A Framework for Networked Interactive Surfaces

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A Framework For Networked Interactive Surfaces

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Introduction

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- Software framework
- C/C++ (OpenGL for rendering)
- Easy developing of applications with support for:
  - Multi-touch interaction
  - Networked collaboration

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Overview

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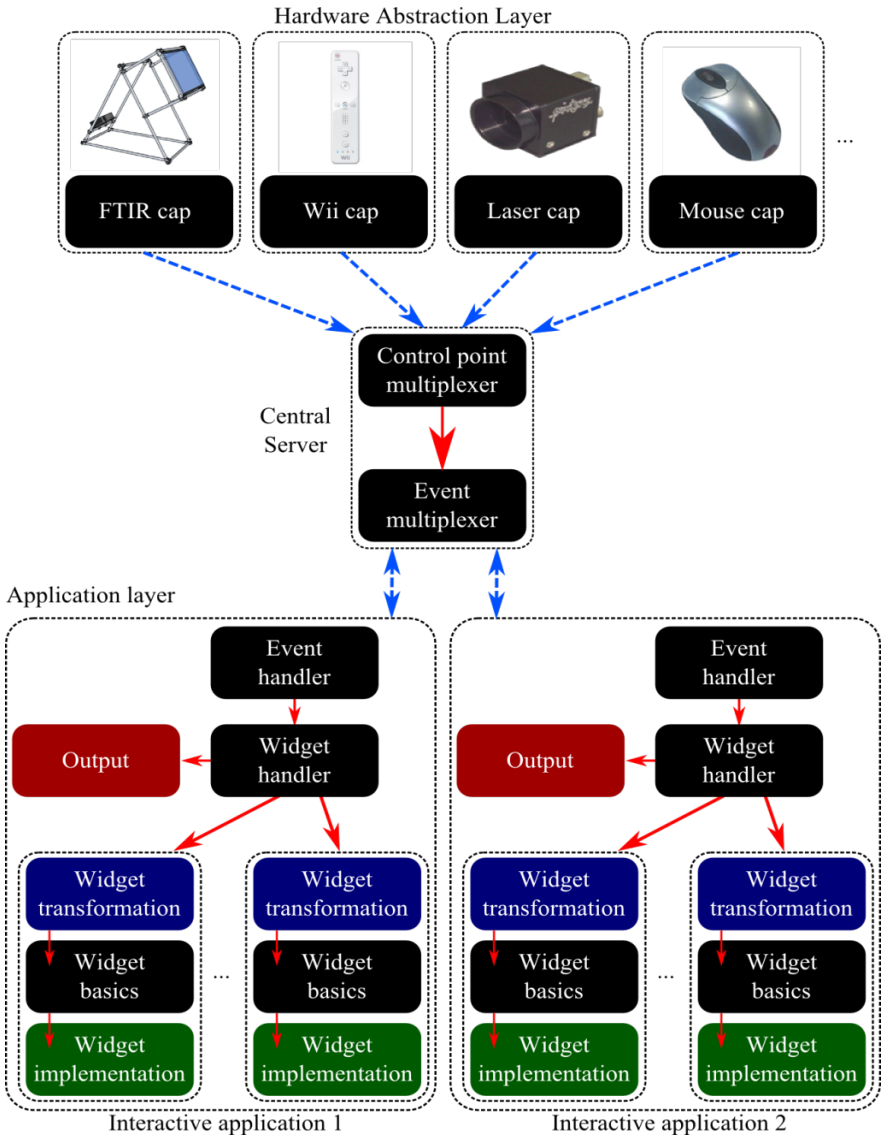
- General System Architecture
- Event Passing Mechanism
- Creating Applications
- Examples

