



GET STARTED FAST WITH CLOUDCHECKR

AWS Reference Guide

CloudCheckr

GET STARTED FAST WITH CLOUDCHECKR

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GET STARTED FAST WITH CLOUDCHECKR

Initial Setup

Step 1: Log-On to Your CloudCheckr Account

CloudCheckr has a platform deployed in three regions. Direct your web browser to one of the following links and log-on using your existing CloudCheckr credentials:

app.cloudcheckr.com | eu.cloudcheckr.com | au.cloudcheckr.com

To sign up for a CloudCheckr account, [get started here with a free trial.](#)

Step 2: Prepare AWS Accounts

Before CloudCheckr can begin to monitor your AWS account, you must complete a series of actions in AWS to ensure your account is prepared.

Step A: enable Detailed Billing Reports.

Step B: enable tags for Cost Allocation reports.

Step C: configure the Cost and Usage Report. (More info [here](#))

Step D: grant access to CloudCheckr using an AWS role for cross-account access.

For more information on how to perform the above steps, see [CloudCheckr Success Center: Prepare Your AWS Account.](#)

Step 3: Configure CloudCheckr Account

When you log-in to CloudCheckr for the first time your accounts page will be pre-populated with a sample account. You can use this to look through the various CloudCheckr reports and functionality. You will want to add your own AWS accounts to get a full analysis of your environment.

Step A: click 'New Account'

Step B: create a unique account name

Step C: add AWS account credentials

Step D: set-up notifications

Read the “Configuring Your CloudCheckr Account” guide:

[CloudCheckr Success Center: Creating an Account in CloudCheckr](#)

Depending on the size of your AWS deployment, the initial reports update could take anywhere from a few minutes to a few hours. As soon as your initial report update finishes CloudCheckr will send you an Inventory Summary, S3 Summary, and Best Practices Report email (if you entered an email address when configuring your account). Once your initial report update finishes, you can begin reviewing the data within your account. For more in-app information about CloudCheckr updates and other Account Notifications, navigate to the green “Notifications” icon in the upper right hand corner of the screen.

Step 4: Accounts and Multi-Account Views

The accounts page is the landing page each time you log-in to CloudCheckr. The list of accounts will provide links to each individual account as well any Multi-Account Views (MAVs) that have been set up, let you know the last time a report update occurred, provide easily accessible, customized dashboards, and list the daily and monthly AWS bill for each account (as long as detailed billing is enabled).

Accounts and Multi-Account Views, cnt'd

To configure a Multi-Account View, click 'New Multi-Account View' on the accounts page. Enter the name and cloud provider for the MAV in question.

After creating the MAV, you will be prompted to add the accounts that should be included in the view. You have the option to add all accounts, or to create an account-level tag, which allows you to specifically manage which accounts are tracked in a MAV.

Step 5: User Provisioning

CloudCheckr customers have full control over provisioning and managing user access within their account(s). User access can be configured with specific permissions, rights, and visibility based on the needs and role of the user.

Step A: Setting up users & permissions and their associated policies:

[CloudCheckr Success Center: User Management](#)

CloudCheckr user provisioning can also be managed using the AdminLevelAPI. For more information, please see: [CloudCheckr Success Center: Admin API Reference Guide](#).

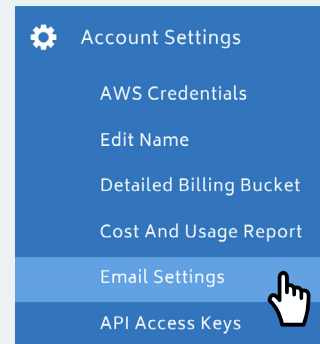
Step 6: Customize Your CloudCheckr Experience

After the initial report update is completed, your account will be populated with detailed information about your AWS deployment, organized into many pre-built (and any custom created) reports. Each time a report update completes, CloudCheckr will create new reports that reflect the most recent state of your AWS account. Since CloudCheckr retains a history of your deployment, you can drill into historical information for any of CloudCheckr's reports.

Customize Your CloudCheckr Experience, ctn'd

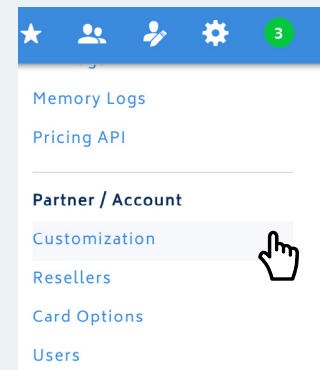
Step A:

Start by configuring CloudCheckr email notifications by navigating to **Account Settings > Email Settings**. There are a number of pre-built options for daily, weekly, and monthly emails, including Daily Bill Fluctuation Alerts, Best Practice Check summaries, Change Monitoring reports, Automation task information, CloudTrail detail, and AWS Health notifications.



Step B:

Second, navigate to the upper right of the UI and select the gear symbol drop down, and then to **Partner / Account > Customization** to access the CloudCheckr basic whitelabeling options. Users can add their own logo and page icon, change the colors of the navigation menus, and change the support site link to an internal site, if desired.



