TRiA CLOUD MANAGEMENT PLATFORM FOR AMAZON WEB SERVICES

Connectria's comprehensive suite of managed services for AWS, powered by TRiA Cloud Management Platform (CMP), can help you achieve your performance, security, compliance and cost optimization goals.

The public cloud without the worry

AWS delivers some of the most advanced cloud computing solutions in the world, but for many organizations, the public cloud can be challenging to implement and manage. This is especially true for organizations that must maintain the highest levels of security or compliance with industry regulations and standards.

When you work with Connectria, we will optimize your AWS cloud environment to meet your goals and objectives no matter your industry. We'll also stay with you after you go-live to ensure your AWS cloud is meeting your requirements for performance, security & compliance, and cost.

Monitor your performance 24x7 – Connectria's advanced monitoring ensures your AWS environment is always up and running at peak performance.

- See everything we see through TRiA which provides a view of all of your cloud environments.
- Stay proactively alerted to problem areas.
- Get the performance your business demands from the insights in our reports and recommendations.

> "Connectria is undeniably one of the leaders within the Managed AWS market.... not many vendors can do what they do."
>
> **Patrick McCollum**
> CTO, ATSG Corporation

Get compliant and stay compliant – Our public cloud experts have helped customers get compliant and stay compliant with all of the most common industry standards and regulations: PCI DSS, HIPAA/HITECH, GDPR, and more.

We can also set up alerts and routines to address any unique requirements or concerns. Once you're up and running, our Security Operations Center (SOC) will monitor your AWS applications and data 24x7 to support and protect your compliant environment.

Optimize your investment – Our cloud experts can help you lower your total cost of ownership and improve asset utilization by monitoring AWS usage and looking for unused, underutilized, or inappropriately used resources. We'll provide reports and guidance on how best to optimize your spend, including the use of AWS Reserved Instances, so you get the most for your investment.

CONNECTRiA

All of your clouds, all in one place

If you've deployed different clouds for different workloads, the TRiA Cloud Management Platform can provide a view into of all of your cloud environments for ultimate visibility and control. With TRiA you can monitor both your public and private clouds 24x7, supporting a consistent approach to cloud policies and compliance across all environments. The TRiA Cloud Management Platform comes standard with all of our managed cloud services, including AWS.

Extend your IT resources

Our cloud experts work as an extension of your IT team, focusing on time-consuming but essential administrative tasks, so you can focus on more strategic ones. With TRiA, these services and more come standard:

- 24x7 Custom Performance Monitoring & Alerts
- 24x7 Custom Restarts & Escalations
- 24x7 Technical Support & Account Management
- Virtual Private Cloud (VPC) Network Administration
- Data Backup & Restore Services
- O/S Systems Administration

Mitigate your security and compliance risks

Managing security and compliance in an ever-changing landscape can be a challenge when your IT resources are stretched thin. AWS, powered by TRiA also includes a number of standard security and compliance features so you can leverage the AWS public cloud with confidence.

Advanced 24x7 Intrusion Protection

- Advanced Security Information Event Management (SIEM) & Event Correlation
- Vulnerability Scanning
- Security Configuration Management & Change Control
- Real-Time Endpoint Protection (Antivirus & Host-based IPS)

Advanced 24x7 Security Administration

- 24x7 Security Incident Response
- Managed AWS Firewall & VPN Support
- Multi-Factor Authentication Support
- Advanced Instance/Operating System Hardening

