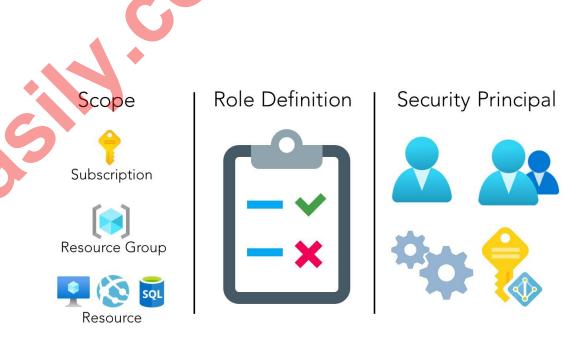
Azure Role-Based Access Control

Component of Azure's identity and access management system

✓ Defines who can do what with

Azure resources



Main Components of RBAC

Security Principal:

✓ Represents a user, group, service principal, or managed identity that is requesting access to Azure resources



Main Components of RBAC

Role Definition:

- ✓ Collection of permissions
- ✓ Built-in roles, such as Owner, Contributor, and
 - Reader. Custom roles can also be created

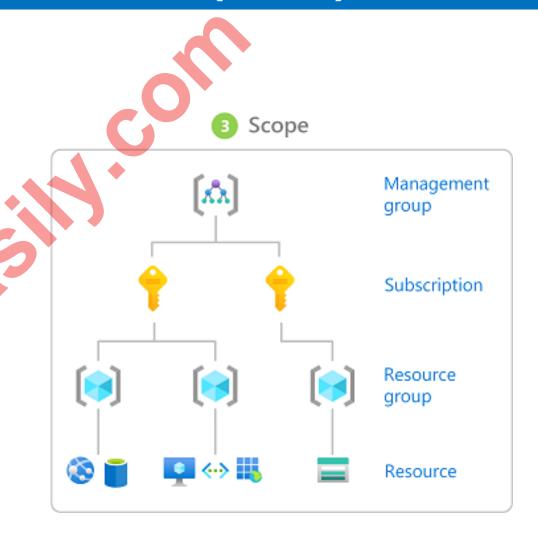




Main Components of RBAC

Scope:

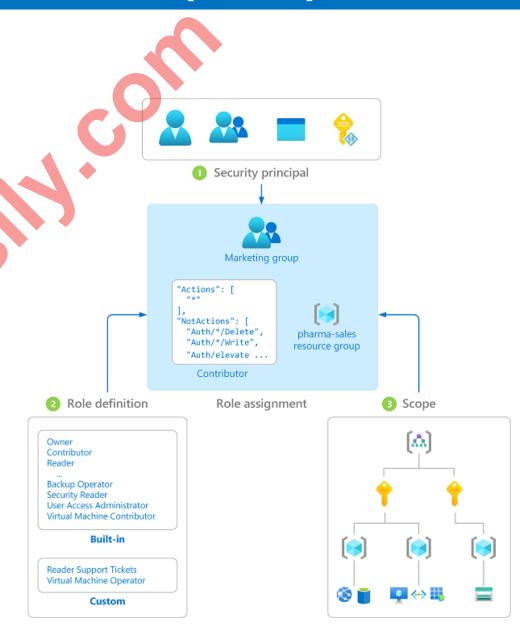
- ✓ Set of resources that the access applies to
- Specify a scope at four levels: management group, subscription, resource group, or resource.
- ✓ Scopes are structured in a parent-child relationship.



Main Components of RBAC

Role assignments:

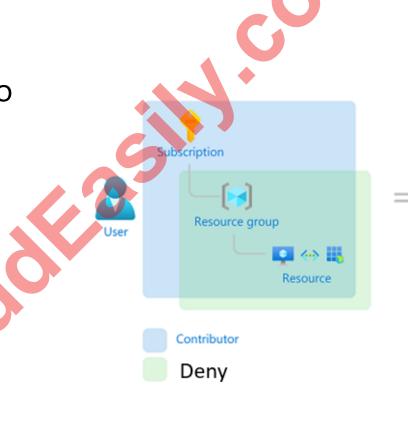
Process of attaching a role definition to a user, group, service principal, or managed identity at a particular scope for the purpose of granting access.

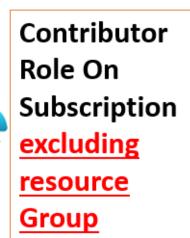


In Case Of Overlapping Role Assignments

✓ Azure RBAC is an additive model, so your effective permissions are ones that has higher scope and higher permission

Deny assignments take precedence over role assignments





Azure Built-In Roles

- ✓ **Owner:** Full access to all resources, including the ability to delegate access.
- ✓ **Contributor:** Full access to all resources, but without the ability to delegate access.
- ✓ Reader: View-only access to resources.
- ✓ User Access Administrator: Manage user access to resources.
- ✓ Security Reader: View security related configurations.
- ✓ Network Contributor: Manage network-related configurations.

Common Use Cases

- Enabling developers to manage resources within their resource groups.
- ✓ Allowing a security team to audit resource configurations.
- ✓ Providing read-only access to auditors.
- ✓ Assigning specific roles for managing virtual machines, databases, or storage accounts.
- ✓ Where only authorized users should access and manage Azure resources.

