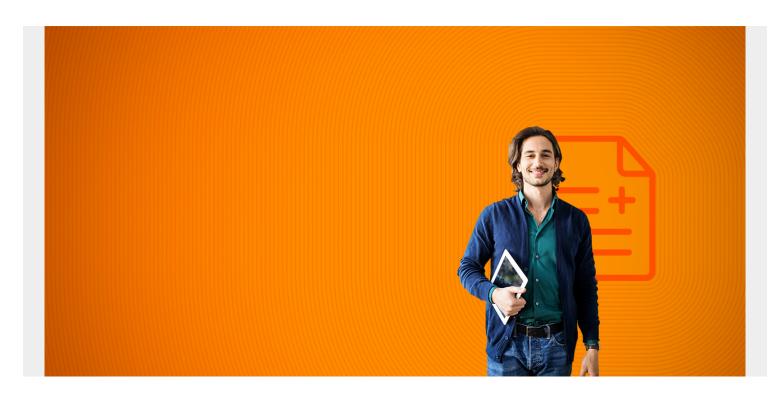# AWS MANAGEMENT TOOLS: WHAT'S AVAILABLE AND HOW TO CHOOSE

As more businesses go through the [digital transformation](#) process of switching to cloud platforms, AWS has long established itself as a market leader among cloud service providers such as Azure and Google Cloud Platform. One thing that makes AWS so attractive for large businesses and developers alike is the number of tools available for those who choose to partner with Amazon for their enterprise needs.

Not only is there an abundant suite of cloud management tools accessible through AWS, but most reputable third-party vendors have also made their tools available for the service as well, making it a truly open source solution.

However, with such a huge selection of tools to choose from, it can be a little overwhelming for businesses and developers who need to know which are the best for their specific needs.

The following article will help you take the guesswork out of cloud management with AWS.

Types of Management Tools

There are generally four types of management tools available to AWS consumers. These are either powered by Amazon or third-party vendors. The categories of tools include the following:

- Provisioning Tools
- Operations Management Tools
- Monitoring and Lodging Tools

- Managed Services and Configuration Tools

Provisioning Tools

Suites of provisioning tools help you allocate and use resources in the most efficient way possible. Provisioning tools are also applications such as RightScale and CloudFormation (more on this below).

Operations Management Tools

Operations management tools focus on allowing users to have total control of their Infrastructure-as-a-Service (IaaS) platform. And with confidence that they are meeting compliance and governance standards.

Monitoring and Lodging Tools

Monitoring and lodging tools are established to make sure everything keeps running as it should. These tools send alerts to managers, automatically respond to certain conditions and monitor log files.

Managed Services and Configuration Tools

These tools work with managed services like Chef and Puppet Enterprises Servers. They manage the process of configuring the environment and scaling the infrastructure.

Tools Powered by Amazon

Here is an in-depth look at tools you can get directly from Amazon Web Services.

AWS CloudFormation

AWS CloudFormation provides a common language to provision foundational assets in your cloud instance.

Benefits:

- Model your infrastructure from a single-source: a text file
- Standardize the infrastructure for your entire organization in a simplified way
- Provisions can be automated and deployed over and over again without being rebuilt
- Demystify infrastructure by treating it like what it is: code

Using a basic text file, CloudFormation enables you to model and provision each asset required.

AWS Service Catalog

AWS Service Catalog enables users to oversee a robust index of services primed for use on AWS.

Benefits:

- Ensuring your organization is compliant with industry standards

- Help users find IT services to deploy
- Manage IT services from one central point

With services that incorporate everything from virtual machine images, servers, applications and databases, AWS Service Catalog enables you to centrally administer programs. It empowers clients to rapidly deploy IT services they need, on-demand.

Amazon CloudWatch

Amazon CloudWatch provides monitoring administration services for AWS cloud resources and applications. Users benefit from Amazon CloudWatch ability to gather and track data analytics, screen log records, set alerts and respond to changes in your AWS assets.

Benefits:

- Amazon EC2 monitoring
- AWS resource monitoring
- Custom metrics monitoring
- Log monitoring and storage
- View data in visual reports
- React to resource changes
- Set alarms

Amazon CloudWatch can screen AWS assets, for example, Amazon EC2 occurrences, Amazon DynamoDB tables and Amazon RDS DB instances and custom metrics produced by your applications and services.

AWS Systems Manager

AWS Systems Manager gives you full control of the framework on AWS. Systems Manager offers an impactful, easy-to-use UI so you can see operational information from various sources and automate tasks needed for smooth operation.

Benefits:

- Ensures security and compliance
- Includes management of hybrid environments
- Full visibility of resource groups and configurations lets you have greater control
- Perfect for automation, easy-to-use
- Detect problems more quickly

With Systems Manager, you can assemble assets by application, monitor operational system info and activate resources.

