>
Tier	Standard
Type	String
Last modified date	Sun, 03 Sep 2023 18:10:51 GMT
Value	<code>True</code>
Description	Display beta features (Spurthy Mutturaj)
Data type	<code>text</code>
Last modified user	aws:sts::951047633688:assumed-role/voclabs/user2353490-Mutturaj
Version	1

Figure 4*Screenshot of the CLI from Task 4*

```

sh-4.2$ ls /var/www/html
aws CHANGELOG.md GuzzleHttp JmesPath LICENSE.md NOTICE.md Par README.md aws-autoloader.php css get-parameters.php index.php info.php make_ip.sh style.css
sh-4.2$ Spurthy Mutturaj
sh: Spurthy: command not found
sh-4.2$ # Get region
sh-4.2$ AWS=$(curl -s http://169.254.169.254/latest/meta-data/placement/availability-zone)
sh-4.2$ export AWS_DEFAULT_REGION=${AWS:-1}
sh-4.2$ # List information about EC2 instances
sh-4.2$ aws ec2 describe-instances
{
  "Reservations": [
    {
      "Instances": [
        {
          "Monitoring": {
            "State": "disabled"
          },
          "PublicDnsName": "ec2-3-80-44-216.compute-1.amazonaws.com",
          "State": {
            "Code": 16,
            "Name": "running"
          },
          "EbsOptimized": false,
          "LaunchTime": "2023-09-03T04:23:50.000Z",
          "PublicIpAddress": "3.80.44.216",
          "PrivateIpAddress": "10.0.0.164",
          "ProductCodes": [],
          "VpcId": "vpc-dae1fd62aa7b1e07",
          "CpuOptions": {
            "CoreCount": 1,
            "ThreadsPerCore": 1
          },
          "StateTransitionReason": "",
          "InstanceId": "i-07b7de77ab3002168",
          "EbsSupport": true,
          "ImageId": "ami-0e1c5d8c23330dee3",
          "PrivateDnsName": "ip-10-0-0-164.ec2.internal",
          "KeyName": "vockey",
          "SecurityGroups": [
            {
              "GroupName": "AppSecurityGroup",
              "GroupId": "sg-0d532c0a35d78bc2c"
            }
          ],
          "ClientToken": "c9171-SSMin-1359NE4D017CJ",
          "SubnetId": "subnet-0e1a06f3b43f8d3c",
          "InstanceType": "t2.micro",
          "CapacityReservationSpecification": {
            "CapacityReservationPreference": "open"
          },
          "NetworkInterfaces": [
            {
              "Status": "in-use",
              "MacAddress": "0a:16:1d:53:2e:ff",

```

Note. Name added after ls command.