Apache Sling

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General Request Processing

request

ResourceResolver

Resource (resource type)

ServletResolver

Servlet   Script

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)
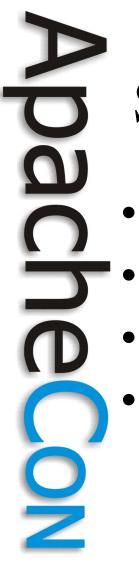 - else --> Method Name (POST, PUT, ...)

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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

Day

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