SPB1252LV

vmware EXPLORE

SpringOne

What is Spring?

Robert McNees (He/Him/His)
Engineering Manager
Glenn Renfro (He/Him/His)
Spring Engineer

Disclaimer

- This presentation may contain product features or functionality that are currently under development.
- This overview of new technology represents no commitment from VMware to deliver these features in any generally available product.
- Features are subject to change, and must not be included in contracts, purchase orders, or sales agreements of any kind.
- Technical feasibility and market demand will affect final delivery.
- Pricing and packaging for any new features/functionality/technology discussed or presented, have not been determined.

Robert McNees
LinkedIn: /in/bmcnees

Glenn Renfro
LinkedIn, Mastodon,
Threads: @cppwfs

What is Spring?

Spring is a framework, designed to takes lots of different technologies and allows you to combine them in ways that feel natural.

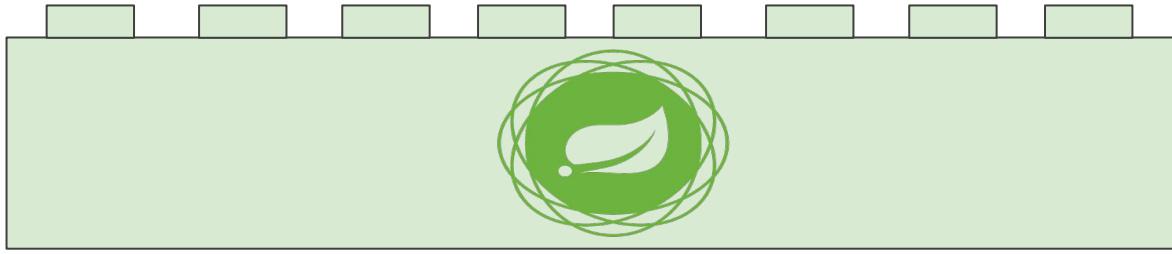
Why Spring?

Spring is a secure, low-cost and flexible framework.

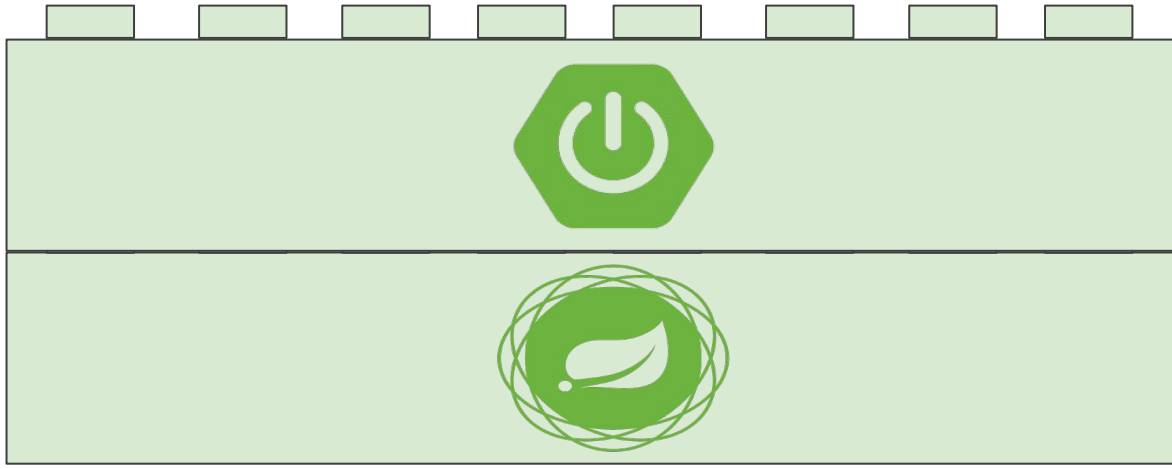
Who uses Spring?

Spring is the most popular enterprise Java development framework in the world.

Where do we start?



