

Adding Multi-tenant Role-based Security



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Binary Protection Discussed Previously

Authenticated

(Logged in)

Not
authenticated

(Not logged in)



Need More Granular Access



Grant permissions

Look at payroll data

Just logged in







User table



Role table



User table



**User role
table**



Role table



User table

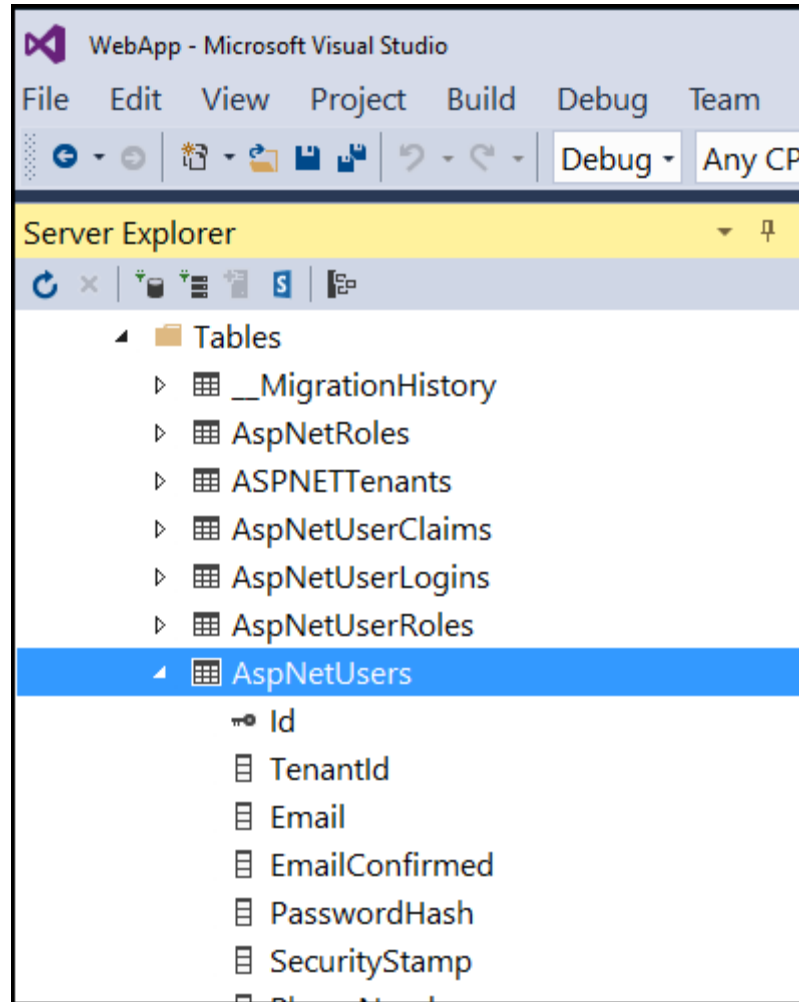


User claim table



Performance Considerations of Roles and Claims





Coding Assigning Roles to Users



Create admin role and others

Create an admin user and assign to admin role

Create new user accounts employee and manager



Creating a Role Controller and Securing It



Create the controller

Create a method for assigning roles to users

Creating a new Action method and securing it



Assigning Security Claims to Users



Roles to users



Claims to users

Assigning Security Claims to Users



.NET 4.5.2

MVC 5

Identity 2



Assigning Security Claims to Users



Create a Custom Attribute to Protect Controllers by Claim



Performance Considerations of Roles and Claims

Protection with
Roles

```
[Authorize  
  (Roles = "admin,manager")]
```

Protection with
Claims

```
[AuthorizeByClaimAttributes  
  (ClaimAttributes = "admin,manager")]
```



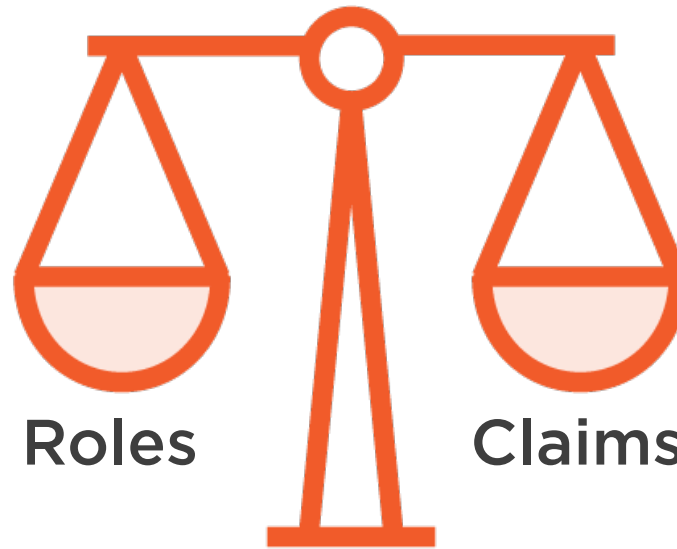
Performance Considerations of Roles and Claims



Permission changes happen immediately

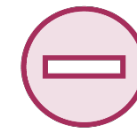


Every request generates SQL request



Roles

Claims



Changing permissions is hard



Permission built into Request
So highly performant



Summary



Role based security

Claims based security

Roles vs claims comparison

