

# Introducing Savings Plans for AWS Compute

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# Agenda

- ✓ Evolution of EC2 pricing models
- ✓ Introducing Savings Plans
- ✓ Types of Savings Plans
- ✓ Working with Savings Plans
- ✓ Demo

# Evolution of Amazon EC2 pricing models

# At first there was Amazon EC2 On-Demand



Short-term, spiky and/or  
unpredictable



Develop and test



Low cost and flexible

# Then we added Amazon EC2 Reserved Instances (RI) Pricing



Savings up to  
72% off the  
On-Demand price

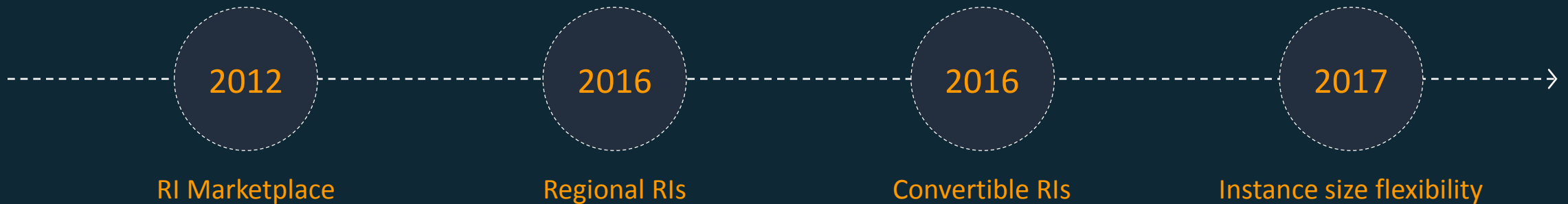


1- and 3-year terms



Steady state usage

**Customers saved billions and over time**  
we rolled out several innovations



# More compute options have led to the need for greater flexibility for customers...



Need an **easier way to manage commitments at scale** across different compute services and 290+ instance options across AWS 22 Regions



Need a commitment option that **supports changes** to compute usage **without management overhead**

# Introducing Savings Plans

# Savings Plans



## What is it?

A new flexible pricing model which helps you save up to 72% on EC2, Fargate and Lambda usage. Customers simply commit to a consistent amount of usage (e.g. \$10/hour) over 1 or 3 years, and in exchange they will receive a lower price for that usage.



## How it works?

Every type of compute usage has an On Demand rate and a Savings Plans price. If a customer commits to \$10/hour of compute usage, then they will get Savings Plans prices on all usage up to \$10. Any usage beyond the commitment will be charged at regular On-Demand rates.



# Why Savings Plans?

Flexible purchase option that offers savings of up to 72% on Amazon EC2, AWS Fargate, and AWS Lambda usage



## Easy to use

Receive lower rates automatically in exchange for a monetary commitment



## Significant Savings

Select from two types of savings plans to access prices of up to 66% off on Compute Savings Plans and 72% off on EC2 Instance Plans



## Flexible

Make a single commitment that applies across multiple AWS Compute Services, even as your requirements change

**Same great prices as EC2 RIs with more flexibility**

# Types of Savings Plans



## Compute Savings Plans

Offer the greatest flexibility, up to 66% off (same prices as Convertible RIs)

### FLEXIBLE ACROSS

- ✓ Instance family: E.g. Move from C5 to M5
- ✓ Region: E.g. change from EU (Ireland) to EU (London)
- ✓ OS: E.g. Windows to Linux
- ✓ Tenancy: E.g. switch Dedicated tenancy to Default tenancy
- ✓ Compute options: E.g. move from EC2 to Fargate



## EC2 Instance Savings Plans

Provide the lowest prices, up to 72% off (same as Standard RIs) on the selected instance family (e.g. C5 or M5), in a specific AWS region

### FLEXIBLE ACROSS

- ✓ Size: E.g. move from m5.xl to m5.4xl
- ✓ OS: E.g. change from m5.xl Windows to m5.xl Linux
- ✓ Tenancy: E.g. modify m5.xl Dedicated to m5.xl Default tenancy

# Payment Options & Term Length



## Payment Options

Savings Plans are offered in the same payment options as RIs

- ✓ No Upfront
- ✓ Partial Upfront
- ✓ All Upfront



## Term Length

Savings Plans are available in the same term length as RIs

- ✓ 1 Year
- ✓ 3 Year

# Comparing RIs and Savings Plans

Savings plans offer all the benefits of RI as well as improved flexibility and reduced management

	Compute Savings Plans	EC2 Instance Savings Plans	Convertible RIs*	Standard RIs
Savings over On Demand	Up to 66%	Up to 72%	Up to 66%	Up to 72%
Low price in exchange for monetary commitment	✓	✓	✗	✗
Pricing automatically applies to any instance families	✓	✗	✗	✗
Pricing automatically applies to any instance size	✓	✓	✗**	✗**
Pricing automatically applies to any Tenancy, or OS	✓	✓	✗	✗
Automatically apply to Fargate Usage	✓	✗	✗	✗
Pricing automatically applies to across any AWS Region	✓	✗	✗	✗
1- and 3-year Term length options	✓	✓	✓	✓

\* Convertible RIs can be changed across instance families, sizes, OS and tenancy they require customers to manually perform exchanges.