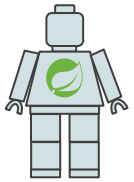
How do we start faster?



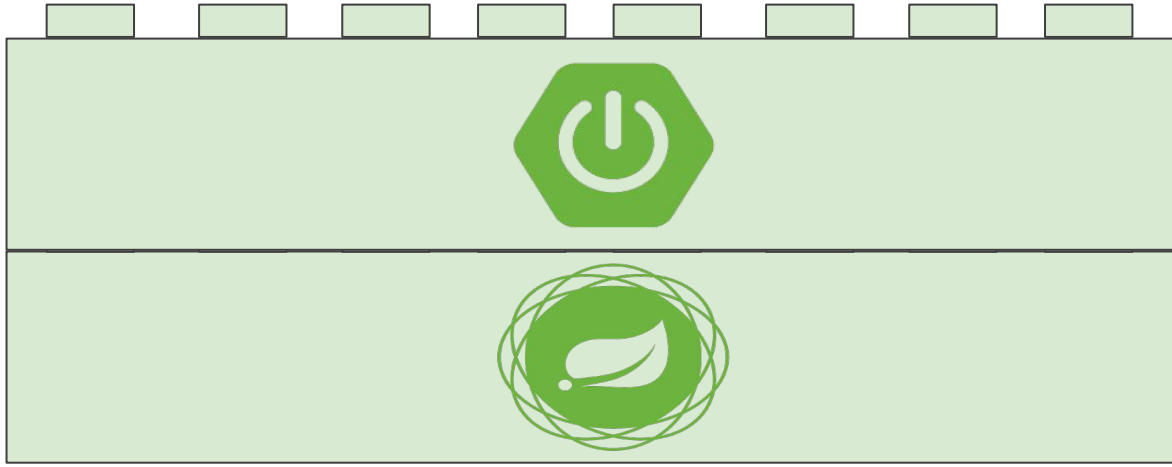
How do we focus on a need?

Spring Boot	Spring Cloud Cluster	Spring Cloud Data Flow
Spring Framework	Spring Cloud Commons	Spring Cloud Kubernetes
Spring Data JDBC Extensions	Spring Cloud Config	Spring Cloud OpenFeign
Spring Data JPA	Spring Cloud Connectors	Spring Modulith
Spring Data LDAP	Spring Cloud Consul	Spring Security
Spring Data MongoDB	Spring Cloud Contract	Spring Security Kerberos
Spring Data Redis	Spring Cloud Function	Spring Security OAuth
Spring Data R2DBC	Spring Cloud Gateway	Spring Security SAML
Spring Data REST	Spring Cloud GCP	Spring Session
Spring Data for Apache Cassandra	Spring Cloud Netflix	Spring Session Core
Spring GraphQL	Spring Cloud Pipelines	Spring Session JDBC
Spring Data Couchbase	Spring Cloud Schema Registry	Spring Session Hazelcast
Spring Data Elasticsearch	Spring Cloud Security	Spring Session MongoDB
Spring Data Envers	Spring Cloud Skipper	Spring Integration
Spring Data Neo4j	Spring Cloud Stream	Spring HATEOAS
Spring for Apache Hadoop	Spring Cloud Stream Applications	Spring REST Docs
Spring Cloud Azure	Spring Cloud Stream App Starters	Spring Batch
Spring Cloud Alibaba	Spring Cloud Task	Spring AMQP
Spring Cloud for Amazon Web Services	Spring Cloud Task App Starters	Spring for Apache Kafka
Spring Cloud Bus	Spring Cloud Vault	Spring LDAP
Spring Cloud CLI	Spring Cloud Zookeeper	Spring Statemachine
Spring Cloud for Cloud Foundry	Spring Cloud App Broker	Spring Vault
	Spring Cloud Circuit Breaker	

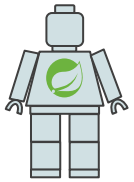
I want two applications to communicate so that they can exchange information



