

MAXIMIZING FULL POTENTIAL OF AWS RESERVED INSTANCES WITH INGRAM MICRO CLOUD

**INGRAM MICRO CLOUD'S
COST OPTIMIZATION
PROGRAM TO MAXIMIZE
AWS SAVINGS
(SYNOPSIS & FAQ)**



IMPLEMENTING A RESERVED INSTANCE STRATEGY TO MAXIMIZE SAVINGS

OVERVIEW

Estimates are showing that **AWS usage will continue to grow at 40% annual rate during and post “Covid-era”**. Gartner estimates are showing that organizations, which are not applying cloud cost optimization strategies, are overspending by 30% or more on their monthly AWS bill. It is common for businesses to overspend two to three times more than their initial budget. A major reason is that businesses underestimate complexity of cloud infrastructure pricing model.

AWS has offered the simplistic **“promise of the cloud” with their flexible, PAYG, Elastic Cloud Compute (EC2) model**. However, EC2 alone has 24 geographical regions, over 77 availability zones, and over 300 instance types with complex pricing and purchasing options. This extends to 3 million different combinations AWS account administrators can choose from when provisioning and paying for a specific EC2 instance.

Most companies today are paying for their AWS usage with an **“on-demand”** model, which often results in uncontrolled cloud costs, requiring a strategic approach to managing and optimizing monthly spend. With increased demand in AWS technologies and increased usage, companies are looking for **ways to decrease their AWS cost footprint**.

AWS has offered **3 methods for Cost Reduction for customers** using AWS services available directly to any AWS account owner (EndUser). Each method promises to lower the overall usage cost; however, **when signing up with AWS directly, each method comes with the caveat and substantial risk**.



**SPOT
INSTANCES**



**SAVINGS PLAN
(COMPUTE/EC2)**



**RESERVED
INSTANCES
(RI)**

PROS/CONS OF EACH METHOD WHEN SIGNING UP WITH AWS DIRECTLY



SPOT INSTANCES

- Discounts up to 80% on EC2 only, utilizing “spare” Spot instance capacity.
- Very complex to manage by EndUser, substantial risk if mismanaged.
- Availability of Spot Instances are not guaranteed by AWS and Spot availability can be terminated with only 2-minute warning when AWS needs that EC2 capacity back, causing service interruption and data/workload loss.
- The Spot Instance concept has very limited EndUser scope, and it is tailored specifically for non-critical, fault-tolerant workloads which can be interrupted constantly.
- Not meant for typical SMB use, or websites/workloads that should remain uninterrupted.



SAVINGS PLANS

- Compute/EC2: most recent savings method from AWS.
- Even though it provides similar discount benefits as a RI plan, Savings Plans don't have flexibility of RIs, nor EndUser controllability of how savings are applied.
- AWS will require EndUser to sign up for 1-3 year commitment.
- The biggest drawback with the Savings Plan is that unlike the RI program, EndUser doesn't own Reservation ID.
- EndUser provides monetary and time commitment to AWS, without risk mitigation.
- Savings Plans can be applied to EC2, Fargate usage, but unlike RIs.
- Savings Plans are not applicable to RDS, RedShift, ElastiCache.



RESERVED INSTANCES (RI)

- Discounts up to 72%.
- Original savings method AWS introduced in 2009 and still the most popular plan to date. It caters to variety of use cases and majority of AWS EndUsers.
- It comes in 3 purchasing variations (all upfront, partial upfront, no upfront capital expense).
- When purchasing RIs directly with AWS, EndUser will receive Reservation ID, similar to Licensing ID, which can later be converted, exchanged, or even sold.
- RIs are applicable to 3 of the most popular AWS services: EC2, RDS, RedShift (and ElastiCache).
- The biggest drawback for EndUsers directly purchasing RIs from AWS, is that they will be responsible for complex management of RIs.
- In many cases, when managed improperly, RI savings can turn into additional cost and unnecessary unplanned expense.
- Some EndUsers will opt to hire a dedicated role to manage their RIs or hire a 3rd party company that will manage EndUser's RI fleet.
- 3rd party companies can charge 35%-50% of total savings amount for management alone and ElastiCache
- AWS requires EndUser to sign a 1-3 year commitment with RI program.
- Deeper discounts will be awarded to 3 year commitments and "all-upfront" paying option, which will require a significant up-front capital cash investment by EndUser.
- Discounts for the "partial-upfront" payment option will reduce discount amounts, while "no up-front" option will have the least favorable discount to EndUser.



INGRAM MICRO CLOUD AWS RI PROGRAM

Ingram Micro Cloud has been empowering Partners for over a decade and is continuing to do so through programs like our AWS Cost Optimization Program.

Since 2016, Ingram Micro has worked with hundreds of EndUser case scenarios, AWS consultants, and 3rd party companies specializing in cost optimization strategies to offer you the most robust, yet simplified AWS Cost Optimization program on the market today.