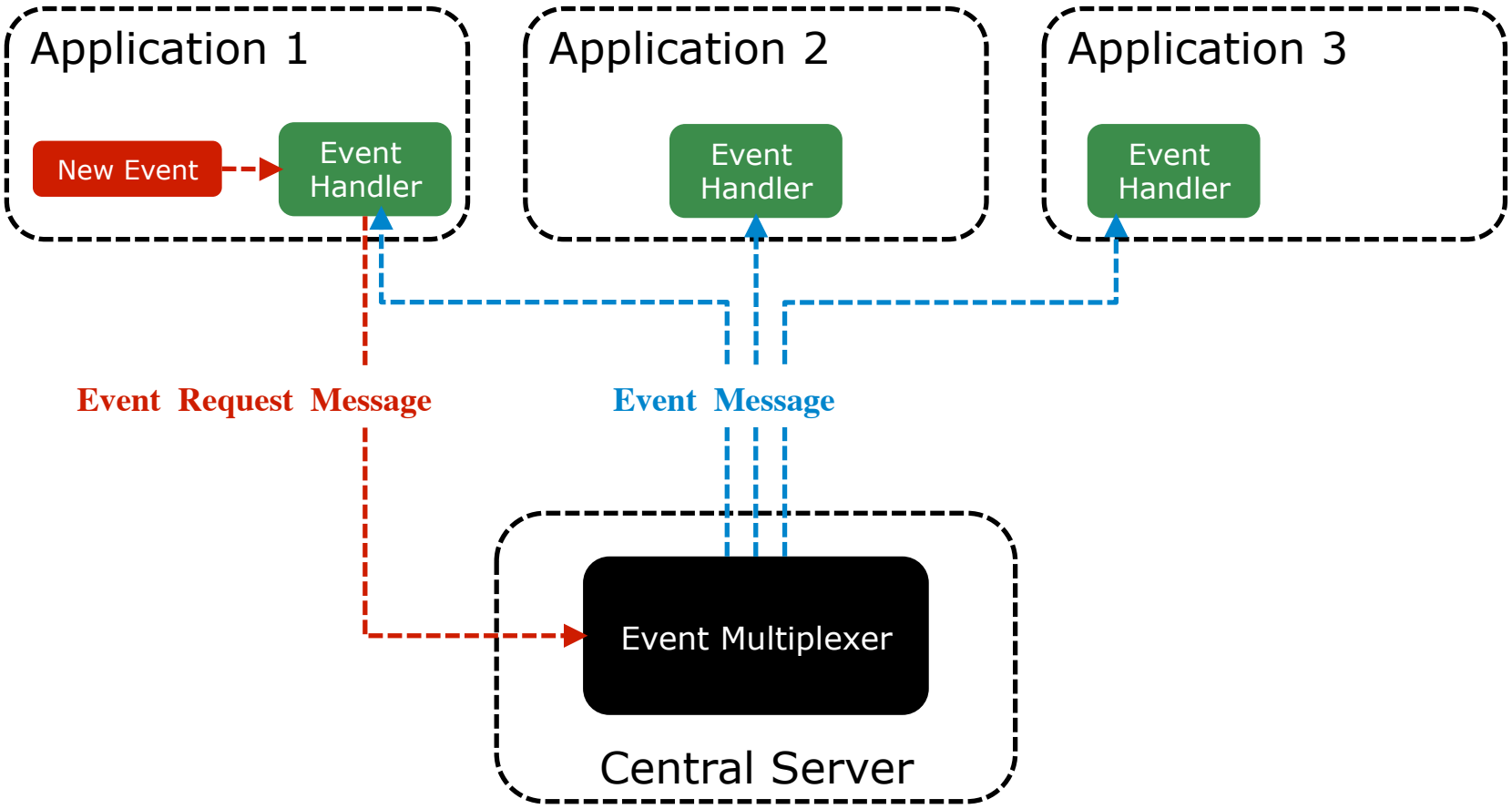
Architecture

- Three Layers:
  - Hardware Abstraction Layer
  - Central Server Layer
  - Application Layer
- Compiled as separate executables
- UDP communication