Step 7: Get a Platform Deep Dive from a CloudCheckr Technical Expert

To help you get up and running quickly, CloudCheckr can advise on how you can make the most of the recommendations in your initial report update. The goal of this deep dive is to have one of our subject matter experts provide you some initial suggestions on what features to leverage based on your use case(s), help get any specific questions answered and ensure you have a primary point of contact here at CloudCheckr.

GET STARTED FAST WITH CLOUDCHECKR

Security

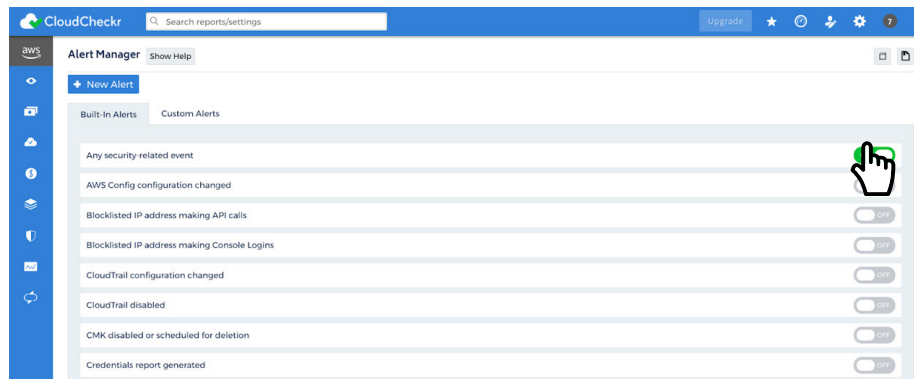
Fix Security BPCs

CloudCheckr has over 550 Best Practice Checks (BPCs), and most of those are focused on security. Because CloudCheckr Best Practice Checks run at least once a day, by Day 2, you should be able to begin analyzing configuration vulnerabilities. Each check will be marked in Red, Orange, Yellow, or Green, based on severity, and Blue, if the check is informational in nature. Many times, thanks to Automated Self-Healing, our Fix Now and Always Fix buttons can fix the underlying issue, even if you're not actively using the platform! CloudCheckr automation capabilities provide self-healing governance at scale.

The screenshot displays the CloudCheckr console interface. At the top, there's a list of security BPCs with status indicators (Red, Orange, Yellow, Green, Blue). The first BPC is '21 Network ACLs Allowing All Inbound Traffic' (Red). Below it, there's a section titled 'Checks all S3 buckets to see if any have any permissions granted to Everyone.' with a 'Read more' link. This section lists two buckets: 'Bucket: cloudcheckr-s3-bucket-2020' and 'Bucket: cloudcheckr-selfhosted-documentation', both with 'Craete: Everyone | Permission: List (Read) | Region: US East (Northern Virginia)'. A 'View Details for All 2 Items' link is present. Below this is a '30 Day Trend' chart showing a constant value of 2 items over time. At the bottom, there's a list of more BPCs, including '2 S3 Buckets With List permission Set to Everyone' (Orange), '53 Buckets With View Permissions' (Yellow), '19 VPC Flow Log Not Enabled' (Yellow), '34 EC2 VPC Security Groups Inbound Rules Allowing Traffic From Broad IP Ranges' (Yellow), '3 EC2 VPC Security Groups Inbound Rules Set To All Ports' (Yellow), '34 EC2 VPC Security Groups Inbound Rules With Dangerous Ports Exposed' (Yellow), and '41 EC2 VPC Security Groups Inbound Rules With Potentially Dangerous Ports Exposed' (Yellow). A 'Confirm Action' dialog box is open on the right, asking for confirmation to fix the '2 S3 Buckets With List permission Set to Everyone' BPC. The dialog lists the permissions needed: 's3:GetBucketAcl, s3:PutBucketAcl, s3:DeleteBucketPolicy, s3:PutBucketPolicy'. It also provides a link to the 'https://support.cloudcheckr.com/getting-started-with-cloudcheckr/permissions-page/' for more information. The dialog asks 'Would you like to perform this action?' and has three buttons: 'Yes Always', 'Yes Now', and 'No'. A hand cursor is pointing at the 'Yes Always' button.

Setup Security Alerts

Leveraging CloudCheckr's Security Best Practice Checks will help to get your accounts configuration in order, but that doesn't mean another AWS user can't undo those changes.

