AWS billing alarms (beta) - Frequently Asked Questions (FAQ)

The billing alarms feature is currently in limited beta, available on an opt-in basis to Premium Support customers as well as by request through your AWS account representative. Please be aware that this functionality is subject to change before general availability. Contact developer support or your account representative if you have additional questions not answered below.

# How can I enable monitoring of my AWS estimated charges?

If you are a Premium Support customer, you can enable monitoring of estimated charges for any account by visiting the Account Activity page and clicking ‘Enable now’ in the box that begins with “Monitor charges automatically…” Once you do that, estimated charges for your account will be stored as Amazon CloudWatch metrics whenever updated estimates are available. This includes your total AWS charges as well as charges for each individual service that you use (Amazon EC2, Amazon S3, and so on). Estimated charges will continue to be accessible on the Account Activity page as well.

Once your account is enabled, you can view metric data and set alarms using Amazon CloudWatch APIs or the AWS Management Console. For example, you can graph your charges for Amazon EC2 over the last 14 days and then set an alarm that emails you as soon as they exceed $100. Please allow up to 15 minutes after the first time you enable this feature for data to appear in the console and APIs.

Note that if you are using Consolidated Billing (CB) with linked accounts, you will automatically receive metrics for your overall consolidated charges as well as breakdowns for each linked account. These metrics will be visible in the payer account.

|  |  |
| --- | --- |
| Estimated Charge metrics provided: | Provided for: |
| Total | All beta users |
| By Service | All beta users |
| By Linked Acccount | Beta users with CB |
| By Linked Account and Service | Beta users with CB |

# Does it cost anything to monitor my estimated charges?

There is no additional charge for storing estimated charge data in Amazon CloudWatch; these metrics are provided free of charge. Many customers can also set alarms and receive notifications at no extra charge as part of their free tier. After you exceed the free tier of 10 CloudWatch alarms per month, each additional alarm costs $0.10 per month. After you exceed the free tier of 1,000 email notifications per month (provided by Amazon Simple Notification Service), each email notification costs $0.0001 per email.

# How can I view my estimated charges in Amazon CloudWatch?

From the Account Activity page, click ‘Manage alarms in Amazon CloudWatch’. You will be redirected to the Amazon CloudWatch Management Console where you will see Estimated Charge metrics for your total AWS usage as well as for each individual service that you use. Select a metric to view a graph of your estimated charges. For example, you can select Amazon EC2, Amazon S3, AWS Data Transfer, and so on.

Alternatively, you can go directly to the Amazon CloudWatch Management Console to view your estimated charges. Click ‘Metrics’ in the left panel and then select ‘Estimated Charges’ in the ‘Viewing’ dropdown menu that appears in the main panel to view a metric.

Note that all Estimated Charge metrics are stored in the US-East-1 region, regardless of the region in which the service usage occurred.

# How can I set an alarm to be notified when my estimated charges reach my spending limit?

You can set an alarm on estimated charges to be notified when they reach a spending limit that you define. First, select an estimated charge metric in the Amazon CloudWatch Management Console as described above. Then, click the ‘Create Alarm’ button beside the graph. Next, give your alarm a name and a description and specify the charge threshold above which you want to be notified and click Continue. Choose an action of “Send Notification” when the alarm enters the “ALARM” state and select or create the SNS topic that you will use for the notification.

Note that when creating new SNS topics or adding new email subscribers to an existing topic, each email address added will receive a subscription email that must be confirmed before notifications will be sent to it.

# What statistic and period should I use for viewing metrics and setting alarms?

In most cases you should use the ‘Maximum’ statistic and a period of 6 hours (360 minutes). Each metric data point already represents the sum total of estimated charges for the specified service, so those settings will return the highest value within that time period. For example, if the graph shows $100 at 2pm, $105 at 6pm, and $110 at 10pm, the total estimated charges are $110.

# What are the recommended settings for an estimated charge alarm?

We recommend the using the following settings for your estimated charge alarms.

