**AWS EC2 Pricing Plans**

Amazon EC2 provides flexible pricing options to fit different use cases and budgets. Below are the key EC2 pricing models:

### **1. On-Demand Instances (Pay-as-You-Go)**

* **Pricing:** Pay per second (Linux) or per hour (Windows).
* **Best for:** Short-term workloads, testing, development.
* **Pros:** No upfront cost, flexible.
* **Cons:** More expensive than other pricing models.

**Example Pricing (us-east-1, t3.medium)**

* **Linux**: $0.0416 per hour
* **Windows**: $0.064 per hour

### **2. Reserved Instances (RI)**

* **Pricing:** Up to **72% discount** compared to On-Demand.
* **Commitment:** 1-year or 3-year term.
* **Payment Options:**
  + **All Upfront:** Highest discount.
  + **Partial Upfront:** Medium discount.
  + **No Upfront:** Least discount, but still cheaper than On-Demand.
* **Best for:** Predictable workloads, long-term applications.

**Example Pricing (t3.medium, 1-year Reserved, No Upfront)**

* **Linux:** ~$0.028 per hour
* **Windows:** ~$0.045 per hour

### **3. Spot Instances (Up to 90% Discount)**

* **Pricing:** Significantly discounted but instances may be terminated at any time if AWS needs capacity.
* **Best for:** Batch processing, CI/CD, fault-tolerant applications.
* **Cons:** Instances can be interrupted with little notice.

**Example Pricing (t3.medium, Spot, us-east-1)**

* **Linux:** ~$0.012 per hour
* **Windows:** ~$0.02 per hour

### **4. Savings Plans (Flexible Reserved Pricing)**

* **Pricing:** Up to **66% discount** compared to On-Demand.
* **Commitment:** 1-year or 3-year term, but more flexible than Reserved Instances.
* **Types:**
  + **Compute Savings Plan:** Works for any EC2 instance, even if you change instance families or regions.
  + **EC2 Instance Savings Plan:** Works only for a specific instance family in a specific region.

**Example Pricing:**

* **t3.medium (1-year Savings Plan, No Upfront)** → **$0.03 per hour**

### **5. Dedicated Hosts & Dedicated Instances**

* **Dedicated Host:** Physical server reserved just for you (meets compliance needs).
* **Dedicated Instance:** Virtual instance on a dedicated server.
* **Best for:** Regulatory requirements, licensing restrictions (e.g., Windows Server, Oracle DB).

**Example Pricing:**

* **m5.large Dedicated Host (us-east-1)** → **$2.688 per hour**

### **6. EC2 Free Tier (For Beginners)**

* **750 hours/month** of t2.micro or t3.micro (for 12 months).
* **Includes:** 30GB EBS storage, 1 million Lambda requests, etc.

### **Which EC2 Pricing Plan Should You Choose?**

| **Use Case** | **Best Pricing Option** |
| --- | --- |
| Short-term workloads | **On-Demand** |
| Long-term workloads (1-3 years) | **Reserved Instances or Savings Plan** |
| Cost-sensitive, fault-tolerant workloads | **Spot Instances** |
| Compliance or licensing needs | **Dedicated Hosts/Instances** |

By understanding these pricing models, you can choose the best option to optimize costs for your workloads.

For more details, visit the [AWS EC2 Pricing Page](https://aws.amazon.com/ec2/pricing/).