# Introduction to Content Rendering



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## Overview



Nodes and properties

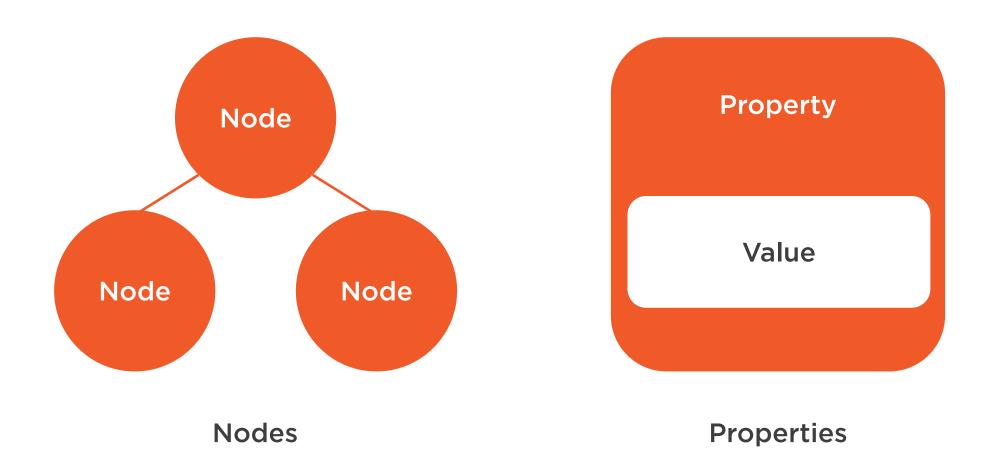
JCR folder structure

Create our first component

Sling resolution process

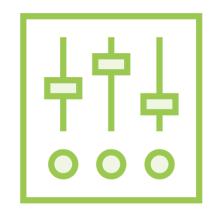


# Nodes & Properties





### Closer Look at Nodes





jcr:primaryType

jcr:mixinTypes



# Closer Look at Properties





Single valued

Multi-valued



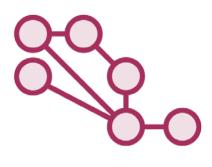
# Namespaces

jcr: nt: rep: mix: sling: cq:

# Common JCR Node Types







nt:file

nt:folder

nt:unstructured



# Common AEM Node Types



cq:Page



cq:Dialog



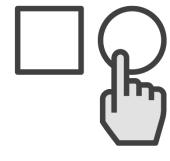
cq:Template



cq:EditConfig



cq:ClientLibraryFolder



cq:InplaceEditConfig



### Folder Structure of the JCR



## Demo



Use CRXDE to explore the JCR folder structure



# Setup Project Folder Structure



### Demo



Create project folder

Create components folders

Create templates folder



# Page Rendering Components



# Component Notes

Components are modular

**Collection of scripts** 

**Default script** 

Use sling:resourceType for rendering



### Demo



Create a page rendering component

Create the content node

Render content



# Understanding the Sling Resolution Process



# Sling Resolution Process

Sling is resource-oriented

Resources form a virtual tree

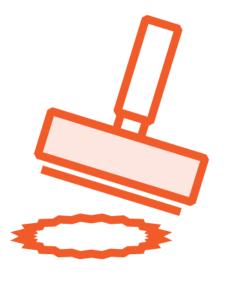
Resources are typically mapped to a JCR node