\*\* Regional Convertible RIs and Regional Standard RIs provide instance flexibility

# Working with Savings Plans

# Getting started with Savings Plans

AWS Cost Explorer will guide you through the purchasing process



Review your Savings Plans recommendations in the **AWS Cost Explorer**



Customize recommendations based on your needs (Type of Savings Plan, Payment Option, Term Length)



Review hourly commitment (e.g. \$10/hr) and add to cart

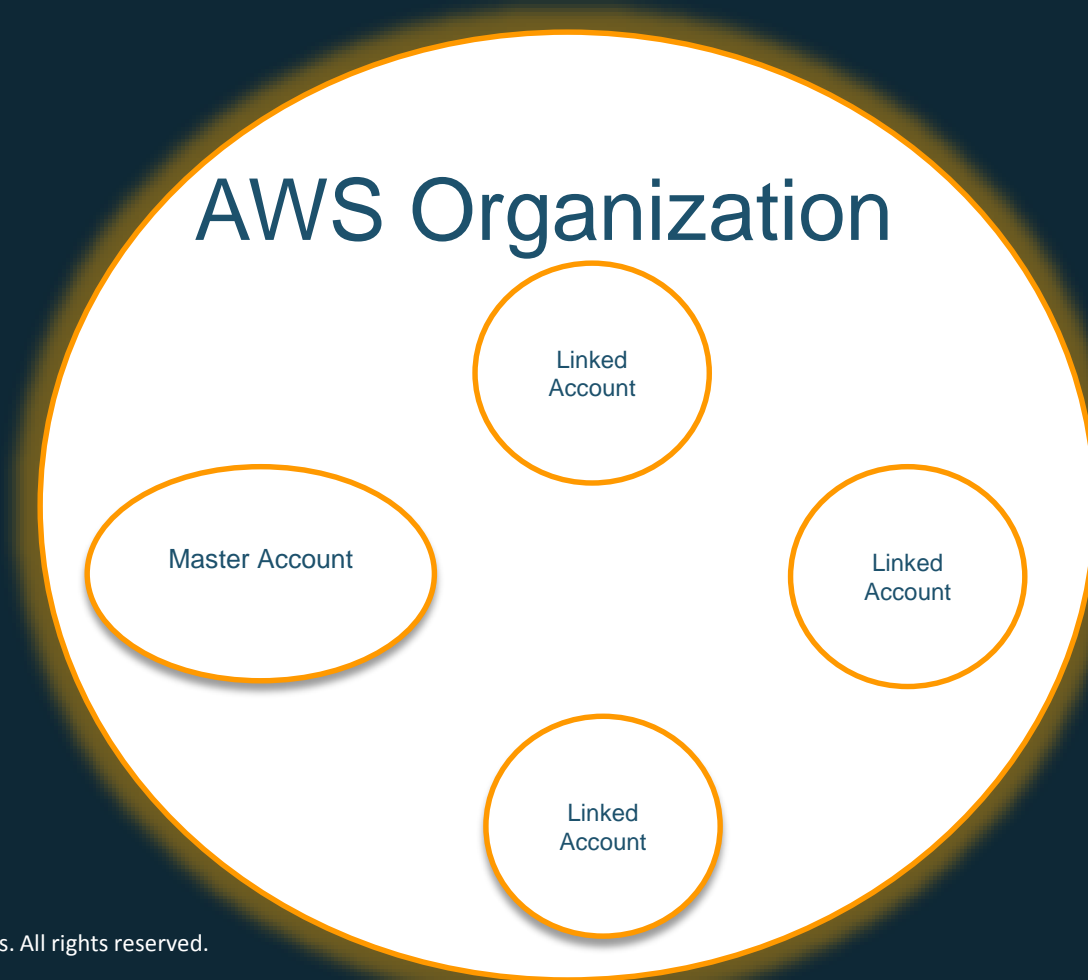


Eligible Amazon EC2 and AWS Fargate usage is charged at a low Savings Plans rate up to your commitment level