DevOps Segregation of Duties
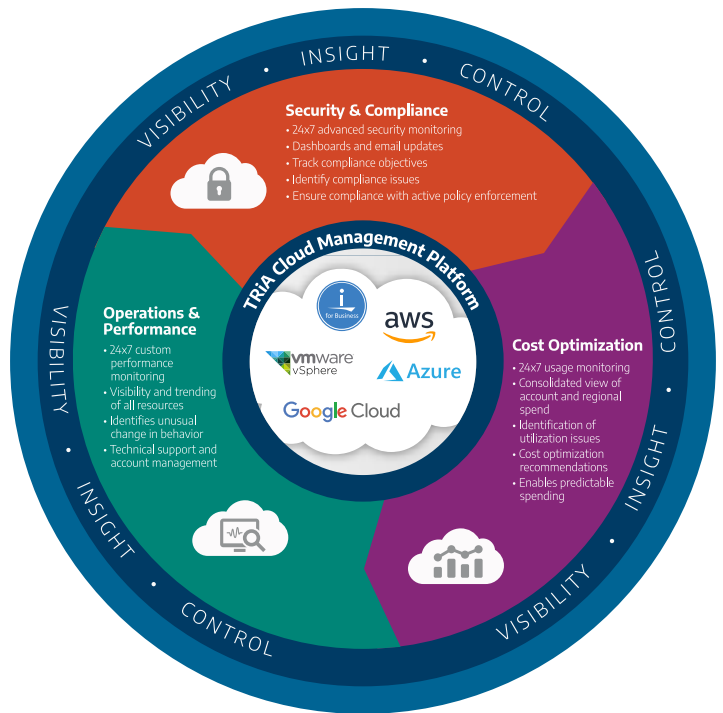
- Automated & Manual Code Deployments
- Audit Trail for Compliance
- Ensures Separation of Duties Between Development & Operations

Advanced Compliance Services for HIPAA & PCI Environments

- Compliance Audit Assistance
- Advanced Data Encryption for Data at Rest & Data in Motion
- Application Access Controls
- Annual Compliance Assessment & Employee Controls (Connectria)
- Web Application Firewall (WAF) for AWS
- HIPAA Compliant Business Associates Agreements
- PCI DSS ROC & AOC Reports
- EU-US Privacy Shield Compliant Agreements
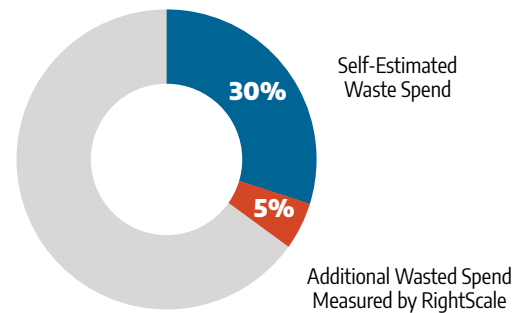
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Cost Optimization

Managing cloud costs has become a top challenge and concern, with an estimated 35 percent of wasted cloud spend by users. Despite an increased focus on cloud cost management, only a minority of companies are taking critical actions to optimize cloud costs.

AWS offers a large number of services and an almost infinite number of ways to configure them around your application deployment. The sheer number of choices can sometimes lead to insecure settings and choosing options that might not be the most cost-effective.

Several key areas can impact the optimization of your AWS environment: cost, availability, security, usage and reserved instances. TRiA provides rich functionality to provide the right visibility into your AWS cloud environment so it may be optimized. This includes features and tools such as:

- TRiA Tag Explorer: An easy to use reporting tool allowing you to search and manage your resource key pairs insert description.
- TRiA Cost Explorer: An Interactive dashboard allowing you to identify outlier spend and address unwanted trends.
- TRiA Bots Automation: Intuitive tools that allow you to automate resource management without needing to learn code.
- TRiA Security and Compliance: Monitors over 200 different compliance check points to continually identify and remediate issues before they appear in an audit.
- TRiA Cost Advisor: A reporting dashboard that reviews your environment to notify you of cost savings by identifying potential reserved instances, idle resources, or unattached volumes.

% of Cloud Spend Wasted

30% Self-Estimated Waste Spend

5% Additional Wasted Spend Measured by RightScale

Source: RightScale 2018 State of the Cloud Report

Tag Explorer

Tag Keys: Cost Center, Environment, ConnectriaManaged

Tagged/Untagged Breakdown

Cost Center — 6.5% / 94.5%
Tagged Resources 1,590
Untagged Resources 93

Environment — 95.0%
Tagged Resources 1,599
Untagged Resources 84

ConnectriaManaged — 14.0% / 86.0%
Tagged Resources 1,447
Untagged Resources 236

TRiA TAG EXPLORER
- Search, sort, and organize resources based on applied key pairs
- Quickly view gaps in your environment's tagging structure
- Gain insights into environment and cost center allocations

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Cost

It can be easy to forget about a deployed resource that might no longer be needed. If you are not continuously monitoring resources like Amazon Elastic Cloud Compute (Amazon EC2), Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB and others, you will be incurring charges when they might be unused or idle. You may have Amazon Elastic Block Store (Amazon EBS) volumes which are not attached to any resources.

