SSM - Node Management - Inventory

## Service Overview

AWS Systems Manager Inventory provides visibility into your Amazon EC2 and on-premises computing environment. You can use Inventory to collect metadata from your managed instances. You can store this metadata in a central Amazon Simple Storage Service (Amazon S3) bucket, and then use built-in tools to query the data and quickly determine which instances are running the software and configurations required by your software policy, and which instances need to be updated. You can configure Inventory on all of your managed instances by using a one-click procedure. You can also configure and view inventory data from multiple AWS Regions and accounts.

If the pre-configured metadata types collected by Systems Manager Inventory don't meet your needs, then you can create custom inventory. Custom inventory is simply a JSON file with information that you provide and add to the managed instance in a specific directory. When Systems Manager Inventory collects data, it captures this custom inventory data. For example, if you run a large datacenter, you can specify the rack location of each of your servers as custom inventory. You can then view the rack space data when you view other inventory data.

## Use cases / Considerations

You can configure Inventory to collect the following types of metadata:

* **Applications**: Application names, publishers, versions, etc.
* **AWS components**: EC2 driver, agents, versions, etc.
* **Files**: Name, size, version, installed date, modification and last accessed times, etc.
* **Network configuration**: IP address, MAC address, DNS, gateway, subnet mask, etc.
* **Windows updates**: Hotfix ID, installed by, installed date, etc.
* **Instance details**: System name, operating systems (OS) name, OS version, last boot, DNS, domain, work group, OS architecture, etc.
* **Services**: Name, display name, status, dependent services, service type, start type, etc.
* **Tags**: Tags assigned to your instances.
* **Windows Registry**: Registry key path, value name, value type, and value.
* **Windows roles**: Name, display name, path, feature type, installed state, etc.
* **Custom inventory**: Metadata that was assigned to a managed instance as described in [Working with custom inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-custom.html).

To view a list of all metadata collected by Inventory, see [Metadata collected by inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-schema.html).

## Governance

This Systems Manager Inventory is supported as an *event* type in Amazon EventBridge (EventBridge) rules. For information, see [Monitoring Systems Manager events with Amazon EventBridge](https://docs.aws.amazon.com/systems-manager/latest/userguide/monitoring-eventbridge-events.html) and [Reference: Amazon EventBridge event patterns and types for Systems Manager](https://docs.aws.amazon.com/systems-manager/latest/userguide/reference-eventbridge-events.html).

## Cautions

You can choose to inventory all instances in your AWS account, individually select instances, or target groups of instances by using Amazon EC2 tags.

You can specify a collection interval in terms of minutes, hours, and days. The shortest collection interval is every 30 minutes.

## Pricing considerations

No additional charges

## More details

* [Learn more about Systems Manager Inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-about.html)
* [Setting up Systems Manager Inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-inventory-setting-up.html)
* [Configuring inventory collection](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-configuring.html)
* [Working with Systems Manager inventory data](https://docs.aws.amazon.com/systems-manager/latest/userguide/systems-manager-inventory-data-working.html)
* [Working with custom inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-custom.html)
* [Viewing inventory history and change tracking](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-history.html)
* [Systems Manager Inventory walkthroughs](https://docs.aws.amazon.com/systems-manager/latest/userguide/sysman-inventory-walk.html)
* [Troubleshooting problems with Systems Manager Inventory](https://docs.aws.amazon.com/systems-manager/latest/userguide/syman-inventory-troubleshooting.html)

### [Collect Inventory Data with Systems Manager Inventory (video)](https://www.youtube.com/watch?v=T7f-Qi7mR48" \o "Collect Inventory Data with Systems Manager Inventory)