Just like RIs, you can purchase Savings Plans via the RI Operations Team as well

# Purchasing Savings Plans in your AWS Organization

Savings Plans can be purchased at Payer account or Linked account



# How Savings Plans recommendations work



## Establish baseline

Based on your On-Demand and Savings Plans covered usage over the last 7, 30, or 60 days, and the Savings Plans currently owned by your account



## Re-compute

Add an incremental Savings Plans commitment and re-compute what your bill would have been on an hour-by-hour basis over this time period



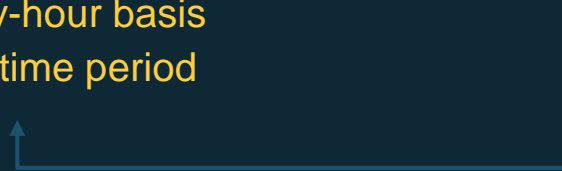
## Compare

If your bill would be lower with this additional commitment, we repeat the process



## Recommend

Provide the recommendation for the given configuration that will result in the lowest bill based on past usage and recommendations step size

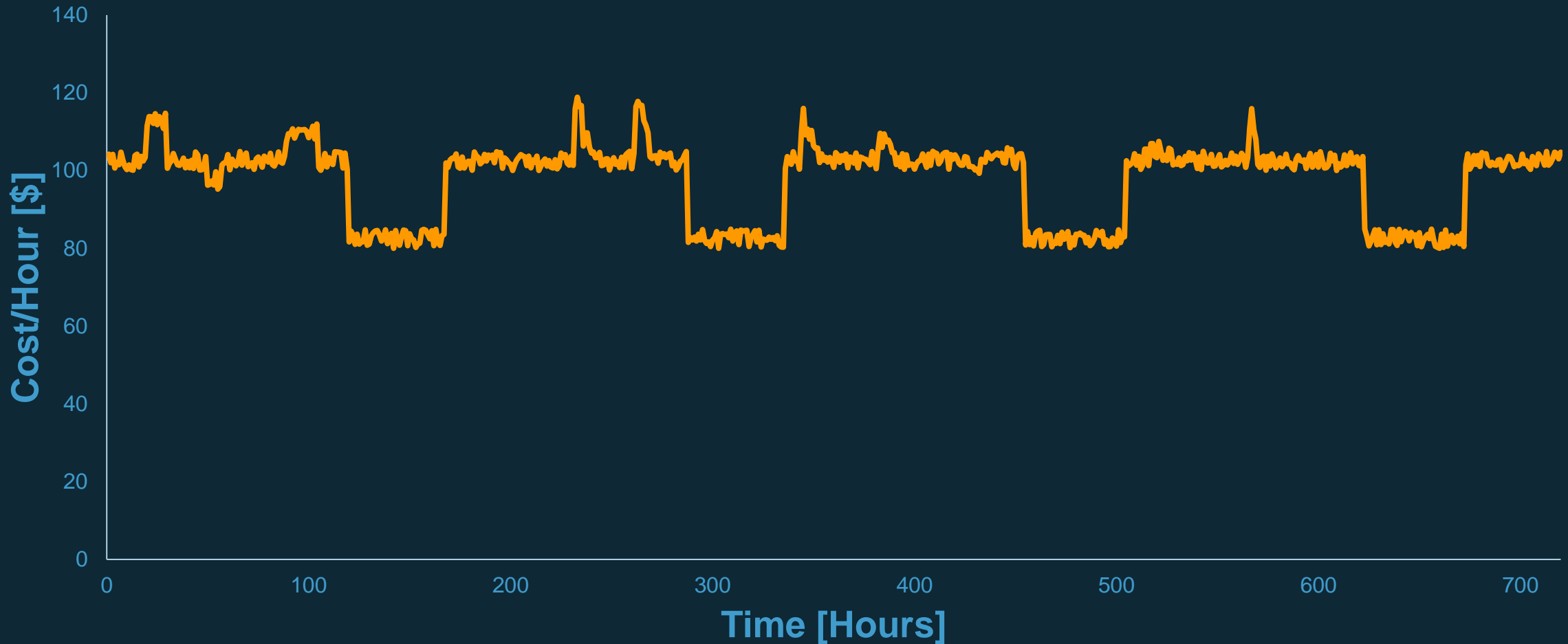


AWS Savings Plans recommendations take into account your existing RI as well as Savings Plans account affinity and application order