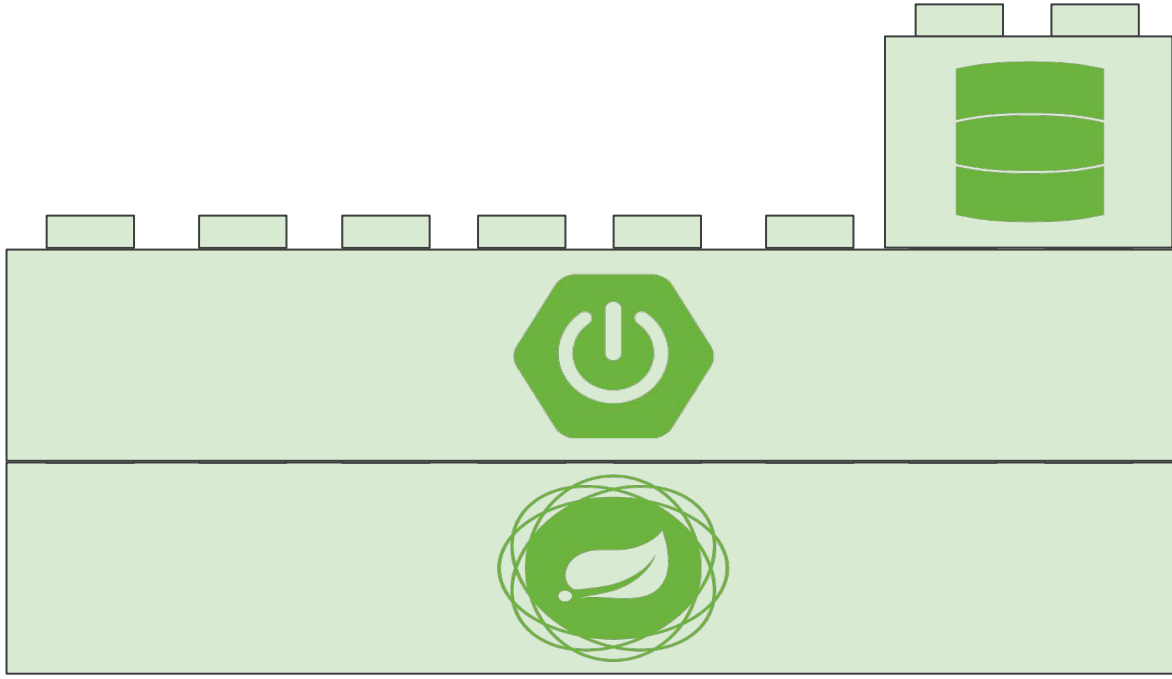
Spring Web



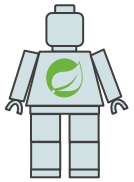
I want to store information in a database so that I can do almost anything