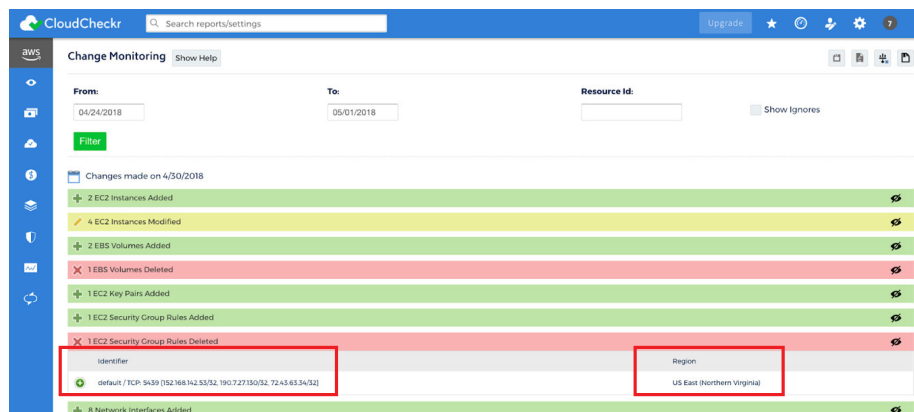


Setup Security Alerts , cnt'd

CloudCheckr has more than 30 pre-built CloudTrail alerts that users can toggle on/off (as shown above) as well as the ability to create custom alerts, using any CloudTrail event or resource-level changes, with advanced filtration capabilities and automation via AWS Lambda. CloudCheckr has notification integrations to maximize our customers' ability to integrate systems, and can push alerts via email, SNS, Syslog, PagerDuty, Slack, and ServiceNow.

Monitoring Changes

CloudCheckr's Change Monitoring report allows you to track the day-to-day configuration and resource changes that occur in your AWS account. CloudCheckr takes a daily snapshot of your AWS deployment and compares it against the previous day; if anything has been added, deleted, or modified, users will be notified – and able to drill into event detail, as shown below – using this report.

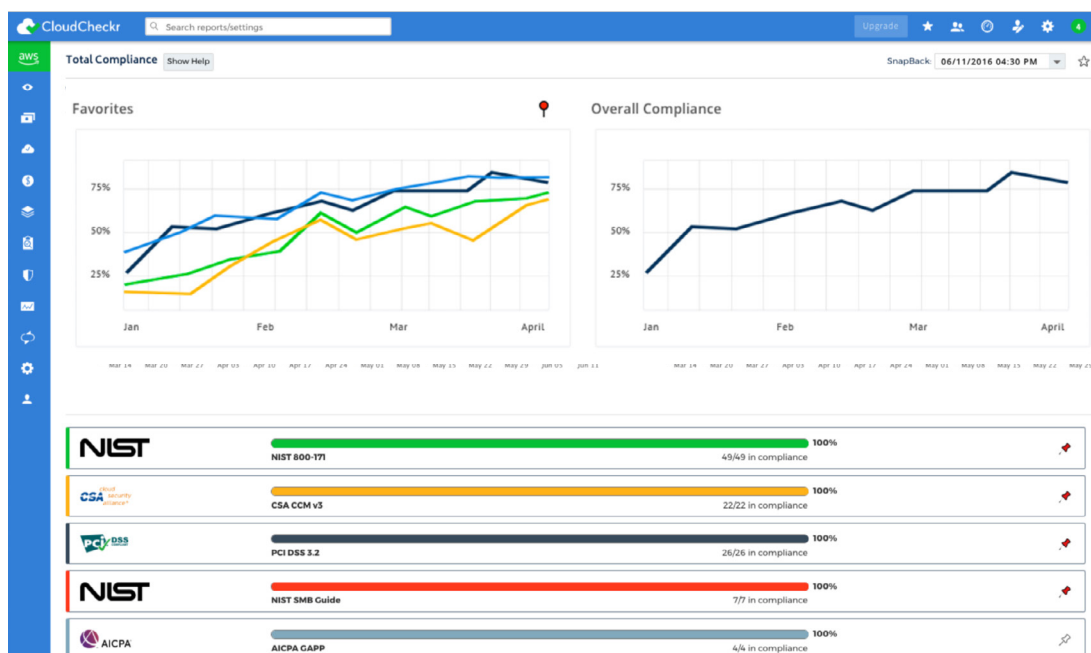


The Change Monitoring report can also be delivered as a daily email, so you'll always know when changes are made to your EC2 instances, AMIs, EBS volumes, ELBs, EIPs, IAM users, policies or groups, security groups, VPCs, and more!

Check Compliance

CloudCheckr Total Compliance has more than 35 interactive compliance benchmarking reports to assist with cloud governance at scale in regulated industries and the Public Sector, including CIS Benchmarks, a variety of NIST standards, PCI DSS, HIPAA, FISMA, and many more. Each report references our Best Practice Checks and helps make sure your organization is in compliance.