Ingram Micro has built its offering on top the of the AWS RI program to offer EndUsers only the benefits while removing any risk, capital expense, financial, and time commitment that AWS would otherwise mandate to EndUsers if purchasing RIs through AWS directly. Average total savings achieved (on EC2, RDS, RedShift) with our program is 20-30%.

WHAT CAN AWS ENDUSERS EXPECT WHEN SIGNING UP FOR INGRAM MICRO CLOUD'S AWS RI COST OPTIMIZATION PROGRAM?

- Ingram Micro will perform **free and confidential** Cost Optimization analysis of EndUser AWS account environment.
- Ingram Micro will provide **detailed analysis and monthly** saving amount estimates within 72 hours.
- **Upon agreement and consent** from the EndUser, Ingram Micro will **purchase RIs** from AWS and AWS marketplace on behalf of the EndUser.
- Capital/financial expense required to buy RIs **will be provided solely** by Ingram Micro and its affiliates.

- Purchased Reserved Instances **will reside in the EndUser's AWS account.**
- Ingram Micro **will manage and continuously optimize** EndUser AWS account RI environment with proprietary AI and ML technologies.
- Unlike AWS, Ingram Micro **does not require** lengthy multi-year time commitments with the program.
- EndUser should only provide Ingram Micro **with 60 days notification** if there is a desire to exit the program, with no strings attached.

BELOW TABLE PROVIDES SUMMARY OF BENEFITS FOR THE ENDUSER WHEN CHOOSING TO ENROLL IN SELF-MANAGED AWS RI PROGRAM VS. INGRAM MICRO CLOUD MANAGED RI PROGRAM.

	EndUser Self-Managed RI Program directly with AWS	Ingram Micro Cloud RI Managed Program
Capital Expense	For optimal savings potential, AWS will require (significant) cash up-front payment from the EndUser.	Ingram Micro will provide necessary up-front financial capital with no additional costs to the EndUser.
Program Duration	Locked commitment 1-3 years.	Exist program any time with 60 days notice.
Savings Amount	Savings amount can range from 10%-15% with conservative approach.	Savings Amount to the EndUser (after Ingram Micro management fee) is in 20%-30% range.
Management	Will typically require dedicated resource to manage the RI fleet, or to hire 3rd party company to manage.	Ingram Micro and affiliates using AI and ML proprietary tools will manage the RI fleet, ensuring highest coverage/utilization.
RI Coverage	EndUser will need to constantly analyze overall account usage and purchase new coverage.	Ingram Micro will constantly analyze the environment and make necessary purchases to keep coverage in optimal range.
RI Utilization	Typical EndUser RI utilization is ~70% (if utilization drops below 50%, RIs start to lose money).	Typical utilization is ~90%+. High level is achieved with AI and ML management, and hyperscale multi-account approach.
Underutilized RIs	EndUser would need to sell underutilized RIs (if below 50%) on AWS Marketplace. AWS takes 12% fee.	Ingram Micro will manage underutilized RIs with our hyperscale multi-account approach or sell it on AWS Marketplace. (at no financial impact to the EndUser).
Regional Management	EndUser will need to ensure proper management in each AWS Region separately.	Ingram Micro and affiliates using AI and ML proprietary tools will manage the RI fleet across all regions.
RI Modifications	EndUser must manage and execute weekly/monthly modifications for instances that fluctuate in usage/ utilization month over month.	Ingram Micro and affiliates using AI and ML proprietary tools will manage modifications across the entire account portfolio.
RI Exchanges	EndUser must manage and execute weekly/monthly RI exchanges, which require extra “true-up” cost of capital.	Ingram Micro and affiliates using AI and ML proprietary tools will manage exchanges and provide necessary “true-up” capital.

01

I want to sign up for the “no-upfront” 1-year RI option directly with AWS to cover my EC2 instance. Since I am not putting any cash upfront, does it mean that I have no financial risk?

Even though you may choose the “no-upfront” option with AWS directly, you are still committing to paying the AWS monthly price of the RI for next 12 months, regardless if you will be using that EC2 instance or not.

Example: if your EC2 on-demand monthly cost is \$100, purchasing 1 Year no-upfront RI may reduce your monthly EC2 bill to \$80; however, you will be committed to paying \$80 for next 12 months, regardless if you are using your EC2 instance or not, or even if EC2 instance is terminated.

02

I already have a small fleet of existing RIs in my AWS account that I am not managing properly. Can Ingram Micro take over and help manage those RIs?

Yes, Ingram Micro can take over management of your existing RIs, and we will ensure that existing (underutilized RIs are fully optimized and utilized across all regions in a short amount of time. In addition, we would potentially purchase additional RIs to ensure high coverage and highest utilization within the account.