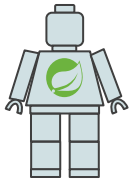
Spring Web



I want to store information in a database so that I can do almost anything

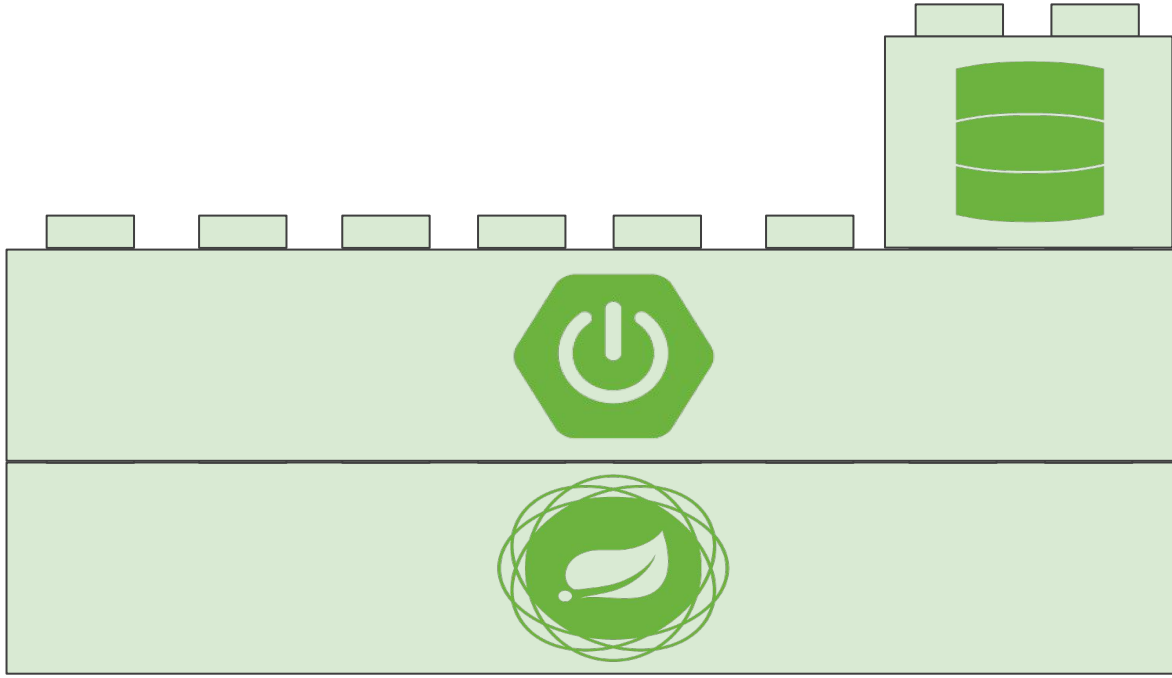


Spring Web

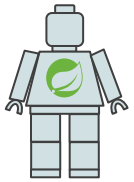


Spring Data

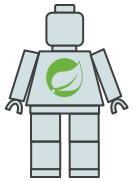
- Spring Data JPA
- Spring Data LDAP
- Spring Data MongoDB
- Spring Data Redis
- Spring Data R2DBC
- Spring Data REST
- Spring Data for Apache Cassandra
- Spring Data Couchbase
- Spring Data Elasticsearch
- Spring Data Envers
- Spring Data Neo4j
- Spring for Apache Hadoop



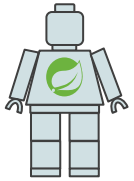
I want to keep my application secure so that I can not be in the news



