

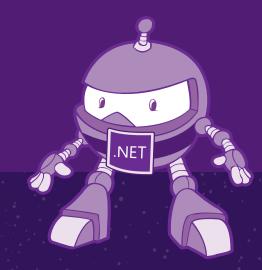


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Entity Framework 3.0: Multitenancy with multiple databases

Claudia Montalvo

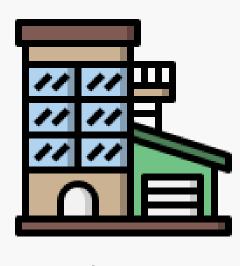
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Single Tenant vs Multi Tenant

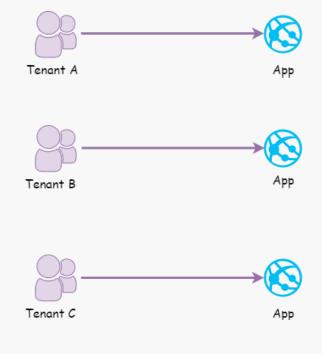


Vs



Multi Tenant

What is Single tenant?



- One app instance to each customer
- No sharing
- Complete isolation

Benefits?

- Improved security
- Reliable Operations
- Easy Restoration and Backup
- Individual Upgrades
- Self-hosted Migration
- Flexibility

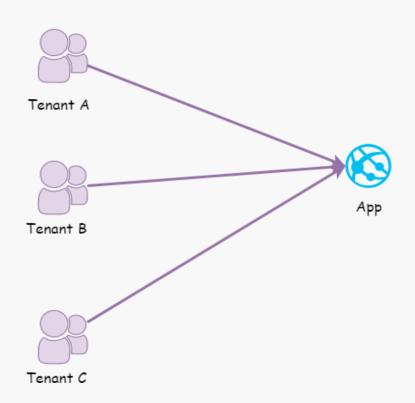


Drawbacks

- Management
- Setup
- Mantainance
- Resources



What is multitenant?



- One app instance to serve multiple customers
- Tenant's data remains invisible to other tenants
- Share resources
- Single deploy

Benefits?

- Lower cost
- Fewer Maintenance Costs
- Efficient Resources
- Shared Data Centers
- Larger Computing Capacity
- Services Tasks



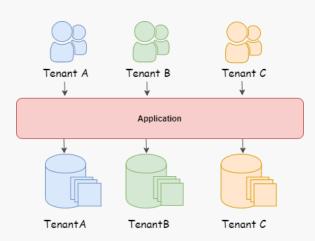
Drawbacks

- Security
- Backup and Restoration
- Limited Management
- Concurrent Issues
- Patching Issues

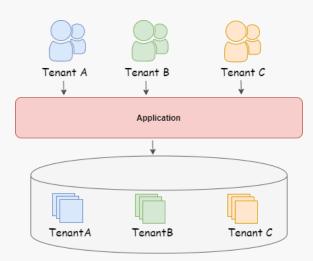


Database Strategies

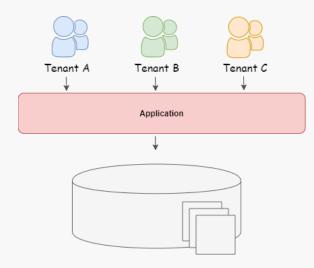
Separate Database, Separate Schema



Shared Database, Separate Schema



Shared Database, Shared Schema



Database Strategies

Factors	Separate Database, Separate Schema	Shared Database, Separate Schema	Shared Database, Shared Schema
Security	High	Medium	Low
Flexibility	High	Medium	Low
Cost	High	Medium	Low
Maintenance	High	Medium	Low

Who is applying it?













Finbuckle

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Configuration and Strategies

```
public void ConfigureServices(IServiceCollection services)
{
    ...
    services.AddMultiTenant().WithStrategy(...).WithInMemoryStore(...);
    ...
}
```

Static
BasePath
Strategy
Delegate
FallBack Strategy
Remote Authentication

AppSettings.json CustomStore In-Memory Store EFCore Store

Demo



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Gracias!