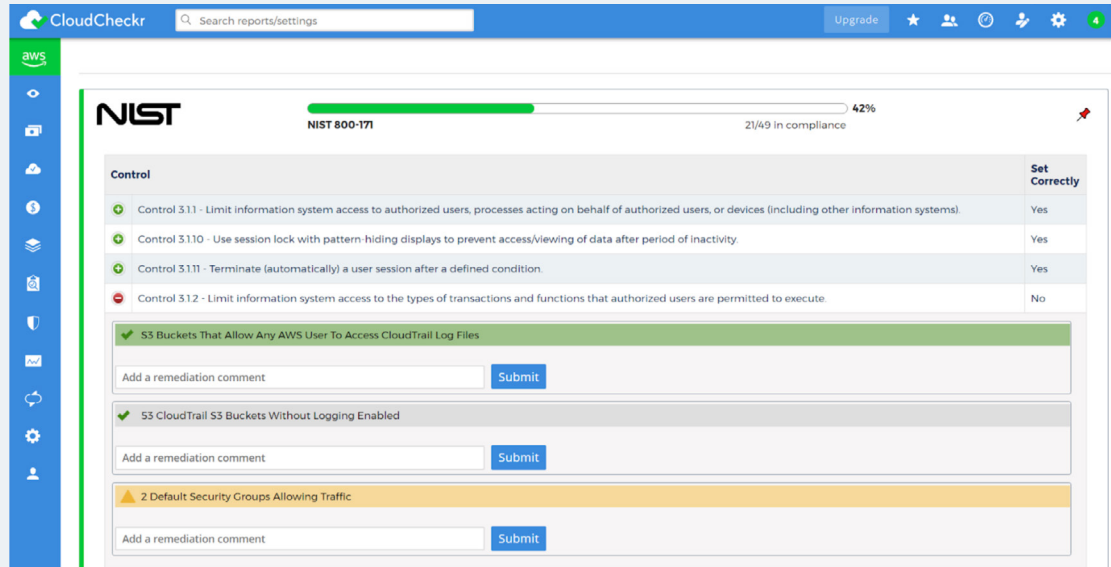
With handy graphs that showcase your top five frameworks, and our SnapBack History view, you can easily demonstrate that your organization has achieved and maintained compliance to your executive team, or provide read-only access to the CloudCheckr platform for auditors.



To ensure that you are meeting requirements for a specific standard, click on the compliance framework to expand the underlying cloud-based controls. For each, CloudCheckr's corresponding Best Practice Check(s) are displayed underneath; if there is a green check mark next to the Best Practice Check, that portion of the control passes.

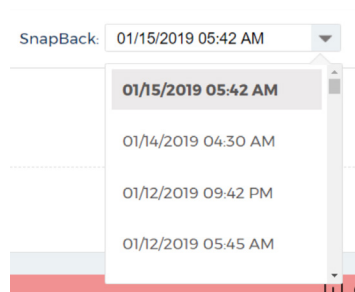
Check Compliance, ctn'd

Users can establish approval workflows and add remediation comments detailing any actions taken, to easily keep supervisors apprised of any changes. Once all associated Best Practice Checks are resolved and display the green check mark, then the overall Control changes to “Set Correctly = Yes”, and your compliance percentages will rise accordingly.



Audit Compliance History with SnapBack

Finally, the SnapBack History feature at the top right allows you to re-run the Total Compliance report for a prior date, in either Daily or Weekly view. CloudCheckr keeps historical data for up to seven years to assist customers with compliance or regulatory requirements. These SnapBack Reports can be used during the attestation process by auditors to prove that your organization was compliant at a point in time or over time, and can be added, as is, to a Body of Evidence report.



For more information on how to perform the above steps, see [Total Compliance Documentation on CloudCheckr Success Center](#)

GET STARTED FAST WITH CLOUDCHECKR

Cost

Cleanup Idle, Unused, Misprovisioned, & Previous Generation Resources

CloudCheckr can immediately help users to identify resources for which they are incurring cost, without seeing the value of that investment. Start by looking through our Cost Best Practice Checks, and identify the BPCs that include the words “unused,” “not utilized,” under-utilized,” and “unattached,” among others.

In addition, we have savings tools to analyze whether you could save money by upgrading to a newer generation resource, and the ability to scan for many common service provisioning issues. Users can reference either our ‘Savings’ page or the Cost BPCs for all cost optimization opportunities.

CloudCheckr Search reports/settings Upgrade Star Share Download Settings Help

Cost Savings Show Help Snapshot: 01/08/2019 05:20 AM Export Summary

Possible Monthly Savings
\$53,508.83

Potential Spot Savings
\$28,451.56
Get Started with Spot Management

Idle Resources
Idle Resources: \$116.24
Mis-Provisioned Resources: \$0.00
Unused Resources: \$52.40
Previous Generation Resources: \$0.00

Reserved Purchase Recommendations:

- ✓ Redshift Reserved Nodes Not Utilized
- ✓ Redshift Reserved Nodes Purchase Recommendations
- ✓ Redshift Reserved Nodes That Are Expiring In The Next 30 Days
- ✓ Redshift Reserved Nodes That Are Expiring In The Next 7 Days
- ✓ Reserved EC2 Instances Not Fully Utilized
- ✓ Unattached EBS Volumes

Idle Resources

- ✓ Idle RDS DB Instances
- ✓ Idle EC2 Instances

Unused Resources

- ✓ Unused Elastic Load Balancers
- ✓ Unused Elastic IP Addresses

Reserved Purchase Recommendations

| | Total Count | Possible Monthly Savings |
|--|-------------|--------------------------|
| ✓ RDS Reserved DB Instance Purchase Recommendations | 24 | \$41,776.44 |
| ✓ EC2 Reserved Instance Purchase Recommendations | 24 | \$9,256.71 |
| ✓ ElastiCache Reserved Node Purchase Recommendations | 9 | \$2,327.04 |

Setup Cost Alerts

CloudCheckr allows users to configure budget alerts based off of both absolute budget thresholds and relative cost spikes. You can add multiple thresholds at which to trigger an alert (as shown below), and alerts can be filtered by accounts, service, region, usage type, operation, and/or tag. Like our Security Alerts, CloudCheckr has notification integrations via email, SNS, Syslog, PagerDuty, Slack, and ServiceNow.