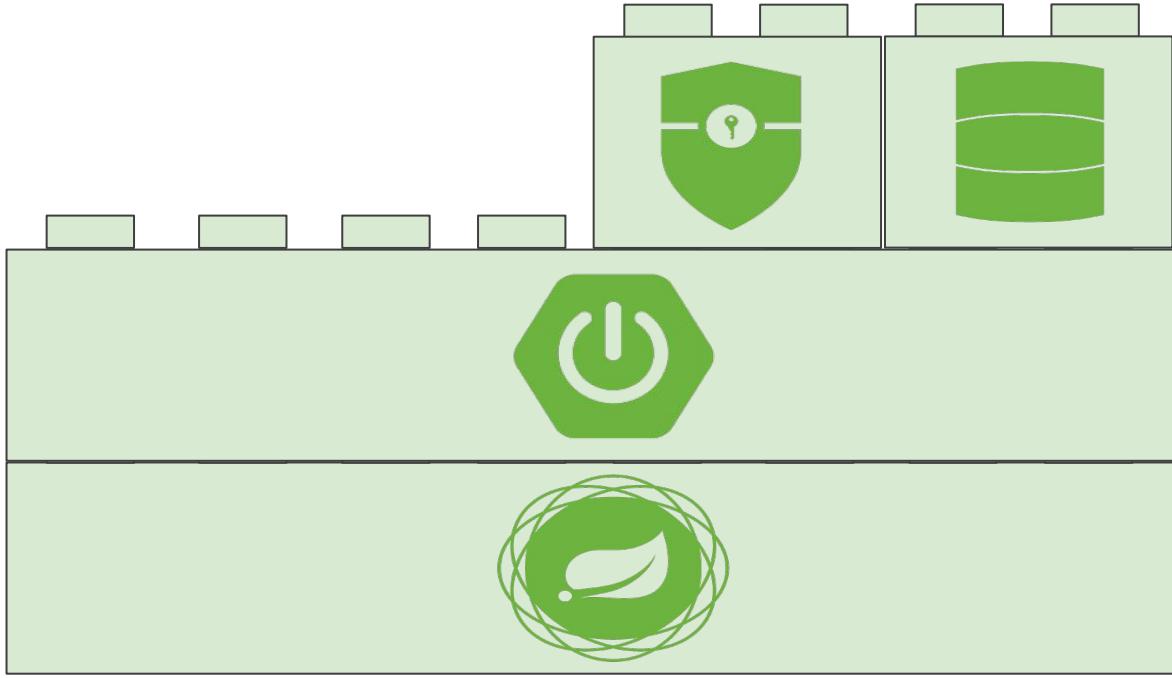
Spring Web



Spring Data



Spring Security



spring initializr

Project
- Gradle - Groovy
- Gradle - Kotlin
- Maven

Language
- Java
- Kotlin
- Groovy

Spring Boot
- 3.2.0 (SNAPSHOT)
- 3.1.2 (SNAPSHOT)
- 3.1.1
- 3.0.9 (SNAPSHOT)
- 3.0.8
- 2.7.14 (SNAPSHOT)
- 2.7.13

Project Metadata

Group	com.example
Artifact	demo
Name	demo
Description	Demo project for Spring Boot
Package name	com.example.demo
Packaging	Jar / War
Java	20 / 17 / 11 / 8

Dependencies — ADD DEPENDENCIES... ⌘ + B

Spring Web WEB
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.

Spring Data JPA SQL
Persist data in SQL stores with Java Persistence API using Spring Data and Hibernate.

Spring Security SECURITY
Highly customizable authentication and access-control framework for Spring applications.

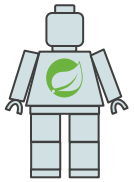
```
dependencies {
  implementation 'org.springframework.boot:spring-boot-starter-data-jpa'
  implementation 'org.springframework.boot:spring-boot-starter-security'
  implementation 'org.springframework.boot:spring-boot-starter-web'
  testImplementation 'org.springframework.boot:spring-boot-starter-test'
  testImplementation 'org.springframework.security:spring-security-test'
}
```

```
<dependency>
    <groupId>org.springframework.boot<
    <artifactId>spring-boot-starter-se
    <version>3.1.1</version>
</dependency>
```