Architecture



Event Passing



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Event Passing Example

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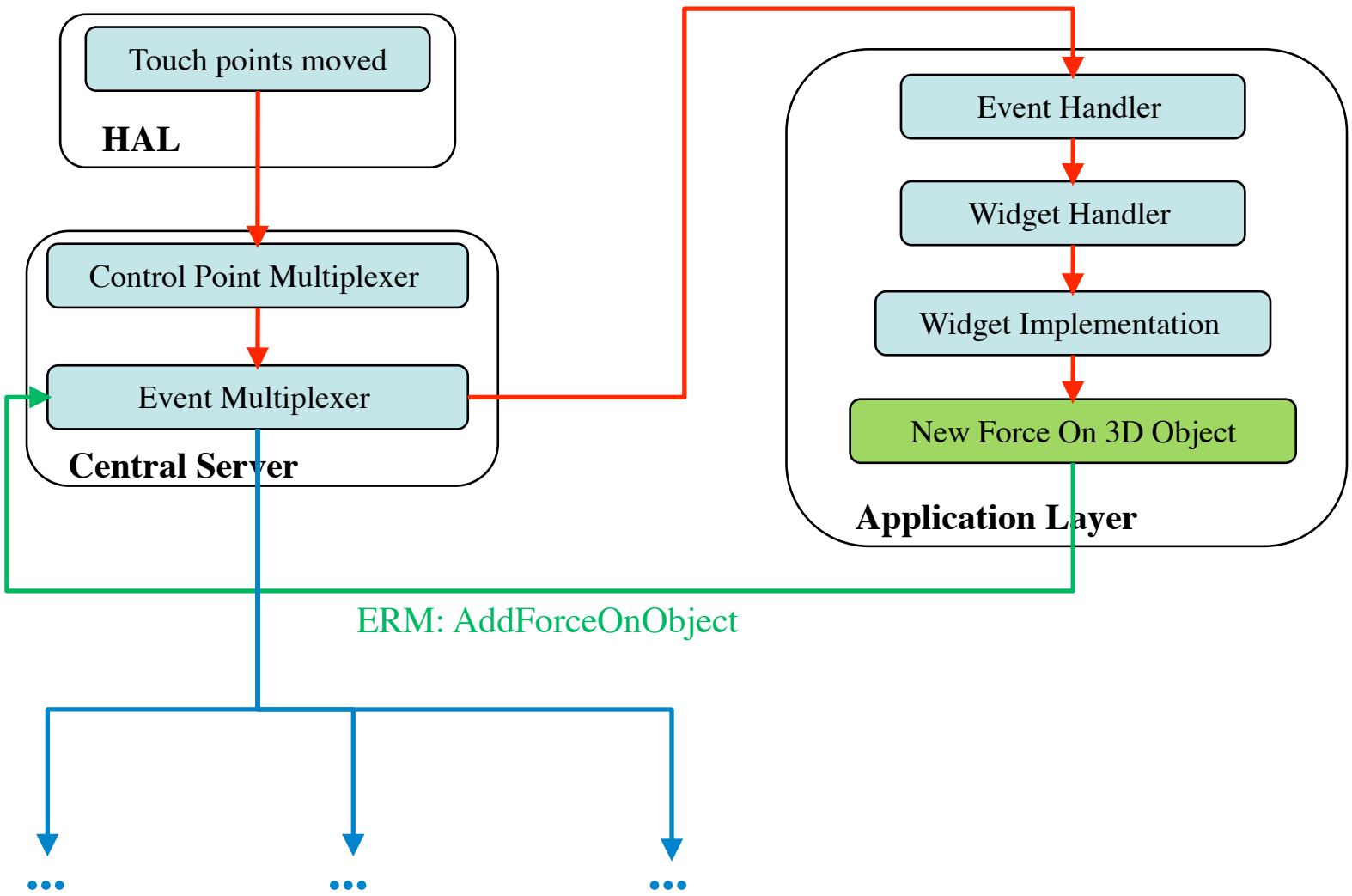
Event Passing Example