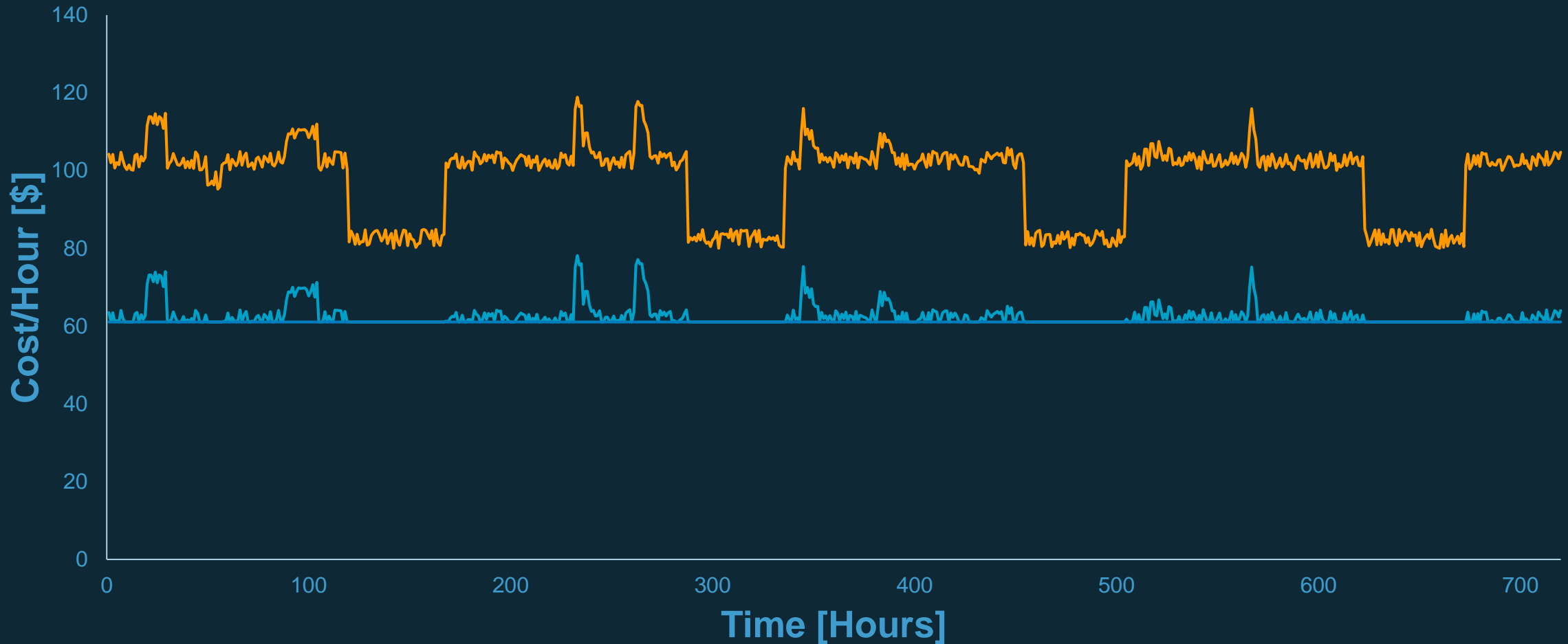
# How Savings Plans recommendations work?

Last 30 days of hourly usage



# How Savings Plans recommendations work?

Last 30 days of hourly usage



— Current On Demand Costs

— Expected Hourly Costs

— Recommended Hourly Commitment

# How are discount products applied to your usage?



Savings Plans apply from highest discount % to lowest discount %

# Savings Plans in the bill

▶ Relational Database Service		\$420.65
▶ Route 53		\$0.50
▶ Savings Plans for AWS Compute usage		\$73,564.86
▼ Any		<b>\$71,832.36</b>
Compute Savings Plans		\$71,832.36
1 year All Upfront Compute Savings Plan	495.000 Hrs	\$0.00
3 year All Upfront Compute Savings Plan	495.000 Hrs	\$0.00
3 year All Upfront Compute Savings Plan	495.000 Hrs	\$0.00
1 year All Upfront Compute Savings Plan	495.000 Hrs	\$0.00
3 year All Upfront Compute Savings Plan	358.000 Hrs	\$0.00
USD 63072.00000000 one-time fee for 3 year All Upfront Compute Savings Plan ID: 7321ca57-9493-4a5f-babf-3dc93aa2a512	One Time Charge	\$63,072.00
1 year No Upfront Compute Savings Plan	357.000 Hrs	\$0.36
1 year All Upfront Compute Savings Plan	356.000 Hrs	\$0.00
USD 8760.00000000 one-time fee for 1 year All Upfront Compute Savings Plan ID: dd0e6c40-12f0-4d10-9788-b3d1ca5e103c	One Time Charge	\$8,760.00
▼ US East (N. Virginia)		<b>\$1,732.50</b>
EC2 Instance Savings Plans		\$1,732.50
1 year No Upfront i3 EC2 Instance Savings Plan in us-east-1	495.000 Hrs	\$1,485.00
1 year Partial Upfront g3 EC2 Instance Savings Plan in us-east-1	495.000 Hrs	\$247.50

