

Events and Commands

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Outline

- Understanding Routed Events
- Custom Routed Events
- Understanding Routed Commands
- Custom Routed Commands

Understanding Routed Events

- **What are they?**
- **Routing Strategies**
 - Direct
 - Bubbling
 - Tunneling
- **Why use them?**
 - Any UIElement can be a listener
 - Common handlers
 - Visual Tree communication
 - Event Setter and Event Trigger

Custom Routed Events

- Register your event
- Choose your Routing Strategy
- Provide add and remove CLR assessors
- Raise your event
- Yes, you can have custom RoutedEventArgs

Understanding Routed Commands

- **What are they?**
 - ICommand – Execute/CanExecute
- **Execute/CanExecute have no logic**
- **Commands that traverse the element tree**
- **Why use them?**
 - Decouple
 - Reduce repetitive code
 - Logic can control enabled state of control
 - Associate input gestures

Custom Routed Commands

- **Custom RoutedCommand**
 - Define/Instantiate
 - ExecuteRoutedEventHandler
 - CanExecuteRoutedEventHandler
 - CommandBinding
- **ICommandSource - Support MVVM**
 - Command
 - CommandParameter
 - CommandTarget

Summary

- Understanding Routed Events
- Custom Routed Events
- Understanding Routed Commands
- Custom Routed Commands