Creating Applications

- Inherit from basic widget class
- Add Application Logic
- Implement `Render()` function
- Optional:
  - Touch Point Events
  - Physics Updates
  - New Input

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Example Applications

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Example Applications

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Example Applications

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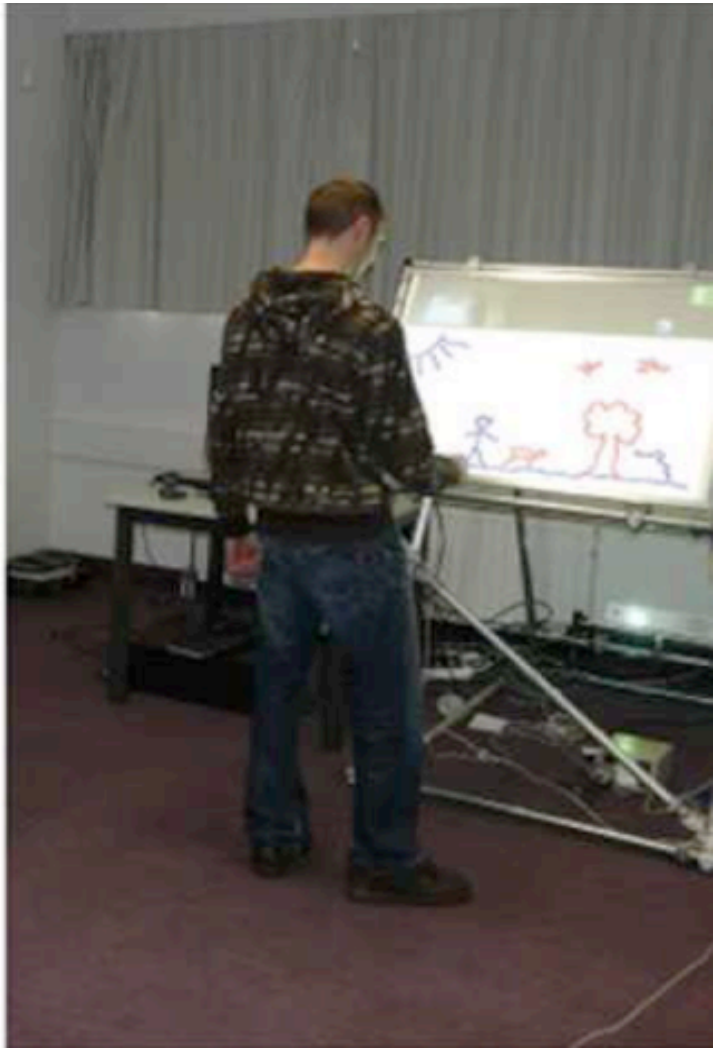

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Video

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- Author homepage:

  http://research.edm.uhasselt.be/~tcuypers/

- YouTube:

  http://www.youtube.com/watch?v=FjDwIcN5omw

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Questions?