# Savings Plans in the Cost and Usage report (CUR)

## SavingsPlanUpfrontFee

*The **SavingsPlanUpfrontFee** line item is added to your bill when you purchase an All Upfront or Partial Upfront Savings Plan.*

lineltem/LineltemType	lineltem/ProductCode	lineltem/UsageStartDate	lineltem/LineltemDescription	lineltem/UnblendedCost	savingsPlan/SavingsPlanARN
SavingsPlanUpfrontFee	ComputeSavingsPlans	2019-10-10T00:03:54Z	Sign up charge for subscription: 2843843037, planId: 70352035	100	arn:aws:savingsplans::5555555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a
SavingsPlanUpfrontFee	ComputeSavingsPlans	2019-10-10T00:12:15Z	Sign up charge for subscription: 28438555123, planId: 12355516	50	arn:aws:savingsplans::5555555555555555:savingsplan/67b0ef20-bc7d-46c0-8a55-9c083bca1b4c

# Savings Plans in the CUR

## SavingsPlanRecurringFee

The **SavingsPlanRecurringFee** line item describes the recurring hourly charges that correspond to No Upfront or Partial Upfront Savings Plans.

lineItem/Linetype	lineItem/ProductCode	lineItem/UsageType	lineItem/Unblended Cost	savingsPlan/SavingsPlanARN	savingsPlan/PaymentOption	savingsPlan/OfferingType	savingsPlan/PurchaseTerm
SavingsPlanRecurring Fee	Compute Savings Plans	ComputeSP:1yrPartialUpfront	0.05	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a	Partial Upfront	ComputeSavingsPlans	1yr
SavingsPlanRecurring Fee	Compute Savings Plans	USE2-EC2SP:t3.1yrPartialUpfront	0.01	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a	Partial Upfront	EC2InstanceSavingsPlans	1yr

# Savings Plans in the CUR

## SavingsPlansCoveredUsage

*The **SavingsPlanCoveredUsage** line item describes the usage that received Savings Plans benefits*

## SavingsPlansNegation

***SavingsPlanNegation** line items offset the unblended cost of **SavingsPlanCoveredUsage***

# Savings Plans in the CUR

lineltem/LineltemType	lineltem/UsageType	lineltem/UsageAmount	lineltem/UnblendedCost	SavingsPlan/SavingsPlanARN	savingsPlan/SavingsPlanRate	savingsPlan/SavingsPlanEffectiveCost
SavingsPlanCoveredUsage	BoxUsage:t3.nano	1	0.0052	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a	0.0026	0.0026
SavingsPlanCoveredUsage	BoxUsage:t3.nano	1	0.0052	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a	0.0026	0.0026
SavingsPlanCoveredUsage	BoxUsage:t3.nano	0.5	0.0026	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a	0.0026	0.0013
SavingsPlanNegation	BoxUsage:t3.nano	2.5	-0.013	arn:aws:savingsplans::555555555555:savingsplan/bc1d08fd-d97c-44e2-bcfa-f8bb5312e48a		



# RIs and Savings Plans



You can continue purchasing EC2 RIs to **maintain compatibility** with your existing purchasing and cost management processes



Your **existing RIs** will continue to work as-is **alongside Savings Plans**



You can **reserve** EC2 capacity **with On-Demand Capacity Reservations**. If you have active Savings Plans, your ODCR will be charged at Savings Plans Rates

# Demo

# Recap: Savings Plans

- **New pricing model** that provide exact same savings as EC2 RIs in exchange for a monetary commitment instead of making commitments to specific instance configurations
- New way for customers to **commit to long term** (1-or 3-years) spend on EC2 and Fargate
- Two types of Savings Plans
  - Compute Savings Plans:** Applicable across EC2, Fargate and Lambda; Region agnostic; Same savings as Convertible RIs
  - EC2 Instance Savings Plans:** Applicable on a selected EC2 Instance family (e.g. M5) in a selected region (US East)
- Available in all **AWS commercial Regions (except Beijing and Ningxia)**;  
Available in AWS GovCloud (US) Regions
- **Simplified purchasing experience** via AWS Cost Explorer; Cost Explorer will provide recommendations based on historical usage for the last 7, 30, or 60 days

