

# NET(NET): 12 Tips to Save on Cloud Costs

NET(net): Find, Get, and Keep more value in your technology supply chain.



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## CLOUD COST OPTIMIZATION (CCO) TIPS

In this eBook, we break down Top 12 Tips to save on Cloud costs. With the global public cloud slated to grow at an average of 23% in 2023, now is the time to ensure your share of those billions is managed to its optimal state

As companies migrate increased number of workloads and applications to the cloud, cost overrun has become a major issue for many engineering teams. While cloud providers offer flexibility and scalability, cloud costs are difficult to track and understand. Without proper governance and processes (referred as 'FinOps'), cloud cost could spiral 'out of control' and leave companies with marginal benefits from their original cloud objectives. In response, many companies are adopting cloud cost optimization strategies to gain better understanding and control of the cloud costs, while maximizing efficiency and usage.

Based on NET(net) practical experience in helping clients across verticals, this guide provides key steps toward cloud cost optimization best practices.

Knowing the market is only part of attaining Cloud enlightenment in 2023. Understanding how the vast array of Cloud products, services, instances, and agreements all work together is like trying to manage flying debris in a tornado.... it's not easy, and very few have the practical knowledge and experience to do it right



## 1. Shut it Off

- Unimaginably, many clients overlook the simplest of things, like shutting off unused Instances.
- A quick and simple audit can often reveal under-utilized and even unused instances, which can easily be shut off.
- Shutting off something that is unused and costing you money is a quick and easy way to save 100% of those costs.



## 2. Consolidate

It is also quite common to see two instances running at 40% utilization, which can easily be consolidated into 1 instance, running at 80% utilization, and you can save significantly depending on your workloads and the consolidation opportunity.



## 3. Demand Management

Even if something is running and the utilization is high, it does not mean it is needed. Check frequently with your business users to make sure they still need the stuff they are running. We often find that as much as 30% of the stuff that has been out there for a year isn't even looked at anymore even if it does run.



## 4. Power-Cycle it

Power-cycling your instances when they are not in use is a great way to save money. By simply parking your instance to be power cycled back on when needed, you can save a ton. Let us say your development environment is running 24x7x365, but your developers are working 9a – 5p M-F. You could reduce the hours in use from 168 to 40 per week, a savings of 76%!

## Pro Tip: Use Tagging

Use tagging. Tag your instances as #test, #development #staging #qa or other clear markers and then you could schedule a job to turn off these environments at say 7 pm and turn them back on at 7 am, and boom – you’ve just saved 50% on your costs, and nothing has really changed about the business value you receive if you don’t have your teams working 24/7. Have the Friday procedure shut down at 7 pm on Friday, and not start up until 7 am on Monday, and you’ve just saved 2 more days (another 28.6% on your costs)?



## 5. Size it Right

2CPUs instead of 4CPUs is a 50% Savings



## 6. Use CloudWatch with Auto-Scaling

### Pro Tip: Use auto-scaling.



Use auto-scaling. You can also set the minimum, maximum, and desired instances to 0 for the time in question to eliminate the charges without turning off your servers. If you had an environment of 10 servers during working hours and only 1 server off hours, you could get 90% of the same benefit.



## 7. Use Spot Pricing (90% cost reductions when compared to OnDemand)



## 8. Reserve Your Instance (75% cost reductions when compared to OnDemand)



## 9. Elastic IPs

### Pro Tip: Use Trusted Advisor

Use Trusted Advisor because it will notify you of ways to save money especially when it comes to Elastic IPs that are unassociated with an Instance, which end up costing you money for not using them.



## 10. Use the Appropriate Storage Class

- S3
- Infrequent Access (IA)
- Infrequent Access One Zone
- Glacier
  - Bulk (access in 5 – 12 hours)
  - Expedited (access in 1-5 minutes)



## 11. Set up a Hierarchical Storage Management Proc.

- a. Automatically move data from
  1. S3 to IA after 30 days
  2. IA to Glacier after 90 days
  3. Expire / Delete specific objects after 180 days



## 12. Data Transfer Costs

- Transferring data INTO EC2 is free
- Transferring data OUT OF EC2 is not free. In fact, this can be extremely expensive. For some clients, this has quietly become the bulk of their costs.
- The Rosetta Stone of Data Transfer costs is:
  - Designing & Planning your Infrastructure with Cost in mind
  - Understanding the relationship between service types and regions

### Pro Tips



- Transferring Data across Regions will result in higher data transfer fees, so limit the number of regions for data transfer.
  - Understanding the various data flows, and ensuring those flows happen along the least expensive routes
- Data Transfer Costs are lower with Private IP Addresses, so avoid using public or elastic IP addresses if at all possible



### Bonus Tips

- 10. Get AWS Training
- 11. Look at Competitive Options.
  - AWS, Google, and Azure
  - Digital Ocean (as an example) says in some cases, they offer 2x the value at half the cost when compared to Amazon. Do yourself a favor and start democratizing your cloud environments so that your discrete workloads can benefit from the best overall value out there.



## ABOUT NET(NET)

Founded in 2002, NET (net) is the world’s leading IT Investment Optimization firm, helping clients find, get and keep more economic and strategic value. With over 2,500 clients around the world in nearly all industries and geographies, and with the experience of over 25,000 field engagements with over 250 technology suppliers in XaaS, Cloud, Hardware, Software, Services, Healthcare, Outsourcing, Infrastructure, Telecommunications, and other areas of IT spend, resulting in incremental client captured value in excess of \$250 billion since 2002. NET (net) has the expertise you need, the experience you want, and the performance you demand. Contact us today at [info@netnetweb.com](mailto:info@netnetweb.com), visit us online at <https://www.netnetweb.com>, or call us at +1-866-2-NET-net to see if we can help you capture more value in your IT investments, agreements, and relationships.

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