03

Can I participate with my AWS “Master Payer” account only, or can I also do this with my account that is linked to Ingram Micro’s “Master Payer” account?

Ingram Micro can manage RIs in your AWS “Master Payer” account as it is without any further AWS configurations. We can also manage EndUser AWS accounts that are linked to Ingram Micro Mast Payer; in which case, those linked accounts would receive an additional 5% of total RI savings benefit, as a linked member or Ingram Micro master payer account.

04

Advertising on AWS website claims that I can save up to 72% on my EC2 cost with RIs. Why is Ingram Micro only offering 20-30% savings with the RI program?

72% savings will only be applicable to a handful of EC2 Instances. These are generally for older, outdated models of virtual machines (VMs) that are low in demand. For newer models/types of EC2 VMs that are more powerful, optimized, and higher in demand, AWS will only provide a discount of up to 4%. AWS will provide the highest discount to EC2 VMs that are no longer in demand and the lowest discount to those EC2 VMs that are most popular in demand.

Average AWS portfolio account with typical EC2, RDS, RedShift mix will yield approximately 20%-30% of monthly savings.

05

How do I know that Ingram Micro will ensure my RIs are optimally utilized and I get the most savings possible?

Ingram Micro management fee is based on the percentage of total savings achieved in the EndUser AWS account. It's in our benefit to get the most savings out of the EndUser AWS account. Our team will constantly manage and optimize your AWS account with AI and ML applications to ensure the highest savings. Ingram Micro will provide monthly reports transparently showing full amount of realized savings, and utilization achieved.

06

Will I see RIs purchases in my AWS console?

Yes, you will have full transparency and ability to track the RIs bought in AWS console. All RI purchases will be pre-paid by our credit card and will appear as "paid" invoice in AWS console. In conjunction with AWS console, Ingram Micro will also provide independent reports showing purchased RI fleet.

07

I only have one EC2 virtual machine that I know I will be using for the next 3 years and it will be 100% utilized. I want to buy 3 year “all up-front” RI directly with AWS for maximum savings. Is there any underlying risk in this scenario?

Even though you may achieve 100% utilization, there is an intrinsic value risk of RI depreciation over time. On average, AWS will lower on-demand pricing of EC2 instances every 16 months. When you commit yourself with AWS RI, you will receive a “fixed” reserved rate of RI that will remain flat for the next 3 years. While the “on-demand” rate will decrease over a 3 year period, your fixed “reserved” rate will remain the same and you may end up in a scenario where in 2nd or 3rd year of your commitment, your reserved (fixed) rate becomes higher than “on-demand” rate, causing a loss instead of savings.

08

Okay, I am interested, how do I get Ingram Micro to perform an analysis of my AWS account?

Ingram Micro adheres to AWS best practices and security. We will provide additional instructions to the EndUser to create 2 read-only roles within their AWS account (on the master payer level only). Roles will allow Ingram Micro access historical billing information and current RI fleet as captured on AWS account CUR. Analysis will be performed in 48-72 hours and we will provide the report showing your current cost versus hypothetical cost with RIs applied. Upon our analysis, if you wish not to participate in the program, roles should be deleted, and Ingram Micro will no longer have access to your account.

09

What is the Ingram Micro RI management fee?

Ingram Micro takes a Tiered Discount Approach, and the fee can range from **5-35%** of total savings achieved within the account. The more you spend, the more you save.

For more detail on pricing tiers, see your Ingram Micro Cloud rep.

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I have enjoyed the RI monthly savings with Ingram Micro's Managed program; however, my organization would like to take over management of RIs that were purchased by Ingram Micro. What are the next steps?

In this scenario, if you wish to keep all existing RIs that Ingram Micro has purchased within your account, you will simply need to pay the true face value (up-front cost) of existing RIs to Ingram Micro. Our agreement would be terminated immediately and you would be solely responsible for future management of AWS RIs within your account.

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My organization has decided to move and migrate all existing AWS workloads onto another cloud provider (GCP, Azure, etc.). What are the next steps?

In this scenario we would ask you to provide us with 60 days notice of your planned action for migration, and Ingram Micro would transfer your RIs into another Ingram Micro managed account, or we would sell the RIs on AWS Marketplace. There would be no penalties, nor financial exposure to you. Any loss incurred in this motion would be sustained solely by Ingram Micro.

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Due to current economic uncertainty what happens if I need to close my business and AWS account all together, and I can't afford to provide 60 days cancellation notification to Ingram Micro?

We understand the current economic uncertainty and we are here to support. In the event of this scenario, we would ask you to provide us with immediate notification of such a decision, and we would work to transfer or sell the RIs out of your account immediately at no financial downside to you.

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I already have a Savings Plan with AWS, can I still participate in Ingram Micro RI managed program?

Yes, through our analysis we will purchase specific RIs that will complement your existing Savings Plan so you can benefit from both.