Create New Amazon Web Services Cost Alert

Alert Type: Amazon Web Services Costs

Alert Name: My Cost Alert

Notifications

My budget for each billing period is: 10000

Alert me if costs exceed the following thresholds:

| | | |
|---|---------------------|---|
| <input type="checkbox"/> 10 % of my budget | Send every 1 day(s) | <input type="checkbox"/> Only send once |
| <input checked="" type="checkbox"/> 50 % of my budget | Send every 1 day(s) | <input type="checkbox"/> Only send once |
| <input checked="" type="checkbox"/> 90 % of my budget | Send every 1 day(s) | <input type="checkbox"/> Only send once |

[Add another alert threshold](#)

☒ Budget is the monthly AWS Bill ☐ Daily Budget

☐ Budget cycle

Create Alert Cancel

Setup Billing & Invoicing

CloudCheckr can manage the entirety of the invoicing process from ingestion of the AWS billing reports, to sending invoices to customers through our invoice generator, to ad hoc profit reporting. We offer both pre-built and custom invoice formats and can generate customers' bills on a scheduled day each month or with the click of a button.

Our invoicing features help Partners dramatically reduce time and expenses of the billing process. CloudCheckr users can create invoices, in PDF or CSV format, grouped by service, region, operation, usage type, and/or tag, for one or more accounts.

Setup Billing & Invoicing, cnt'd

Beyond invoice itemization and filtering, there are many options to experiment with. For example, invoices can display multiple cost types, known as **Blended**, **Unblended**, or **List Cost** rates. **List Cost** is a CloudCheckr custom cost layer that gives users full power over the allocation of RI-related and volume-based discounting across the consolidated bill.

Invoice period is also editable. Users can choose a calendar month or a specific date range as the billing period, show precise values well beyond 2 decimal places, and perform currency conversion.

Manage Custom Charges and Credits

In addition to saving money, CloudCheckr enables Managed Services Providers and Enterprises with an IT profit center to charge more for AWS consumption and build margin. You can create charges that are a percentage uplift, or a flat dollar amount, each with multiple tiering capabilities and advanced filters. Administrators can also reconfigure the consumption rate for any service in the AWS catalog, including CloudFront. Similarly, you can share cloud provider credits across accounts, if desired, and pass the savings on to your clients.

Custom Billing Charges [Show Help](#)























[+ New Custom Charge](#) [Update Stack Order](#) [Reload Billing Data](#) ?

| Actions | Start Date | End Date | Type | Charge Value | AWS Account ID(s) | Description | Region | Resource ID | Stack | Stack Order |
|---------|------------|----------|-------------------------|--------------|-------------------|------------------------------|-------------|-------------|-------|-------------|
| | 08/09/2017 | --- | Premium for all charges | 15.00% | All Accounts | Managed Provider - Uplift | All Regions | --- | N/A | N/A |
| | 08/09/2017 | --- | Premium for all charges | 20.00% | All Accounts | Billing Partner Uplift | All Regions | --- | N/A | N/A |
| | 08/01/2017 | --- | Fixed Single Charge | \$200.00 | All Accounts | Service Provider Monthly Fee | All Regions | --- | N/A | N/A |
| | 08/01/2017 | --- | Fixed Single Charge | \$50.00 | All Accounts | Billing Partner Monthly Fee | All Regions | --- | N/A | N/A |

Review Right Sizing Recommendations

The EC2 Right Sizing report helps you optimize the sizing of your instance fleet by providing recommendations both within and across families and a “Request Fix” (or “Fix Now”) button to make the necessary changes to the instance in question without leaving the CloudCheckr UI.

Users should wait until the later part of their evaluation to review Right Sizing report, to ensure that CloudCheckr has a solid couple of weeks’ worth of history to be able to make accurate recommendations; typically, we advise waiting to effectuate recommendations until the platform has the ability to use 30 day average CPU history. In many cases, right sizing is one of the places that CloudCheckr customers achieve the greatest cost savings.