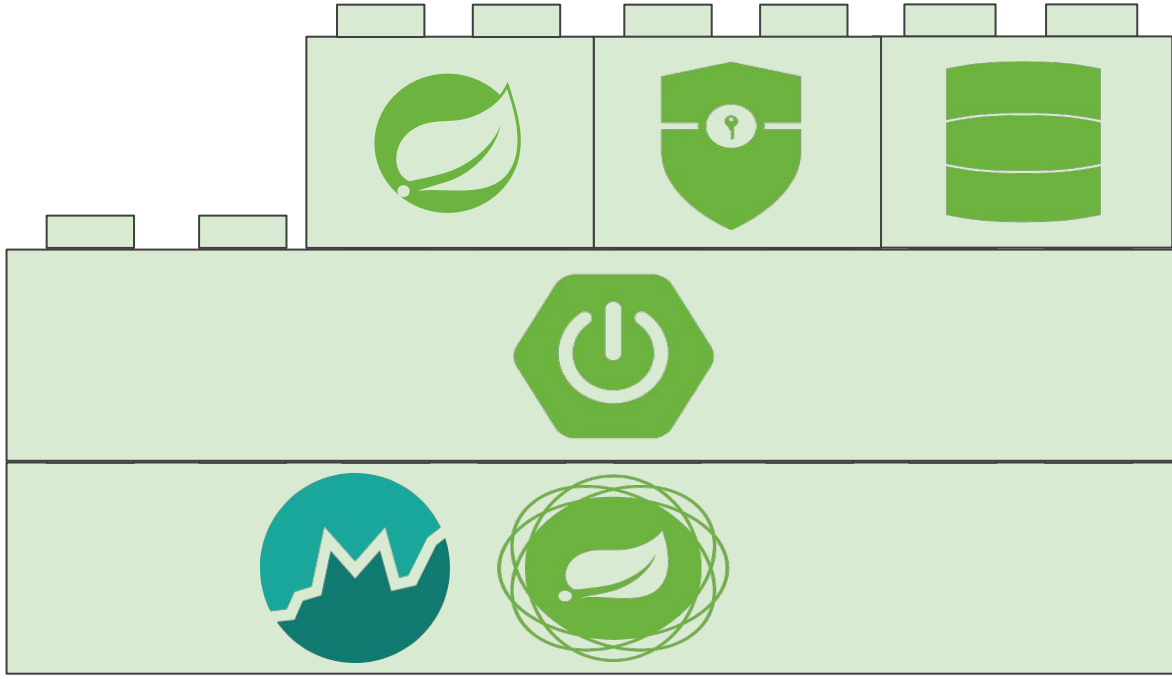
```
    <scope>compile</scope>
</dependency>
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-aop</artifactId>
    <version>6.0.10</version>
    <scope>compile</scope>
</dependency>
<dependency>
    <groupId>org.springframework.security</groupId>
    <artifactId>spring-security-config</artifactId>
    <version>6.1.1</version>
    <scope>compile</scope>
</dependency>
<dependency>
    <groupId>org.springframework.security</groupId>
    <artifactId>spring-security-web</artifactId>
    <version>6.1.1</version>
    <scope>compile</scope>
</dependency>
```

start.spring.io

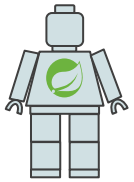
I want to monitor my application so that I can know what went wrong



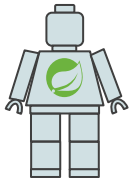
Spring Boot Actuator



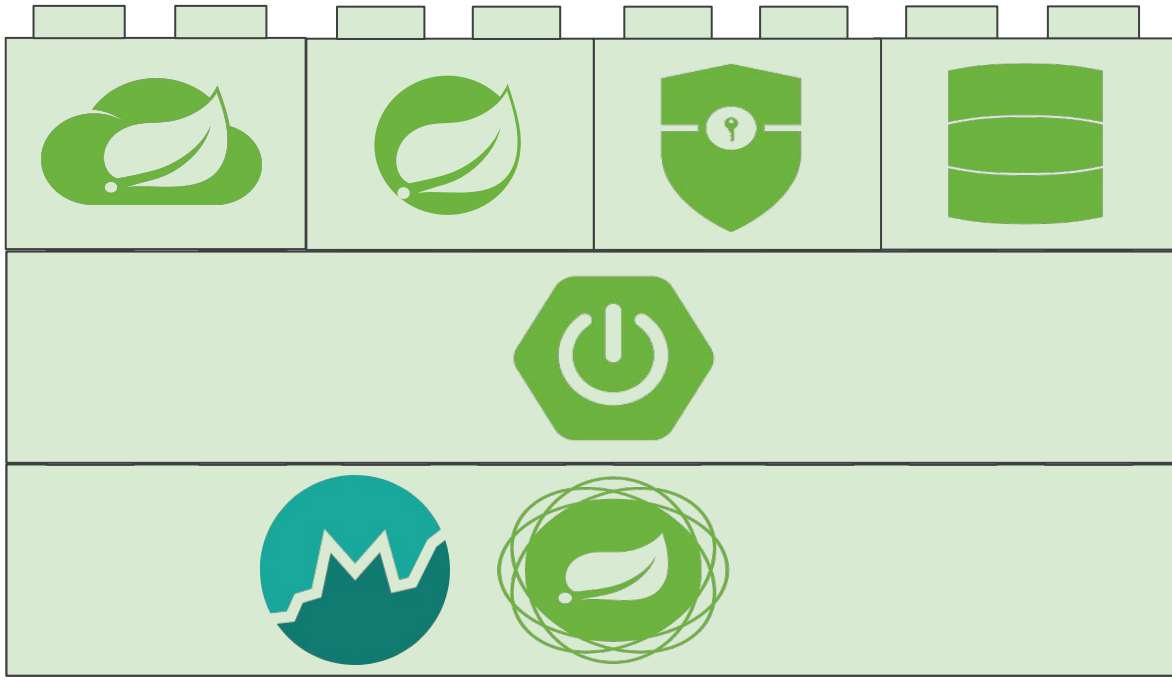
I want to be able to change properties without a deploy so that my application can change behavior quickly