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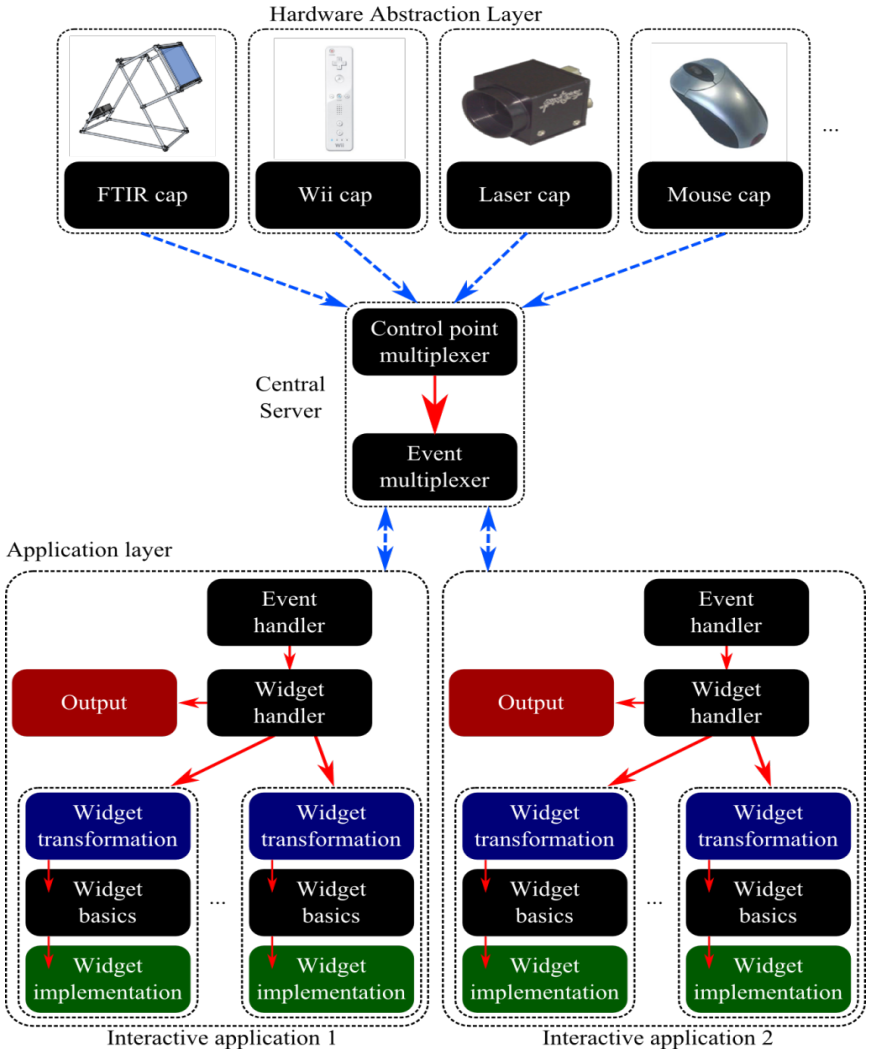

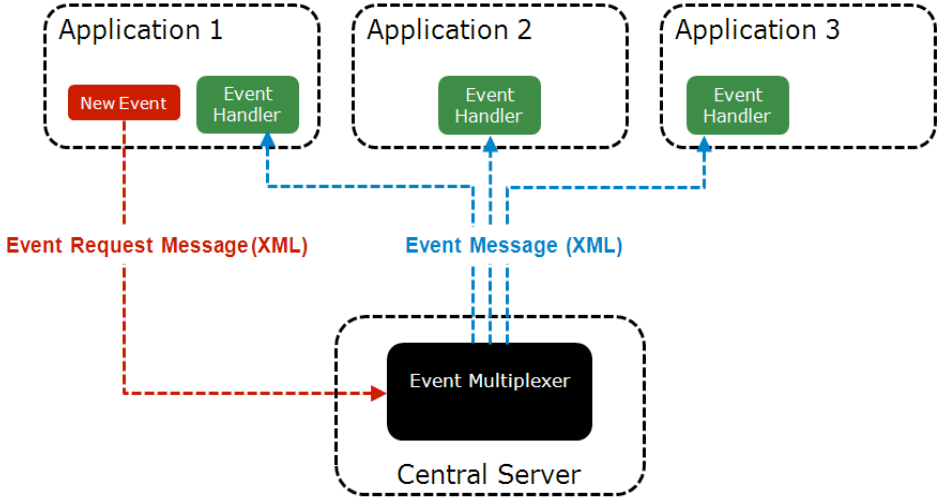

Extern Libraries

- OpenGL → for rendering
- FFMpeg → for video loading
- DevIL → for image loading