apache stanbol™

stanbol.apache.org

OSGi in Apache Stanbol

a modular software stack and reusable set of components for semantic content management

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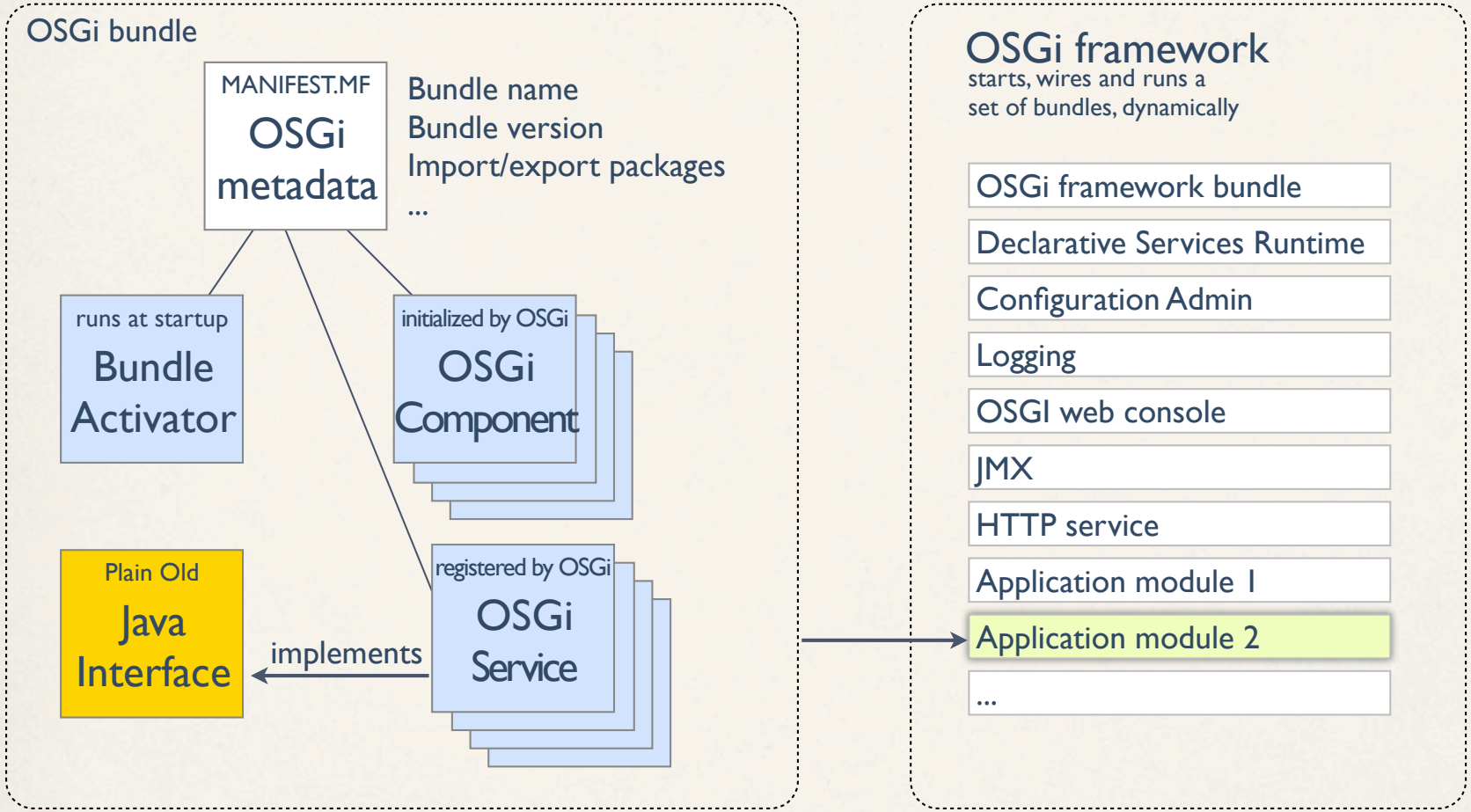
September 2012 - Bertrand Delacretaz - @bdelacretaz

