



OW2 JOnAS/OSGi

Connectivity Demonstrated

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Summary

➔ Introduction

➔ Code Sample

➔ Architecture

➔ Architecture Details

➔ Conclusion

Introduction

➔ JOnAS 5 Overview

- Modular
- Adaptable
- Built on top of OSGi

➔ Extensible

- Install new modules at runtime
- Deploy external services



Code Sample

➔ JOnAS offers OSGi resource injection

- In EJB 3.0 components

```
@Stateful(mappedName="WiimoteController")
@Local(IWiimoteController.class)
public class WiimoteController implements IWiimoteController {

    /**
     * Injected BundleContext that give access to the OSGi world.
     */
    @OSGiResource
    private BundleContext context;

    ...

}
```

Architecture

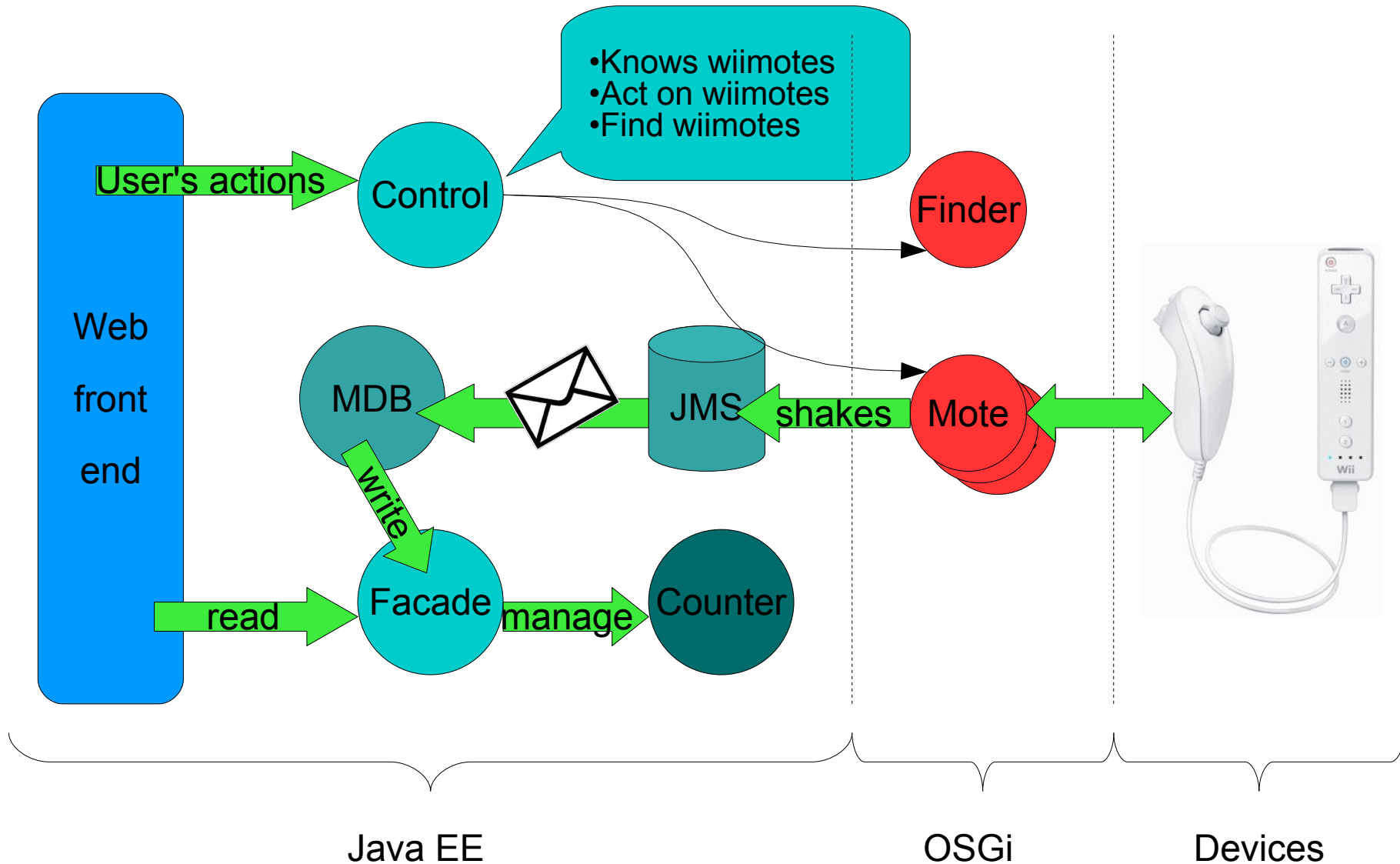
➔ Proposed application will have 3 main objectives

- Show how to connect to OSGi services from EE components
- Demonstrate that EE components can interact with OSGi services and the opposite too
- Show that dynamism within Java EE is possible

➔ We will use

- Nintendo™ Wiimotes and their associated bundles
- Java EAR containing EjbJar and WebApp

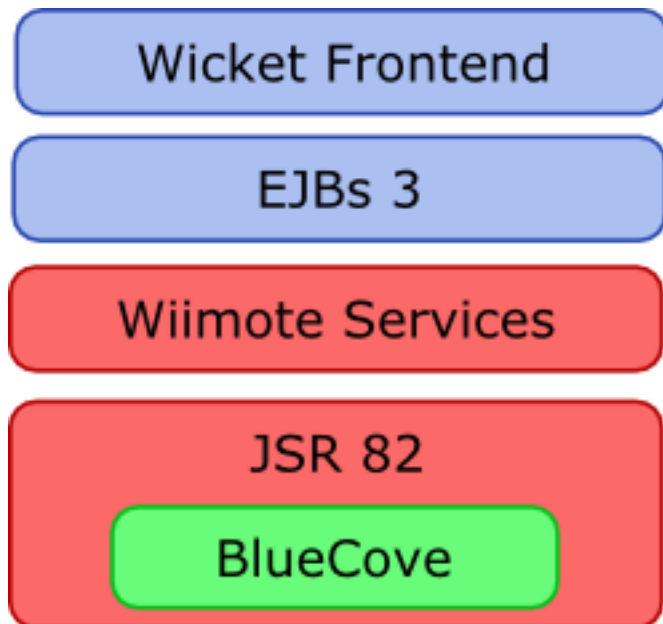
Architecture Details



Architecture Details [cont.]