Failure to identify them can be costly. And if you are not aware of older generation resources which may be migrated to a new generation, you may be missing out on more power at a lower cost.

Availability

Having resources available at all times is a must when running applications in AWS. Your infrastructure should be regularly scanned to ensure that resources are properly configured and setup to take advantage of AWS' high availability architecture. Snapshots of Amazon EBS volumes should exist and be reviewed to make certain they are recent. In order to ensure high availability of resources, service limits should be monitored, along with availability zone distribution of resources like Amazon EC2, Amazon RDS, and AWS Application Auto Scaling.
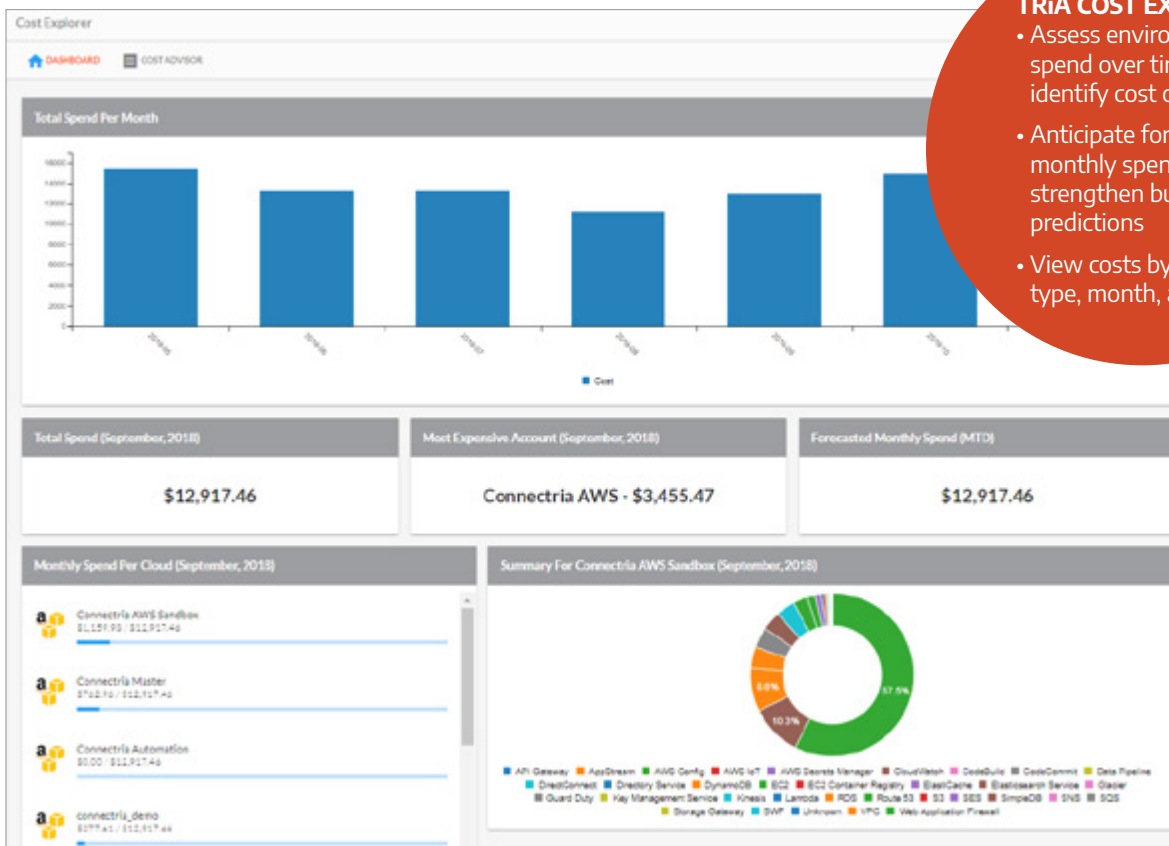
TRiA COST EXPLORER
- Assess environment spend over time and identify cost outliers
- Anticipate forecasted monthly spend to strengthen budget predictions
- View costs by resource type, month, and cloud

Usage

With so many services within AWS, it can be a daunting task to ensure that all services are used correctly. Implementing checks to identify underutilized services like Amazon EC2, Amazon RDS, and DynamoDB are critical. It is also important to ensure Application Auto Scaling launch configurations are configured correctly and unused resources like key pairs, security groups, and Amazon CloudWatch alarms are identified.

