

*<https://github.com/nebhale/internal-data-group-2013>*

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# Cloud Foundry Java Buildpack

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# Java Buildpack

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- ❖ Primary Objective
  - ❖ Be the easiest way to run a Java application
- ❖ Secondary Objectives
  - ❖ Easily extensible
  - ❖ Aggressively up-to-date with security fixes, by default
- ❖ <https://github.com/cloudfoundry/java-buildpack>



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# Automatic Container Choice

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- ❖ `Java main()`
- ❖ Tomcat (including Grails)
- ❖ Play Framework (including Scala)
- ❖ Groovy
- ❖ Spring Boot CLI

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# Zero-touch Services

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- ❖ Automatic detection of bound services
  - ❖ VCAP\_SERVICES environment variable
- ❖ Automatic download and configuration of bound services



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# Configuring the Buildpack

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- ❖ Just say no!
- ❖ All configuration in `config/*.yml`
  - ❖ Repository location
  - ❖ Versions
  - ❖ JRE Memory configuration

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# Extending the Buildpack

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- ❖ All changes should be additive
- ❖ Well-defined API
  - ❖ `initialize(context), detect(), compile(), release()`
  - ❖ `lib/java_buildpack/[component | framework | jre]`
- ❖ `config/components.yml`



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# Summary

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- ❖ Easy
  - ❖ Automatic Container Choice
  - ❖ Zero-touch Services
- ❖ Configuration
  - ❖ `config/*.yml`
- ❖ Extension
  - ❖ Always additive
  - ❖ Well-defined API