## Common Properties of a Resource







Path

Name

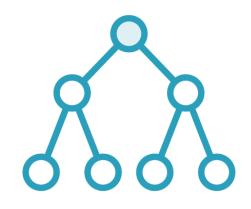
ResourceType

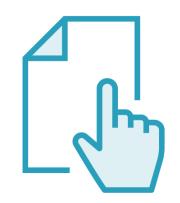


# URLs point to a resource, which is typically a JCR structure



### Basic Steps of Processing Requests





JCR content items exposed as an HTTP resource

Determine script or servlet to handle request



# Steps to Resolve a URL Request

Decompose the URL

Search for servlet or vanity URL redirect

Search for a node indicated by the URL

Resolve the resource

Resolve the rendering script/servlet

Create rendering chain

Invoke rendering chain

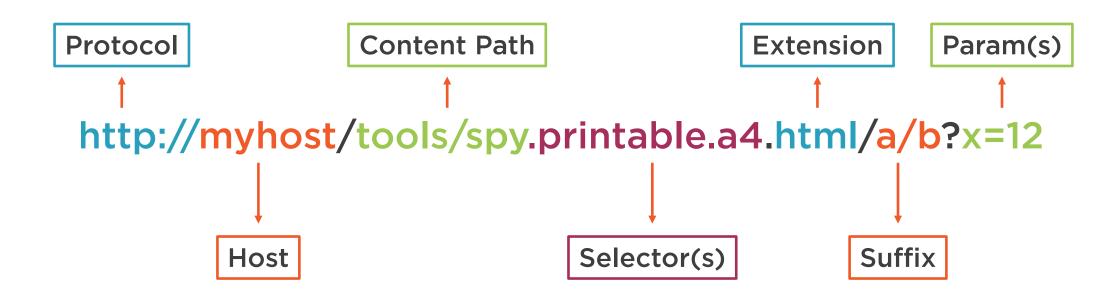


### Decomposing the URL

http://myhost/tools/spy.printable.a4.html/a/b?x=12



# Decomposing the URL



# Resolving Requests to Resources

Example Request: http://myhost/tools/spy.html

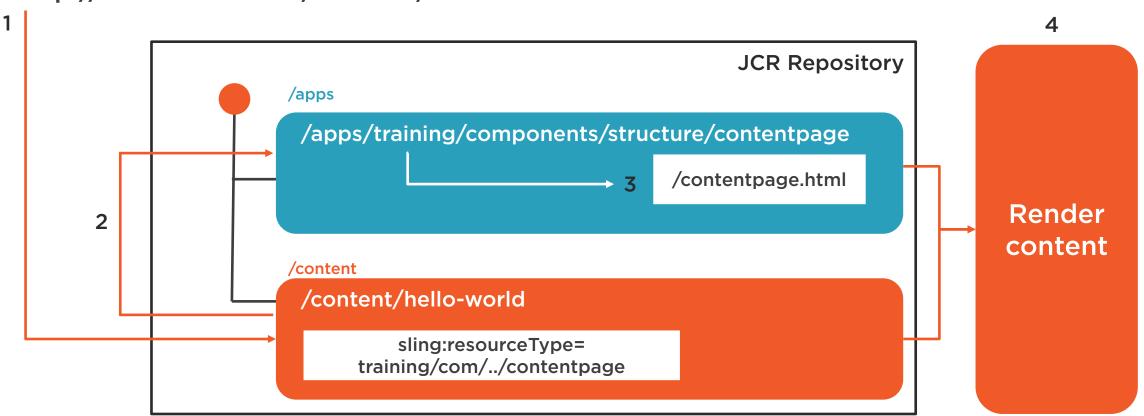
Check for redirection rule or serlvet
Search for tools/spy node
Find node's sling:resourceType
If no node is found, return 404



## Resolving Requests Example

### **Incoming Request:**

http://localhost:4502/content/hello-world.html





## Locating and Rendering Scripts

### contentpage scripts







### Request

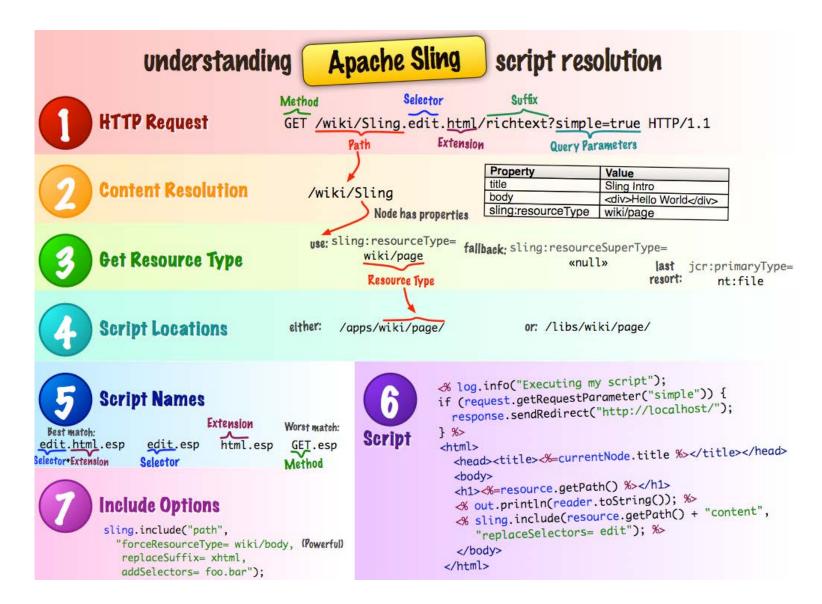
URL: /content/hello-world/test.blue.html sling:resourceType= training/../contentpage

#### **Result Order**

- 1) contentpage.blue.html
- 2) contentpage.html
- 3) GET.html



# Understanding URL Decomposition



### Demo



Step through Sling resolution process
Create second rendering script
Render resource with Sling selector



### Summary



Common node types and properties

Created a page rendering component

Sling resolution process

Created a second rendering script

