

Using AWS Systems Manager Parameter in AWS CloudFormation templates

Query the SSM Parameters using aws-cli

- Configure Access ID and Access Keys to work with AWS CLI, and assign SSM Parameter permission access to this IAM user.
- To Display a complete list of all available public Parameter for Amazon Linux Instances

```
aws ssm get-parameters-by-path --path "/aws/service/ami-amazon-linux-latest" --region us-east-1

aws ssm get-parameters --names /aws/service/ami-amazon-linux-latest/amzn2-ami-hvm-x86_64-gp2 --region us-east-1

aws ec2 describe-images --owners amazon --filters "Name=name,Values=amzn*" --query 'sort_by(Images, &CreationDate)[].Name'
```

- The namespace is made up of two parts:
 - Parameter Store Prefix (tree): `/aws/service/ami-amazon-linux-latest/`
 - AMI name alias: `amzn2-ami-hvm-x86_64-gp2`
- For SSM Parameters, the reference-key segment is composed of the parameter name and version number. Use the following pattern: `'{{resolve:ssm:parameter-name:version}}'`
- To Display a complete list of all available public Parameter for Windows Instances

```
aws ssm get-parameters-by-path --path "/aws/service/ami-windows-latest" --region us-east-1
```

- Create a Parameter in System Manager with any name
- `instance_type_parameter` as key name and value as the `t2.micro`

Note: There can be multiple versions of a parameter if it is edited and stored.

- To dynamically reference the value of the ssm parameter `InstanceType`:
`'{{resolve:ssm:instance_type_parameter:1}}'`
- A public parameter is a parameter provided by an AWS service for use with that service, and stored in AWS Systems Manager Parameter Store.
- A parameter label is a user-defined alias to help you manage different versions of a parameter.