

IAM, RBAC & Permission Models

Clean Interview Explanation (Your Exact Wording)

Core Definitions

- IAM needs a logic to decide what a user can do.
- RBAC is that logic.
- A role is a collection of permissions.
- IAM is a framework that defines who an identity is, how they authenticate, and what resources they are allowed to access.
- RBAC is an authorization model that groups permissions into roles, while IAM authenticates identities and enforces those role-based permissions.
- IAM allows access based on the RBAC roles attached to an identity.
- A permission model is the logic or rule system that defines how permissions are granted, evaluated, and enforced for identities accessing resources.
- RBAC is a permission model.

Why Permission Models Exist

Without a model:

- Permissions would be random
- Hard to scale
- Easy to misconfigure
- Impossible to audit

So systems use structured models to make access predictable, secure, and manageable.

Interview-Grade Answer

IAM is the overall framework for identity and access management, while RBAC is one authorization model used inside IAM to assign permissions efficiently.