SSM - Node Management - State Manager

## Service Overview

AWS Systems Manager State Manager (State Manager) is a secure and scalable configuration management service that automates the process of keeping your Amazon Elastic Compute Cloud (Amazon EC2) and hybrid infrastructure in a state that you define.

## Use cases / Considerations

State Manager use cases:

* Bootstrap instances with specific software at start-up.
* Download and update agents on a defined schedule, including AWS Systems Manager SSM Agent (SSM Agent).
* Configure network settings.
* Join instances to a Windows domain (only Windows Server instances).
* Patch instances with software updates throughout their lifecycle.
* Run scripts on Linux, macOS, and Windows managed instances throughout their lifecycle.

## Governance

State Manager integrates with AWS CloudTrail (CloudTrail) to provide a record of all executions that you can audit, and Amazon EventBridge (EventBridge) to track state changes. You can also choose to store and view detailed command output in Amazon Simple Storage Service (Amazon S3). For more information, see the following topics:

* [Logging AWS Systems Manager API calls with AWS CloudTrail](https://docs.aws.amazon.com/systems-manager/latest/userguide/monitoring-cloudtrail-logs.html)
* [Monitoring Systems Manager events with Amazon EventBridge](https://docs.aws.amazon.com/systems-manager/latest/userguide/monitoring-eventbridge-events.html)

## Cautions

None

## Pricing considerations

No additional charges

## More details

* [State Manager](https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-state.html)
* [About State Manager](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-state-about.html)
* [Working with associations in Systems Manager](https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-associations.html)
* [AWS Systems Manager State Manager walkthroughs](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-state-walk.html)
* [Combating Configuration Drift Using Amazon EC2 Systems Manager and Windows PowerShell DSC](http://aws.amazon.com/blogs/mt/combating-configuration-drift-using-amazon-ec2-systems-manager-and-windows-powershell-dsc/)
* [Configure Amazon EC2 Instances in an Auto Scaling Group Using State Manager](http://aws.amazon.com/blogs/mt/configure-amazon-ec2-instances-in-an-auto-scaling-group-using-state-manager/)
* [Ansible with AWS Systems Manager State Manager (video)](https://www.youtube.com/watch?v=84_vmjiMAwY)