➔ Composed application

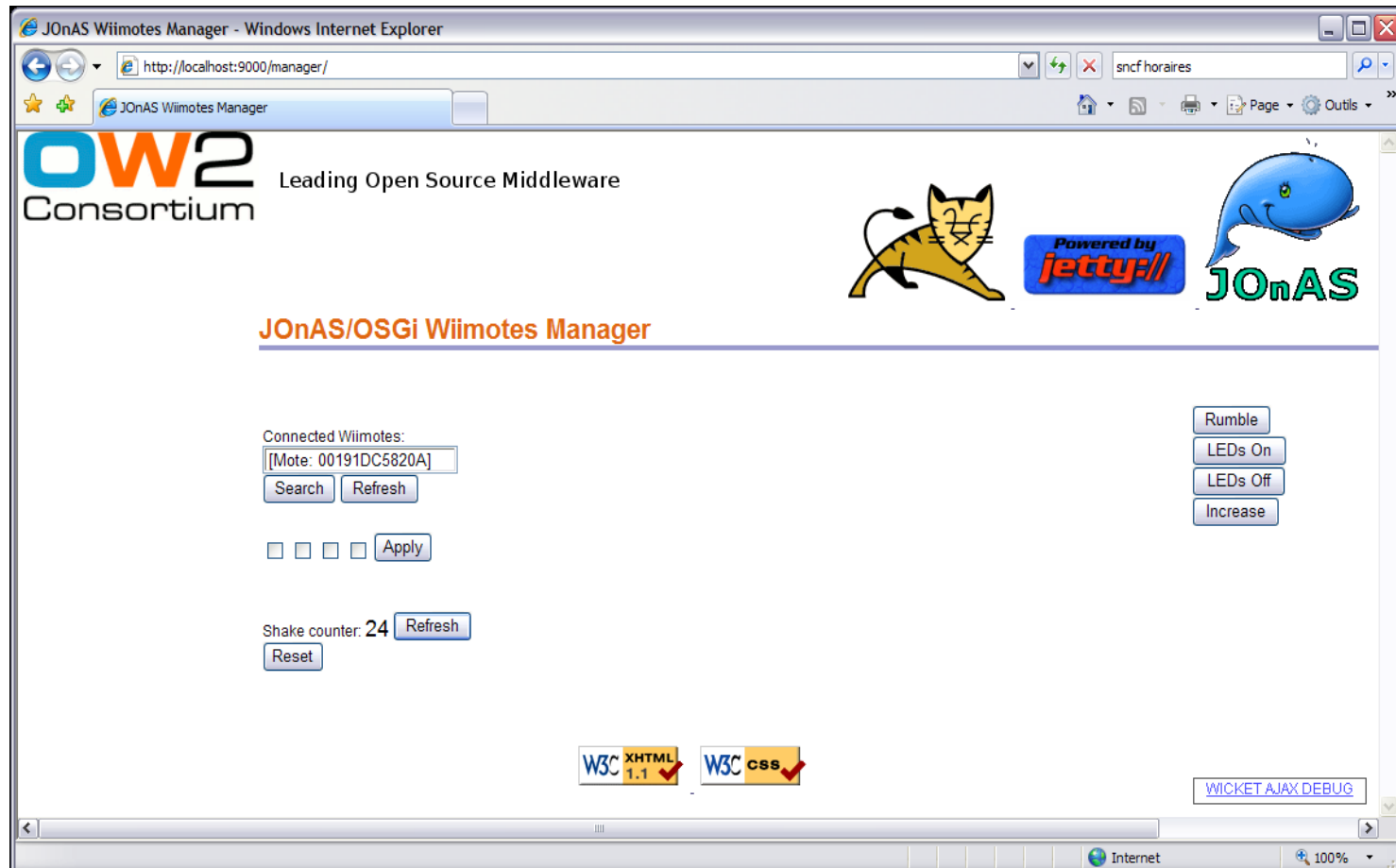
- Java EE & OSGi modules



- *jonas-wiimote-ear*
 - *jonas-wiimote-web*
 - *jonas-wiimote-ejb*
- *jonas-wiimote-gui*
- *jonas-wiimote-motej*
- *jonas-wiimote-api*
- *jonas-wiimote-bluecove*

- Java EE Modules
- OSGi Bundles

Screenshot



Conclusion

- ➔ **Brings the powerful OSGi programming model inside the Java EE world**
 - Takes care of dynamism !
 - Reactive applications

- ➔ **Unlimited real world use cases**
 - RFID, ...
 - Any feature that is packaged as bundles/services can be used from your Java EE application

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For more informations
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Addendum

➔ **Source code of this demonstration can be found in JOnAS SVN:**

`svn://svn.forge.objectweb.org/svnroot/jonas/demo/jonas-wiimote`