| | Instance  | Current Hourly Cost | Projected Hourly Cost | Possible Hourly Savings | Platform | Instance Type (Size) | Recommended | 30 Day Avg CPU | 30 Day Avg Memory | 30 Day Avg Network In | 30 Day Avg Network Out | 30 Day Peak CPU | 30 Day Peak Mem | Utilization Score  | Status |
|-----------------------------|---|---------------------|-----------------------|-------------------------|----------|----------------------|-------------|----------------|-------------------|-----------------------|------------------------|-----------------|-----------------|---|---------|
| Request Fix | i-001dab5602a21aee5 (cc-prod)  | \$0.38 | \$0.19 | \$0.19 | Windows | c4.xlarge | c4.large | 2.71% | --- | 0.59% | 0.37% | 25.56% | --- |  0 | running |
| Request Fix | i-002c6c764302620fa (cc-ensonol)  | \$0.23 | \$0.19 | \$0.03 | Windows | r4.large | m4.large | 1.56% | --- | 0.05% | 0.03% | 8.28% | --- |  0 | running |
| Request Fix | i-0061c92247f35464a (Derek)  | \$0.06 | \$0.01 | \$0.06 | Windows | t2.medium | t2.nano | 1.15% | --- | 0.07% | 0.00% | 1.79% | --- |  0 | running |
| Request Fix | i-006931957b184adb (Nsama)  | \$0.06 | \$0.01 | \$0.06 | Windows | t2.medium | t2.nano | 1.75% | --- | 0.07% | 0.01% | 42.38% | --- |  0 | running |
| Request Fix | i-00c708094e09bb4aa (Worker (AllQueues--save select Ellucian queues))  | \$3.50 | \$1.94 | \$1.56 | Windows | r3.xlarge | r3.xlarge | 18.08% | --- | 6.28% | 2.34% | 55.16% | --- |  2 | running |
| Request Fix | i-0180053b99633c9 (Datadog SQL Server Collector)  | \$0.03 | \$0.01 | \$0.02 | Windows | t2.small | t2.nano | 2.38% | --- | 0.04% | 0.01% | 3.89% | --- |  0 | running |
| Request Fix | i-01d5d4d38f5d'e56a (corpinfo-env)  | \$0.38 | \$0.19 | \$0.19 | Windows | c4.xlarge | c4.large | 0.83% | --- | 0.13% | 0.07% | 7.58% | --- |  0 | running |
| Request Fix | i-02098c3aa1e20dea (Dumbledore)  | \$0.06 | \$0.03 | \$0.03 | Windows | t2.medium | t2.small | 6.91% | --- | 0.30% | 0.21% | 74.43% | --- |  1 | running |
| Request Fix | i-021a81856a5496d6e (cc-prod)  | \$0.38 | \$0.19 | \$0.19 | Windows | c4.xlarge | c4.large | 3.19% | --- | 0.86% | 0.56% | 41.95% | --- |  0 | running |
| Request Fix | i-025cf50bece5275c (cc-api-2016)  | \$0.38 | \$0.19 | \$0.19 | Windows | c4.xlarge | c4.large | 7.78% | --- | 1.36% | 3.95% | 47.37% | --- |  1 | running |

Users are often concerned about permissions to make right sizing decisions. Lower level users do not have the requisite permissions to “Fix Now,” and Instead will see the “Request Fix” button, as shown above. In general, requesting a fix opens a “Workflow.” Users with the “Admin Workflow” permission can approve/reject requests, while users with the “Open Workflow” permission are only allowed to make a request. Users who do not have either of these workflow permissions (i.e. read-only users) cannot make requests at all.

Review Reserved Instance Purchase Recommendations

By the end of the evaluation period, users should have enough data to assess CloudCheckr's recommendations for purchasing Reserved Instances (RIs). These come with a discount, which is higher the more you pay upfront. CloudCheckr will display the recommended configuration, and give you the cost breakdown for different purchasing scenarios. CloudCheckr can look back at usage over the prior 30, 60, 90, or 180 days to make these recommendations, and users can filter and view the recommended RIs by Instance or by Frequency, for static and dynamic environments, respectively.

Recommended Reserved Instance Purchases

| Region | Instance Type | Platform | Tenancy | Number Recommended | On-Demand Hourly Cost | No Upfront | Partial Upfront | All Upfront |
|---|---------------|----------|---------|--------------------|-----------------------|--|--|---|
|  US East (Northern Virginia) | t1.micro | Linux | Default | 2 t1.micro | 0.04 | RI Hourly Cost: \$0.0280 Effective Hourly Cost: \$0.0280 ((\$0.0280 hourly cost * 8,760 hours in term) + \$0.00 upfront) / 8,760 hours in term) Current Monthly Cost: \$29.20 Optimal Monthly Cost: \$20.44 Monthly Savings: \$8.76 Initial Investment Break Even: N/A Total Savings: \$105.12 Percent Savings: 30.00% Return On Investment (vs On-Demand): N/A Return On Investment (vs No Upfront): N/A | RI Hourly Cost: \$0.0100 Effective Hourly Cost: \$0.0242 ((\$0.0100 hourly cost * 8,760 hours in term) + \$124.00 upfront) / 8,760 hours in term) Current Monthly Cost: \$29.20 Optimal Monthly Cost: \$7.30 (\$17.65 including amortized RI costs) Monthly Savings: \$21.90 (\$11.57 including amortized RI costs) Initial Investment Break Even: 6 months Total Savings: \$138.80 Percent Savings: 39.61% Return On Investment (vs On-Demand): 111.94% Return On Investment (vs No Upfront): 69.55% | RI Hourly Cost: \$0.0000 Effective Hourly Cost: \$0.0235 ((\$0.0000 hourly cost * 8,760 hours in term) + \$206.00 upfront) / 8,760 hours in term) Current Monthly Cost: \$29.20 Optimal Monthly Cost: \$0.00 (\$17.17 including amortized RI costs) Monthly Savings: \$29.20 (\$12.03 including amortized RI costs) Initial Investment Break Even: 8 months Total Savings: \$144.40 Percent Savings: 41.21% Return On Investment (vs On-Demand): 70.10% Return On Investment (vs No Upfront): 44.58% |



