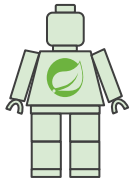
Config Client



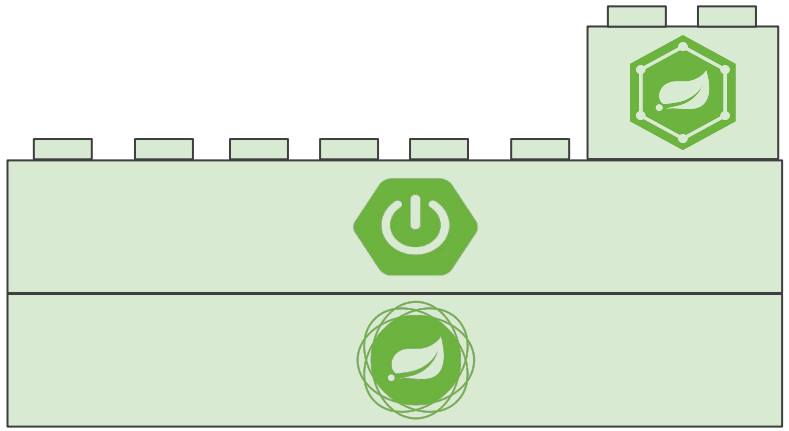
Config Server

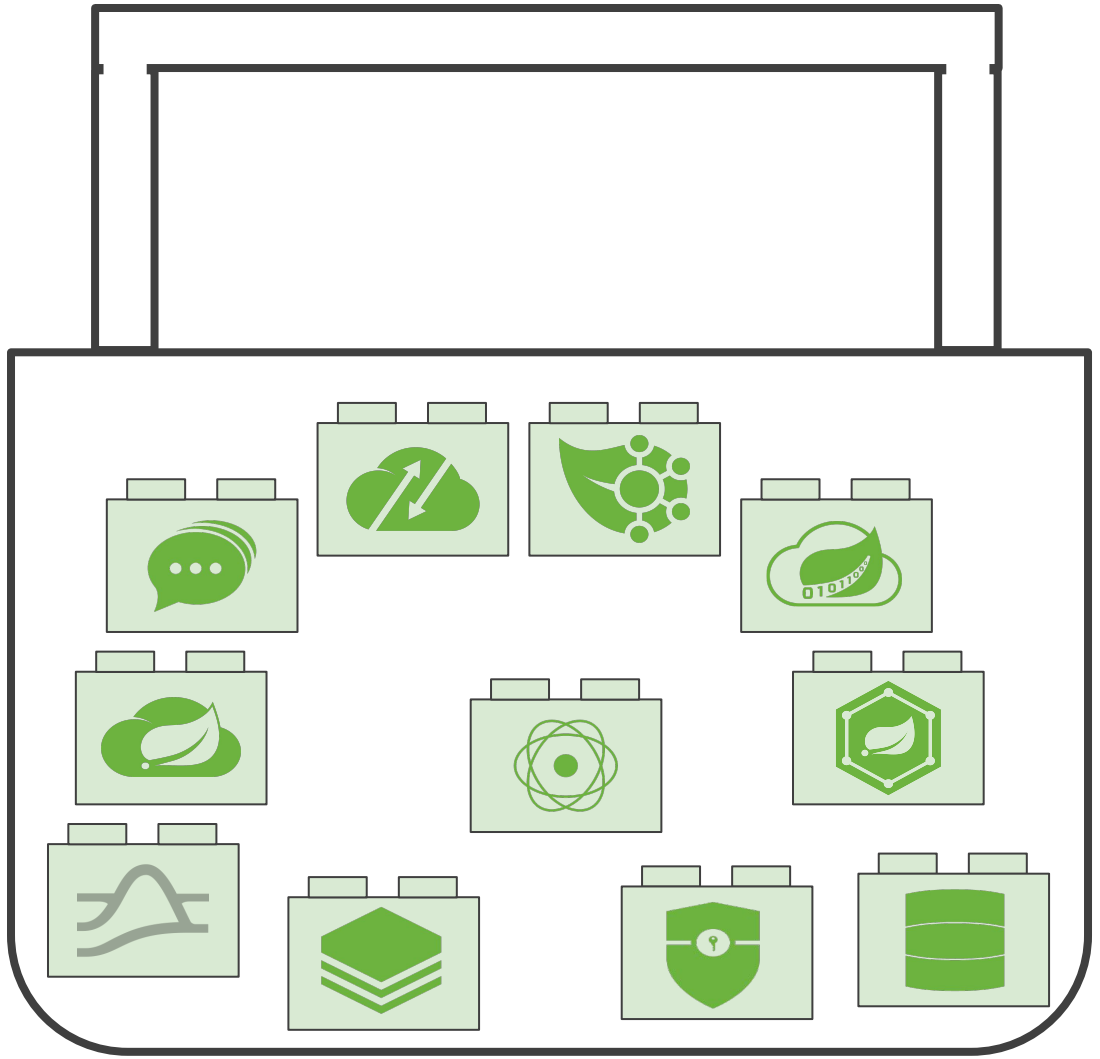


I want my applications to only get the data they need
so that it reduces the maintenance burden and wasteful data transfer