TRiA MCM can automate many services through bots to ensure you are not being charged for unused or underutilized instances.
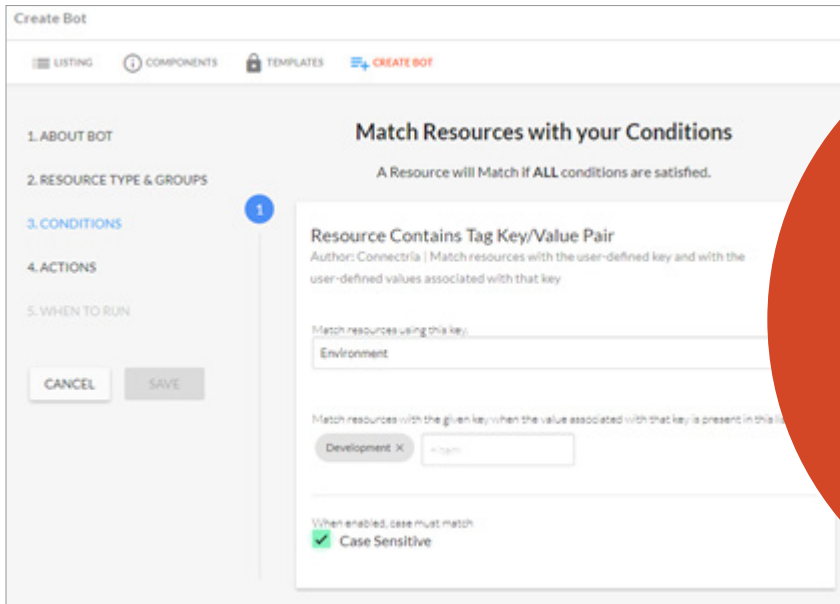
TRiA BOTS AUTOMATION

- Set bots to automate stop and start of unused instances ensuring no charges when development or test environments are not in use

- Automate notifications or actions (e.g., start or stop instances) based on CPU utilization, Key/Value pairs, or dozens of other conditions customizable to your business needs

- Schedule actions based on time of day, instance creation/modification, or trigger bots manually to fit your requirements

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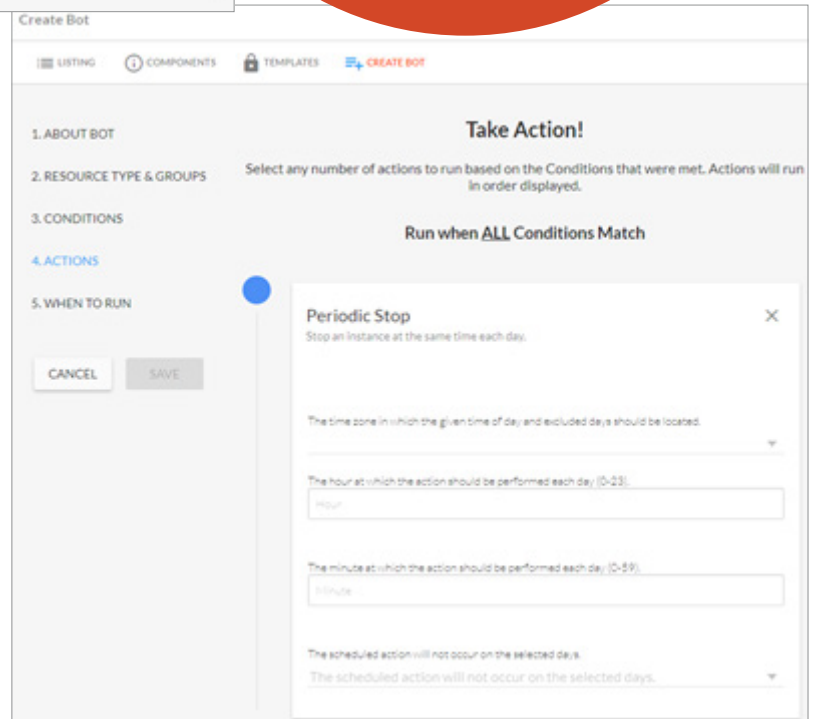
Reserved Purchase Recommendations

All On-Demand Instances should be reviewed regularly to see if they should be converted to Reserved Instances (RIs) to take advantage of the lower pricing. All On-Demand Instances that are stable, and will be in use for at least six months, are candidates to be upgraded to RIs.