OSGi?

java modularization specs from the OSGi alliance, www.osgi.org

an OSGi bundle is a jar file with metadata, can provide an Activator and Services

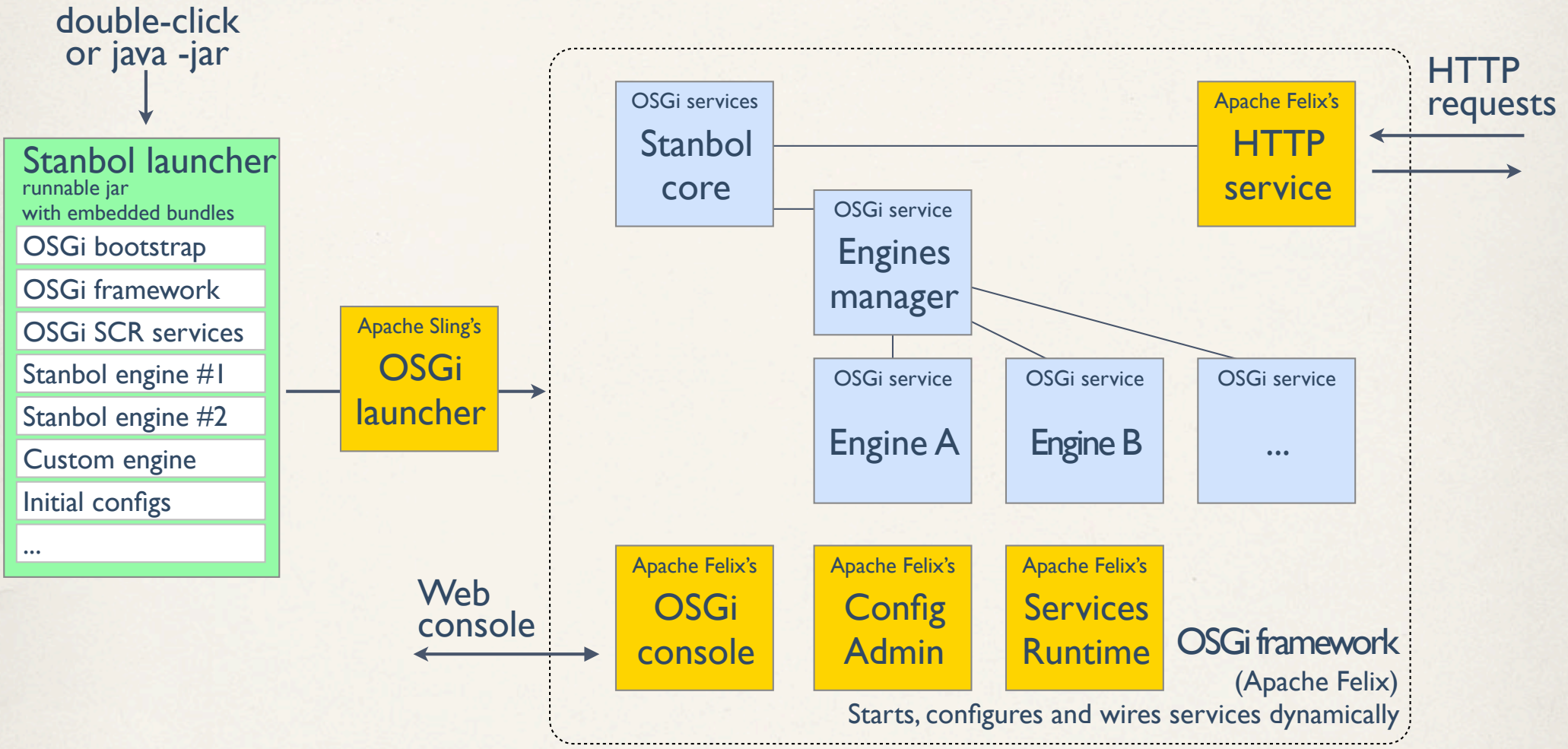


Building Stanbol

as a runnable jar file that embeds OSGi bundles to install at startup

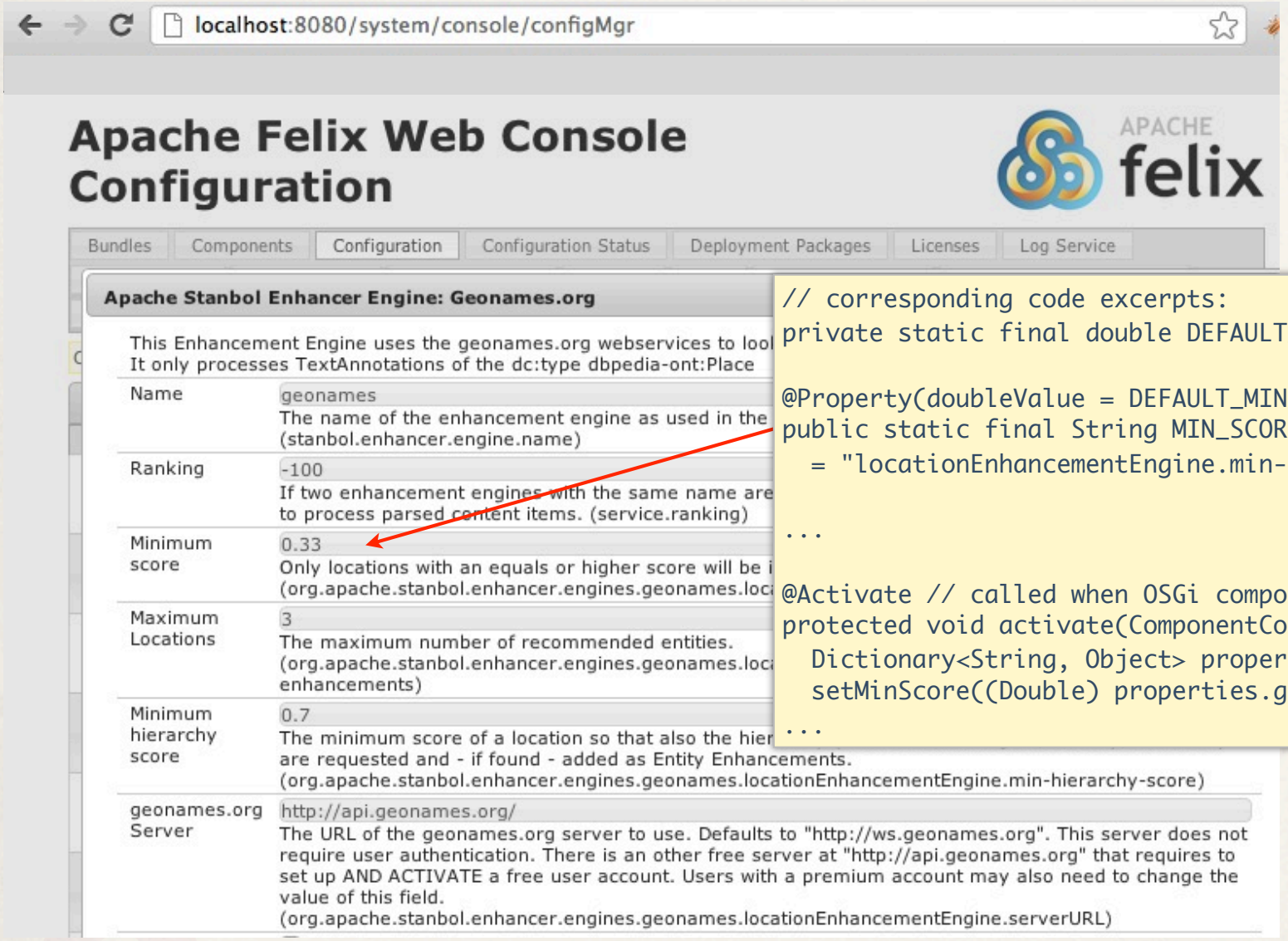
Starting Stanbol

Start the OSGi framework, which starts all available bundles and services



Configuring Stanbol

Using the Apache Felix webconsole



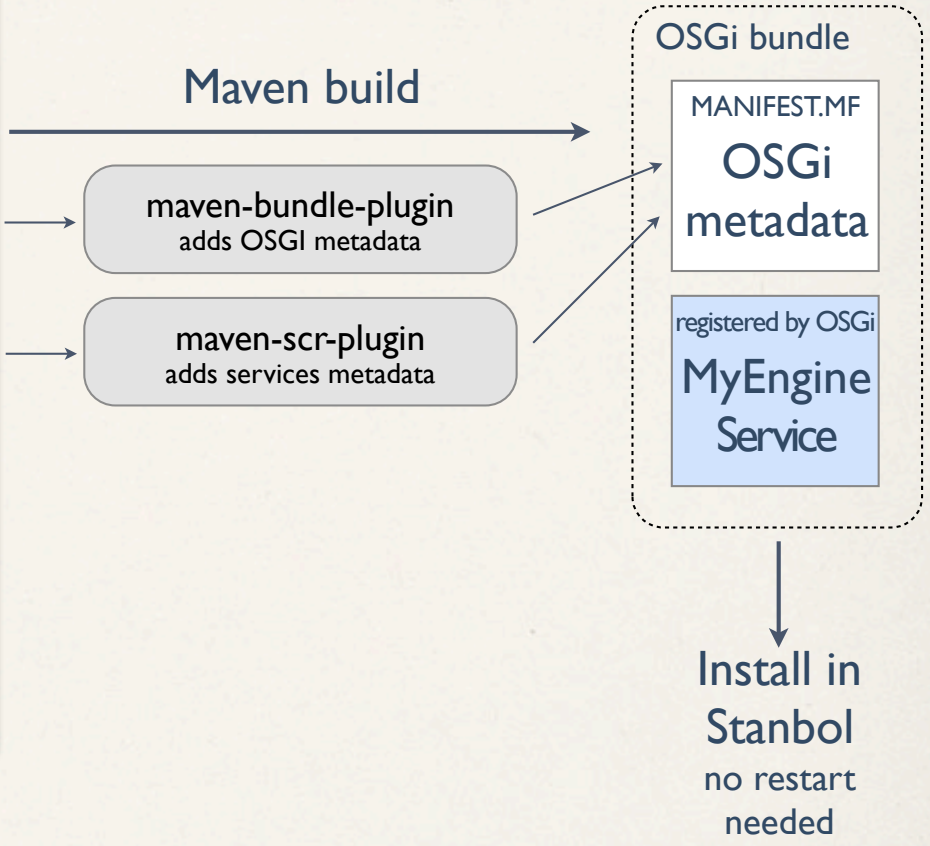

```
// corresponding code excerpts:
private static final double DEFAULT_MIN_SCORE = 0.33;

@Property(doubleValue = DEFAULT_MIN_SCORE)
public static final String MIN_SCORE
  = "locationEnhancementEngine.min-score";

...

@Activate // called when OSGi component is activated
protected void activate(ComponentContext ce) {
  Dictionary<String, Object> properties = ce.getProperties();
  setMinScore((Double) properties.get(MIN_SCORE));
...
```

Extending Stanbol

Adding a custom EnhancementEngine

```
@Component
@Service
public class MyEngine implements EnhancementEngine {

  @Activate
  public void activate(ComponentContext c) {
    // initialize, configure, ...
  }

  public int canEnhance(ContentItem item) {
     if(...item matches our expectations...) {
       return ENHANCE_SYNCHRONOUS;
     } else {
       return CANNOT_ENHANCE;
     }
  }

  public void computeEnhancements(ContentItem item) {
    // run the engine and add results to item's
    // RDF graph based on the item's InputStream
  }
}
```