

Writing our own Classloader



Kevin Jones

@kevinrjones www.rocksolidknowledge.com



Overview



Use the URLClassLoader

- Understand how this works

Load from a file based URL

Load from a network URL

Write our own classloader

- Load from a database

Using Interfaces and Implementations

If using our own classloader

- Cannot reference implementation in the code
- This will cause the class to be loaded with the app class loader

Split code into implementation and interface

- Interface definitions go on the classpath
- Implementation is loaded by our classloader



Writing our own ClassLoader

Will not load all classes

- Delegate to the 'system' classloader

If the parent can't load

- Load the class bytes from the database
- Use ClassLoader's `defineClass` method to load the class

Example uses SQL Server



Summary



URLClassLoader typically used in your application

- Takes an array of URLs
- Can be [file:///](#), [http://](#) or some other protocol

Can write our own classloader

- Extend `java.lang.ClassLoader`
- May delegate first