AWS CloudTrail

An important operational tool, AWS CloudTrail helps enterprise businesses achieve compliance and track user activity.

Benefits:

- User activity is recorded in a secure log
- Compliance audits become easier with pre-stored event logs generated by the system
- Find areas where your system is vulnerable and monitor or fix them
- Security automation

The services offers governance, compliance, operational and risk auditing of your account, to be exact. Cloud Trail provides a comprehensive list of actions taken throughout AWS and aligned services.

AWS Config

AWS Config helps users monitor the many configurations of their AWS instance and services. This is a time-consuming process without the right tools. AWS Config offers assistance monitoring, assessing, auditing and evaluating configurations in one place.

Benefits:

- Monitor, record and assess system configurations
- Track relationships between resources to simplify change management within an organization
- Troubleshooting capabilities

This tool offers users the option to view changes, configuration history and relationships between asset configurations.

AWS OpsWorks

AWS OpsWorks lets you write small instances of code to automate configurations.

Benefit:

- Offers application and server management for Puppet, Chef and Stacks; Chef and Puppet are automation platforms that allow you to use code to automate the configurations of your servers.

Using instances of Chef and Puppet designed for AWS, developers can deploy code that keeps their configurations in check. OpsWorks has three offerings, AWS Opsworks for Chef Automate, AWS OpsWorks for Puppet Enterprise, and AWS OpsWorks Stacks.

AWS Trusted Advisor

AWS Trusted Advisor increases the overall performance of your AWS environment. It does this by optimizing the instance, recalibrating things that reduce cost, increase security and more.

Benefits:

- Full access to a wide range of perks that optimize your AWS instance
- Increased security
- Fine-tuned performance
- Alerts and notifications

Trusted advisor is a provisioning resource that provides on-demand, real-time guidance to AWS users.

Third-Party Tools

In addition to the tools created by AWS, a number of third-party vendors offer resources for provisioning, ops management, monitoring and configurations.

RightScale

RightScale is a multi-use tool that offers assistance with operations management and provisioning. This tool is also used for monitoring governance and optimizing for cost.

Benefits:

- Speed up application delivery
- Increase efficiency
- Global reach
- Optimize investment strategy for the best return
- Risk reduction

This cloud management platform offers users the ability to manage all their clouds from one UI.

SCALR

Similar to RightScale, SCALR has a number of functions that are helpful for users in an AWS environment.

Benefits:

- Optimize for cost savings
- Gain productivity
- Reduce instances of vendor lock in
- Meets security and industry compliance needs
- Standardize usage across clouds

The aim of this service is to increase productivity, reduce cost, enhance security and prevent common concerns such as vendor-lock in. All the while, offering a flexible environment for users on a public, private or hybrid cloud.

Hybridfox

Hybridfox is a popular Chrome add-on that works with a number of IaaS/PaaS providers, including AWS. It can be used with public and private clouds.

- Toggle between different cloud environments easily

Hybridfox perfect for users who have multiple cloud environments because it allows for switching between them seamlessly.

Cloudability

Cloudability is a full-service cloud suite that offers users migration assistance, configuration management and operations management.

Benefits:

- Offers migration assistance
- Cost control optimization
- Provides financial transparency
- Adheres to industry compliance and governance
- Optimized for speed

Cloudability helps to ensure governance and compliance needs are met, while offering a full service suites of services to AWS users.

Ylastic

Ylastic is a cloud management service that focuses on managing user instances of AWS in an intuitive way and offering data analytic and backup options.

Benefits:

- Enhanced governance inventory uses snapshots to ensure compliance
- Track resource configuration
- Collects and monitors data
- Offers analytics in a number of easy-to-read dashboards

Ylastic touches operations management, configuration management, security, compliance and more.

Final Thoughts: AWS Management Tools

As you can see, there are many tools for enterprise businesses to choose from in this growing market. Finding the right one is largely a matter of understanding your unique specifications and use case requirements. Trial and error is recommended to determine which tools you should use.

While the differences between some of these tools may seem small, something like red-flag resolution and alerts could make all the difference for enterprise business leaders. In many instances, it comes down to personal preference.

Overall, when purchasing any new services or applications, it's important to first take inventory of the unique needs of your business, then decide on the right course of action.

Apart from choosing the right services, implementing an effective cloud management strategy is also of paramount importance. BMC offers multi-cloud management services simplified into one secure access point. BMC's services include:

- Migration assistance
- Optimization for performance and cost; and
- Seamless service experience between cloud environments

BMC will help you assess your business needs to determine which tools will be best for your business model. To learn more about how BMC can help support your cloud environment, contact us today.