

# Difference Between Primitive, Predefined, and Custom Roles

## 1. Primitive Roles

These are the most basic and broad roles. There are only three of them:

- **Viewer:** Can only view resources
- **Editor:** Can view and modify resources
- **Owner:** Has full control, including managing permissions

They are easy to use but too general for most real world setups, especially in production.

## 2. Predefined Roles

These roles are more specific and are created by Google. They are meant for particular services or tasks.

For example:

- **Compute Viewer:** Can view Compute Engine resources
- **Storage Object Admin:** Full control over Cloud Storage objects

These are better than primitive roles because they offer more control over what a user or service account can do.

## 3. Custom Roles

Custom roles are roles that we create ourselves. We can pick exactly which permissions to include based on the task.

## Summary

Role Type	Who Defines It	Level of Control	Best Used For
Primitive	Google	Very broad	Simple setups, not recommended for production
Predefined	Google	Task-specific	Common use cases like storage, compute, logging
Custom	You	Very specific	Fine-grained access control for special needs