GET STARTED FAST WITH CLOUDCHECKR

Availability and Usage

BEST PRACTICE CHECKS

Fix Availability

CloudCheckr has dozens of Best Practice Checks (BPCs) focused on High Availability. Use these to make sure that you have backups and snapshots, that you are using multiple zones and load balancers, and that your resources have passed various health checks.

| | |
|--|---|
| 85 EBS Volumes Without A Snapshot |    |
| Elastic Load Balancers With Fewer Than Two Healthy Instances |   |
| 11 RDS Instances Configured To Retain Backups For Fewer Than 30 Days |    |
| 2 SES Domains With Failure Status |   |
| 2 SES Email Addresses With Failure Status |   |
| 5 Auto Scaling Groups Not Utilizing Multiple Availability Zones |   |
| 104 EBS Volumes With No Recent Snapshots (30 days) |     |

BEST PRACTICE CHECKS

Fix Usage

Similar to our Security, Cost and Availability Best Practice Checks, click on the Usage tab and look for under and over-utilized resources. Parameters to determine what constitute adequate utilization are fully editable by the individual user by clicking the **gear symbol**, as shown below.

| | |
|--|--|
| 9 Under-Utilized DynamoDB Table Reads |    |
| 9 Under-Utilized DynamoDB Table Writes |    |
| 17 Under-Utilized EC2 Instances |     |
| Under-Utilized ElastiCache Nodes |    |
| 11 Under-Utilized RDS DB Instances |     |

Configure Check

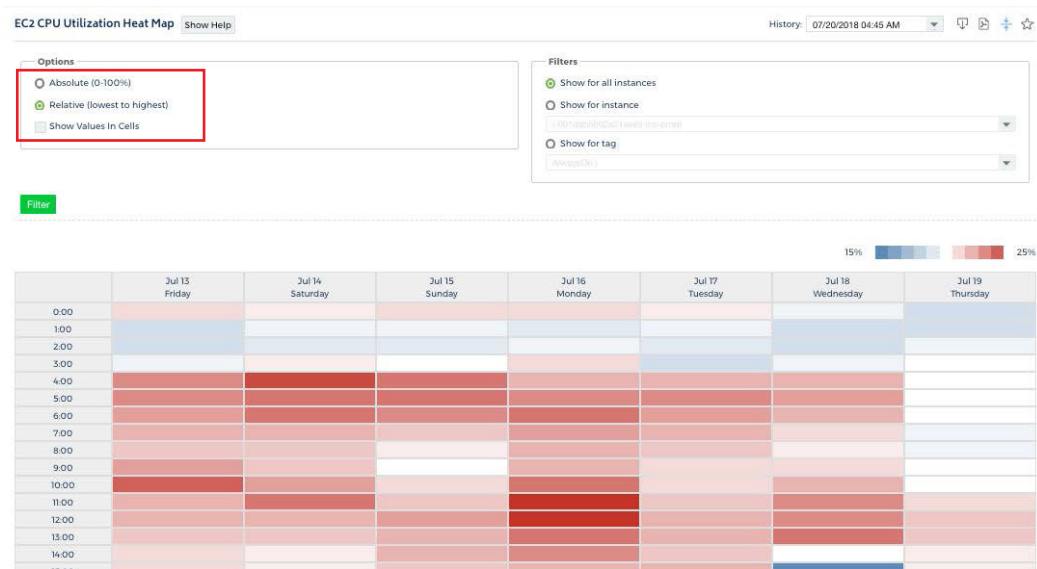
Change configuration for Under-Utilized RDS DB Instances.

Days:

AvgUtilizationCutOff:

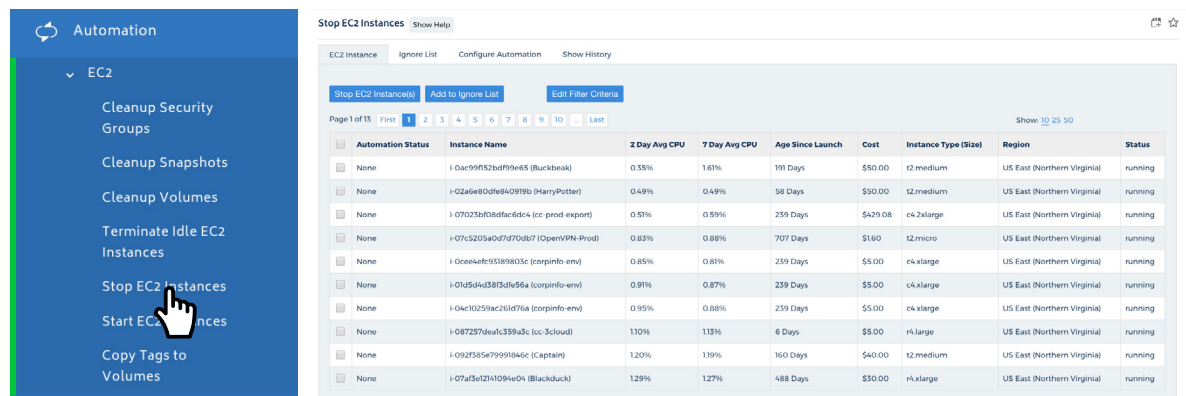
Review Heatmaps

CloudCheckr Utilization Heatmaps span five resource types – EC2, RDS, ElastiCache, Redshift, and DynamoDB, and displays the average utilization, by hour, over the last 7 days. The colors on the heat map shift from blue, indicated less utilization, to white, to red, indicating more utilization. In addition to seeing the Heat Map for ALL of a particular resource, you can use the instance dropdown to view the Heat Map for individual instances, or grouped resources by a tag. Selecting 'Absolute' will display the map ranging from 0% to 100%, while selecting 'Relative' will display the map using the lowest and highest utilization percentages, as shown below.



