Apache Sling

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General Request Processing

- ResourceResolver
  - Resource (resource type)
    - ServletException
    - Script

request → response
Virtual Resource Tree

• Based on JCR Repository
• Integrates with mapped Resources
  – Resources from OSGi Bundles
  – Servlets and Servlet Filters registered as OSGi Services
• Unified access to Data from various sources
• Primary Target is the JCR Repository
URI Decomposition

/content/page.print.a4.html

Resource Path  Selectors  Extension
Servlet and Script Resolution

- Scripts and Servlets are Equal
  - Servlets registered as OSGi Services are mapped into the virtual Resource Tree
  - Scripts stored in the Repository

- Default Servlets (or Scripts)
  - Registerable
  - Fallback / Last Ressort
ScriptResolver

Path to Script built from ...

- Configured Path ( /apps, /libs )
- Resource Type converted to path ( nt/file )
- Selector String ( print/a4 )
- Request Method & MIME Type
  - GET --> Request URL Extension ( html )
  - else --> Method Name ( POST, PUT, ... )
ScriptResolver Example

- URI: /content/page.print.a4.html
- Resource: /content/page
- Resource Type: sample:page
- Script for GET:
  - /sling/scripts/sample/page/print/a4/html.*
- Script for POST:
  - /sling/scripts/sample/page/print/a4/POST.*
Facts

- Sling API
  - No Reference to JCR API
- Modular and Runtime Configurable
  - OSGi Framework
- Two Deployment
  - Standalone Java Application
  - Web Application
Standalone Java Application

- One single executable JAR file
- Small Launcher
- Starts OSGi Framework (Apache Felix)
- Uses Jetty in an OSGi Bundle
Web Application

• Extends Standalone Application
  – Replaces Command Line Support with a Servlet

• Uses a Bridge to connect Sling to the Servlet Container
Questions
One Last Word

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