**Setting a threshold:** Since Estimated Charge data is updated several times a day, we recommend using a statistic of ‘Maximum’ and a period of ‘6 hours’ in order to ensure your alarm triggers properly. When using the AWS Management Console to create an alarm, these are the default settings. We recommend using a threshold comparator of ‘>=’ so that the alarm triggers when charges rise above your specified threshold. Choose a value for your threshold that represents the estimated charge amount at which you want to be notified. Do not include the dollar sign; for example for $99.99, enter ’99.99’. Leave the value in the ‘minutes’ field at 360. Below is an example of an alarm configured with the recommended settings.

|  |  |
| --- | --- |
| **Metric**: EstimatedMonthlyCharges  **Period**: 6 hours  **Statistic**: Maximum | “This alarm will enter the ALARM state when EstimatedMonthlyCharges is **>= 100** for **360** minutes” |

**Setting a notification:** You can choose any action that you wish, however we recommend using an email-based SNS notification so that you receive an email when your threshold is reached. Create an action to send a notification when the alarm state enters ‘ALARM’. Create a new SNS topic or select an existing one if you wish, and add the email addresses you want to notify.

|  |  |  |  |
| --- | --- | --- | --- |
| **When Alarm state is** | **Take action** | **Action details** | |
| ALARM | Send Notification | Topic: ‘Create new email topic’ | Email(s): ‘your-email@your-domain.com’ |

Using these settings, the alarm will send an email notification immediately after your estimated charges reach or exceed the threshold you set.

# How do I manage my existing alarms?

You can manage your alarms in the Amazon CloudWatch Management Console by clicking ‘Alarms’ in the left panel. You can then search for alarms by name or by state (e.g. ALARM or OK) and modify, delete, or view details.

# How frequently are these metrics updated? What time period does it represent?

Estimated charges are updated several times per day by our billing systems. Each metric data point is time-stamped with the time the estimate was calculated. You can also view your Account Activity page to find out the time period that the estimate covers. Each updated estimate will be available in CloudWatch within minutes after it is calculated. Note that the very first time you enable this feature, it may take up to 15 minutes for the metrics to be visible.

# How quickly will I be notified? How often?

When your threshold is reached and your alarm is using the recommended settings, Amazon CloudWatch will send the email notification immediately and exactly once. Even with a Period setting of 6 hours, the alarm will notify you immediately after the threshold is reached, usually in less than a minute. It will not send a repeat notification unless the alarm state changes again, for example if your estimated charges subsequently decrease below and then increase above your threshold.

# For how long does Amazon CloudWatch keep a record of my estimated charges?

At this time, 14 days.

# Can I use different settings for these alarms other than the ones you recommend?

Yes. Although we recommend using the specified settings for your estimated charge alarms, you can adjust them to meet your needs. For example, you can set a period of ‘1 minute’ if you want your alarm to send a new notification each time your estimated charges are updated. You can also choose alarm actions other than SNS email notifications, for example SNS HTTP/S notifications or Auto Scaling policies.

You should only use custom settings if you are familiar enough with Amazon CloudWatch to know how these changes will affect the behavior of your alarm.

# Why are all my regions’ estimated charges aggregated into global Estimated Charges stored in one region?

All estimated charge metrics are stored in the US-East-1 region, regardless of the region(s) in which service usage occurs. In many cases pricing tiers are global and apply collectively across regions, for example AWS Data Transfer tiers, Amazon S3 storage tiers, or the AWS free tier. For this reason, estimated charges are currently provided to CloudWatch at the global level and stored in US-East-1.

# Why shouldn’t I use the statistic ‘Sum’?

These metrics are published as accumulated totals within the entire billing period, not incremental charges since the last estimated charge computation. Therefore, using the Sum statistic will not provide a meaningful number. For example, if your estimated charges are $100 after the 30th of the month and $110 after the 31st, your estimated charges for the month are $110 and not $210.