Configure EC2 Automation

CloudCheckr has seven automation tasks designed for ease of governance of EC2 instances at scale: Cleanup Security Groups, Cleanup Snapshots, Cleanup Volumes, Terminate Idle EC2 Instances, Stop EC2 Instances, Start EC2 Instances, and Copy Tags to Volumes.



The screenshot displays the CloudCheckr Automation interface. On the left, a blue sidebar menu shows the 'Automation' section expanded, with 'EC2' selected. Under 'EC2', the 'Stop EC2 Instances' option is highlighted with a mouse cursor. The main panel shows the 'Stop EC2 Instances' configuration page. It includes tabs for 'EC2 Instance', 'Ignore List', 'Configure Automation', and 'Show History'. The 'Configure Automation' tab is active, showing a table of EC2 instances to be stopped. The table has columns for 'Automation Status', 'Instance Name', '2 Day Avg CPU', '7 Day Avg CPU', 'Age Since Launch', 'Cost', 'Instance Type (Size)', 'Region', and 'Status'. There are 10 instances listed, all with 'Automation Status' set to 'None' and 'Status' set to 'running'. The instances are located in the 'US East (Northern Virginia)' region. The table is paginated, showing 'Page 1 of 15' and 'Show 10 25 50' options.

| Automation Status | Instance Name | 2 Day Avg CPU | 7 Day Avg CPU | Age Since Launch | Cost | Instance Type (Size) | Region | Status |
|-------------------|--------------------------------------|---------------|---------------|------------------|----------|----------------------|-----------------------------|---------|
| None | i-0a99f8f52bdf9e65 (Buckbeak) | 0.35% | 1.61% | 191 Days | \$50.00 | t2.medium | US East (Northern Virginia) | running |
| None | i-02a6e80dfe40919b (HarryPotter) | 0.49% | 0.49% | 58 Days | \$50.00 | t2.medium | US East (Northern Virginia) | running |
| None | i-07023bf08dfac6dc4 (cc-prod-export) | 0.51% | 0.59% | 239 Days | \$429.08 | c4.xlarge | US East (Northern Virginia) | running |
| None | i-07c3205a0d7d70db7 (OpenVPN-Prod) | 0.83% | 0.88% | 707 Days | \$160 | t2.micro | US East (Northern Virginia) | running |
| None | i-0ceee4ef93189803c (corpinfo-eme) | 0.85% | 0.81% | 239 Days | \$5.00 | c4.xlarge | US East (Northern Virginia) | running |
| None | i-01d5d4d38f5f656a (corpinfo-eme) | 0.91% | 0.87% | 239 Days | \$5.00 | c4.xlarge | US East (Northern Virginia) | running |
| None | i-04c10259ac201d76a (corpinfo-eme) | 0.95% | 0.88% | 239 Days | \$5.00 | c4.xlarge | US East (Northern Virginia) | running |
| None | i-087297dualc359a3c (cc-3cloud) | 1.10% | 1.13% | 6 Days | \$5.00 | r4.large | US East (Northern Virginia) | running |
| None | i-092f585e79991846c (Captain) | 1.20% | 1.19% | 160 Days | \$40.00 | t2.medium | US East (Northern Virginia) | running |
| None | i-07a15d21a1094e04 (Blackduck) | 1.29% | 1.27% | 488 Days | \$30.00 | r4.xlarge | US East (Northern Virginia) | running |

Setup Billing & Invoicing, cnt'd

Each task allows you to filter down by various criteria to manage different groupings of instances, and make decisions about how and when the automation will run. Users have the option to manually select the items to be processed from within the UI, receive an email notification when new resources are detected that fit the parameters of the automated task, or simply have CloudCheckr process any non-ignored resources that fit the task parameters.

GET STARTED FAST WITH CLOUDCHECKR

Checklist

Security

- ☐ Fix Security BPCs
- ☐ Setup Security Alerts
- ☐ Monitoring Changes
- ☐ Check Compliance
- ☐ Audit Compliance History with SnapBack

Cost

- ☐ Cleanup Idle, Unused, Misprovisioned, & Previous Generation Resources
- ☐ Setup Cost Alerts
- ☐ Setup Billing & Invoicing
- ☐ Manage Custom Charges and Credits
- ☐ Review Right Sizing Recommendations
- ☐ Review Reserved Instance Purchase Recommendations

Availability & Usage

- ☐ Fix Availability BPCs
- ☐ Fix Usage BPCs
- ☐ Review Heatmaps
- ☐ Configure EC2 Automation