



## Few Misc questions on EC2 Security and Monitoring

- **How can you protect an EC2 instance from accidental termination?**
  - A: Enable termination protection when launching or by modifying instance settings.
- **How can you enable detailed monitoring for EC2 instances?**
  - A: During launch or later by selecting the instance → Actions → Monitor and troubleshoot → Enable Detailed Monitoring (charges apply).
- **What's the difference between Elastic IP and a public IP?**
  - A:
    - Elastic IP: **Static** public IP, persists across stops/starts.
    - Public IP: **Dynamic**, changes when the instance stops and starts.

### What is IMDS ?

IMDS is an HTTP endpoint (`http://169.254.169.254`) accessible from within the EC2 instance that allows the instance (or any app on it) to query for:

- Instance ID, type, region, AMI ID
- IAM role credentials (temporary)
- Security group info, networking
- Custom user data (e.g., startup scripts)

**IMDSv2 (Instance Metadata Service Version 2)** is a security enhancement to the **Instance Metadata Service (IMDS)** provided by AWS for EC2 instances

**IMDSv2 introduces session-based access:**

1. The instance must first make a **PUT request to get a token**.

2. Then use that token in a **GET request** to fetch metadata.

### Old

```
# Fetch Instance ID directly (IMDSv1)
curl http://169.254.169.254/latest/meta-data/instance-id
```

### New

#### # Step 1: Get a session token

```
TOKEN=`curl -X PUT "http://169.254.169.254/latest/api/token" \
-H "X-aws-ec2-metadata-token-ttl-seconds: 21600"``
```

#### # Step 2: Use the token to query metadata

```
curl -H "X-aws-ec2-metadata-token: $TOKEN" \
http://169.254.169.254/latest/meta-data/instance-id
```

### What does IMDS stand for in AWS EC2 context?

- A. Instance Management and Deployment Service
- B. Internal Metadata Service
- C. Instance Metadata Service
- D. Integrated Machine Data Source

**Answer:** C. Instance Metadata Service

### What is the main use of AWS EC2 Instance Metadata Service (IMDS)?

- A. Storing application logs
- B. Providing instance-specific data to applications
- C. Managing IAM user accounts
- D. Monitoring database performance

**Answer:** B. Providing instance-specific data to applications

### What is the benefit of using IMDSv2 over IMDSv1?

- A. It allows metadata to be accessed publicly.
- B. It increases bandwidth for the instance.
- C. It uses session-based tokens to improve security.
- D. It removes the need for IAM roles.

**Answer:** C. It uses session-based tokens to improve security.