These are only a few of the hundreds of checks that are ran against the AWS account and reported on. Following these best practices and ensuring that these checks pass will greatly help production within your environment – and they will also save you money.

There are many benefits to moving workloads to AWS. Within a matter of minutes, you can establish compute and storage capacity, paying for only the resources you use. AWS can provide your organization with a high degree of speed, agility, and flexibility for both development and production environments. Moving workloads to AWS allows you to shift the burden of capital investment and datacenter maintenance to AWS, leaving you to focus your efforts on building and running applications.

There are some challenges, however, that must be considered to enjoy these benefits. Moving to and managing AWS environments requires a knowledgeable and available staff. Your environment must be continuously monitored to ensure it is performing as expected. Should problems arise, they need to be identified and resolved. Your applications and data are crucial to your business and must be protected. Automation tools are great, but they will not address all security concerns alone. While AWS allows for varying resource demand and capacity, left unchecked, your environment can cost you more than it should.

TRiA COST ADVISOR
- Find cost savings recommendations for removing idle or unused resources and purchasing reserved instances
- Identify total savings available and associated resources quickly to take action and save money

Security & Compliance

Improper security settings can lead to big problems when working within the cloud. You should regularly undergo security checks to ensure that permissions are set correctly, and appropriate policies are in place. Important services like AWS CloudTrail, AWS Config, and Amazon Virtual Private Cloud (Amazon VPC) flow logs must be setup correctly. Security groups that allow dangerous ports or are open to the internet should be checked, along with network ACL rules. You should ensure password policies are in place and encryption is being utilized.

TRiA provides robust functionality to ensure your AWS cloud is secure and compliant. This includes extensive compliance validation checks, compliance packages (e.g. HIPAA, PCI DSS, SOC, GDPR), of and bots automation for alerts, notifications and corrective action.

TRiA COMPLIANCE – INSIGHTS

- Validate your environment's compliance with over 200+ compliance checks
- HIPAA, PCI, SOC, and GDPR compliance packages available
- Easily identify resources out of compliance and utilize bots to automate corrective actions and notifications

TRiA COMPLIANCE – BOTS AUTOMATION

- Utilize pre-defined bots to take corrective action on non-compliant resources
- Automate notification for immediate warning of new issues
- Set actions to be triggered on a noncompliant resource including stopping, securing, or rolling back a resource to automatically remediate emerging problems

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The Connectria Advantage

Increase your strategic contribution

With managed clouds powered by TRiA, we operate as an extension of your IT team, providing as much or as little assistance as you need to ensure you're meeting your internal SLAs for security, compliance, and resource availability while providing a strategic contribution to the future of your organization.

Work with a pioneer in cloud computing

When you partner with us, you'll be taking advantage of the unrivaled experience that comes from working with a pioneer in cloud computing.

- 1st to deliver Private Cloud Hosting in 2005
- 1st to deliver HIPAA Compliant Cloud Hosting in 2007
- 1st to deliver fully automated High Availability Public Cloud Hosting in 2008
- Ranked 1st in Cloud performance by Compuware CloudSleuth

Connectria HyperCare™

Running mission critical environments containing sensitive data requires a level of care above all others. Our HyperCare™ includes a comprehensive set of tools and processes, backed 24x7 by highly-skilled staff that is 100% focused on ensuring the security, reliability and performance of the systems they support. It's been honed over a 20-year period of successfully supporting the world's largest companies and the most complex environments.

About Connectria

From Fortune 100 enterprises to medium and small businesses, Connectria provides managed cloud, managed services, and compliant cloud security solutions to more than 1,000 global customers. Working as an extension of each customer's IT team, we deliver technology-agnostic solutions consistently, with depth and breadth of engineering expertise, scalable solutions, and speed to market. Our "No Jerks Allowed®" philosophy includes flexible terms, straight-forward pricing, and custom solutions. With a culture based on integrity and an unwavering employee commitment to treating every customer with a relentless focus on satisfaction, it's easy to do business with Connectria.

Connect with us today

Talk to one of our IT advisors by calling **800.781.7820** or reaching out to us by email: **sales@connectria.com**.