

Building End-to-End Multi-Client Service Oriented Applications

Module 07

Services & Engines – Part 2

Securing & Unit Testing the Service Layer



Highlights

- **Standard WCF-based security**
- **User-data Authorization**
- **Unit Testing**

Security

- **Special windows group (role) for the admin functions**
 - Users of desktop app will be members
- **Special windows user for non-admin functions (still secure)**
 - Site will run under this user
- **Admin functions will NOT be accessible to web users**
 - Rent car to customer
 - Accept car return
- **Non-admin functions will NOT be open to outside world**
- **Simple to assign using `PrincipalPermission` attribute**

User-Data Authorization

- Principal permission is NOT enough
- All web site users will have access to all non-admin operations
- One user should NOT be able to see data from another
 - In many cases, a WCF service's reach is extended with Web API
- **Problem**
 - Windows authentication passes caller identity to service
 - Caller identity is IIS user
 - Need actual user (person logged into site) without coupling to web
- **Solution**
 - Receive a user login name in every operation
 - Use SOAP header to avoid adding to operation contracts
 - **IAccountOwnedEntity** will finally be made clear !

Summary

- Used both standard principal/identity security and custom solution for user-data-authorization
 - User name of application user sent through SOAP header
 - **IAccountOwnedEntity** interface finally used
 - Unit test needed to fake credentials in order to execute

End of module