Tips and Tricks for Monitoring AWS with New Relic

Whether you’re a seasoned New Relic user or are just starting to understand how the New Relic platform works, there’s always a new tip or trick you can use to improve the performance of your cloud-hosted applications. Here are five best practices that can help you boost end-user experiences, simplify performance management, and optimize your AWS environment to suit your applications.

1. **Right-size your AWS instances**
   The transient nature of EC2 instances can make it difficult to get an accurate view of your AWS ecosystem. Your company may have many different individuals or groups who are spinning up EC2 instances for various purposes. Because of this, a complete view of the current state of your AWS environment is essential. A decommissioned host is not a “dead” server; rather, it has merely served its purpose. Using New Relic Infrastructure, you instantly get an accurate snapshot of your EC2 instances, which allows you to then dissect them by the AWS tags you already use. Ultimately, this 360-degree view of your infrastructure allows you to optimize (or right-size) your AWS instances for maximum ROI.

2. **Monitor all the (AWS) things**
   While EC2 powers most AWS workloads, it’s by no means the only AWS service used to power modern applications. To fully understand how your AWS ecosystem is performing, you need to monitor the other services you use. New Relic Infrastructure Professional allows you to monitor the performance health of many popular AWS Services, such as CloudFront, DynamoDB, EBS, ElastiCache, ELB, IAM, Kinesis, RDS, SNS, SQS, and VPC, to name just a few of the services New Relic can monitor. To use these services effectively, you need context. For example, AWS Elastic Load Balancing (ELB) automatically distributes incoming application traffic across multiple Amazon EC2 instances, which you don’t always have visibility into. But by tracking ELB requests per second as well as write and read volume in New Relic Insights, you can understand exactly how that load is being balanced to make sure you’re using the service as effectively as possible.

3. **Set up auto-scaling alerts and dashboards**
   Ops teams depend on critical alerts and custom dashboards to tell the whole story about infrastructure performance. That’s why New Relic
makes it easy for you to set thresholds for alerts on various metrics relating to your applications, servers, and key transactions. As EC2 instances come and go, your alerts and dashboards need to auto-scale with them. You can manage alerts by creating specified user groups and by leveraging New Relic’s integrated alert channels, including OpsGenie, PagerDuty, Slack, VictorOps, and Campfire. If you’re using a different alerting solution, use our Webhook feature to send a JSON Object anywhere you choose. New Relic also gives you the option to create customized dashboards for a curated view of what you care about most when running your applications in an AWS ecosystem.

4. Automate your setup
When you’re operating in a dynamic AWS environment, your underlying infrastructure is constantly shifting. While AWS CloudFormation takes care of provisioning the resources, it raises the obvious question of how your application software is deployed, configured, and executed on your Amazon EC2 instances. That’s why you should consider using an automation solution like Chef or Puppet, which can automatically configure your systems and apps that sit on top of your infrastructure. Both tools make life easier by allowing you to automate your entire deployment and management process. When these config management tools are combined with New Relic Infrastructure, you get an instant view of your EC2 metrics, as well as the change events associated with their configuration.

5. Keep an eye on the entire stack
The great thing about using New Relic to monitor your AWS applications is that it doesn’t just give you visibility into a certain portion of your application stack, but lets you see the entire thing—even if you’re running in a hybrid cloud, on-premises, or both. If you spot a performance problem in New Relic APM, for example, you can easily correlate to issues with your infrastructure using New Relic Infrastructure. You can test your application from outside the firewall using New Relic Synthetics, see what’s going on at the interaction level using New Relic Browser, and also organize, query, and visualize all this data using New Relic Insights to answer key questions about application and customer experience—all in real time.

Want to learn more about optimizing your AWS environment using New Relic?
Visit www.newrelic.com/aws or send an email to aws@newrelic.com.