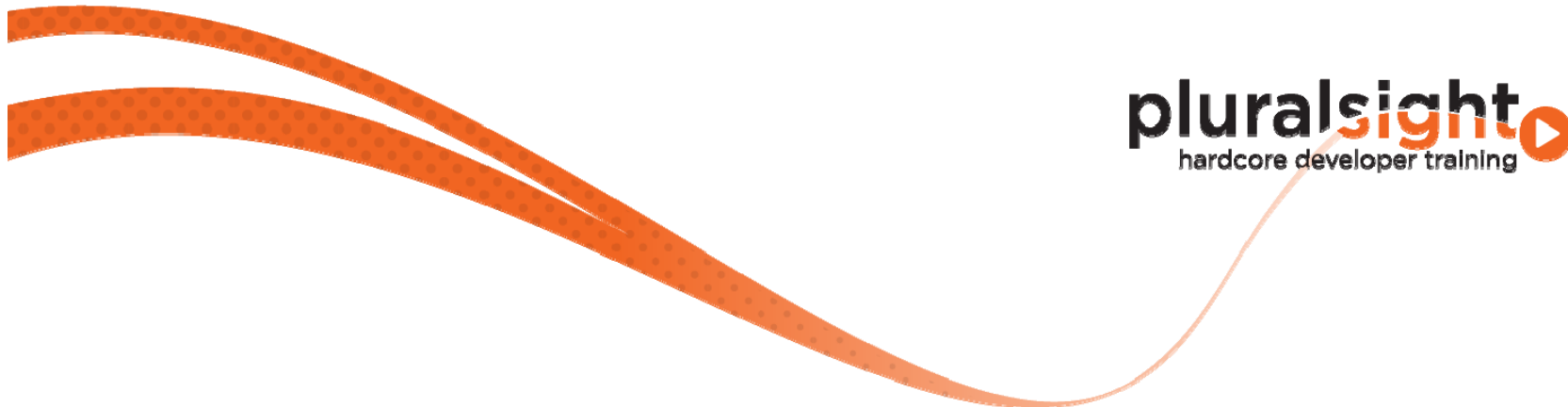


# **Building End-to-End Multi-Client Service Oriented Applications – *Angular Edition***

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**