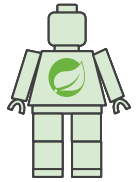


Spring for GraphQL

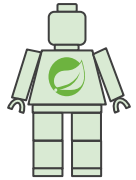




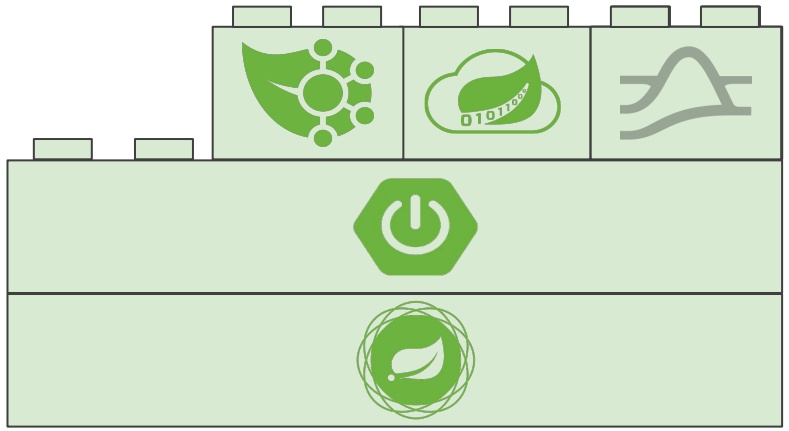
I want my applications to communicate asynchronously so that they can scale independently and not lose messages

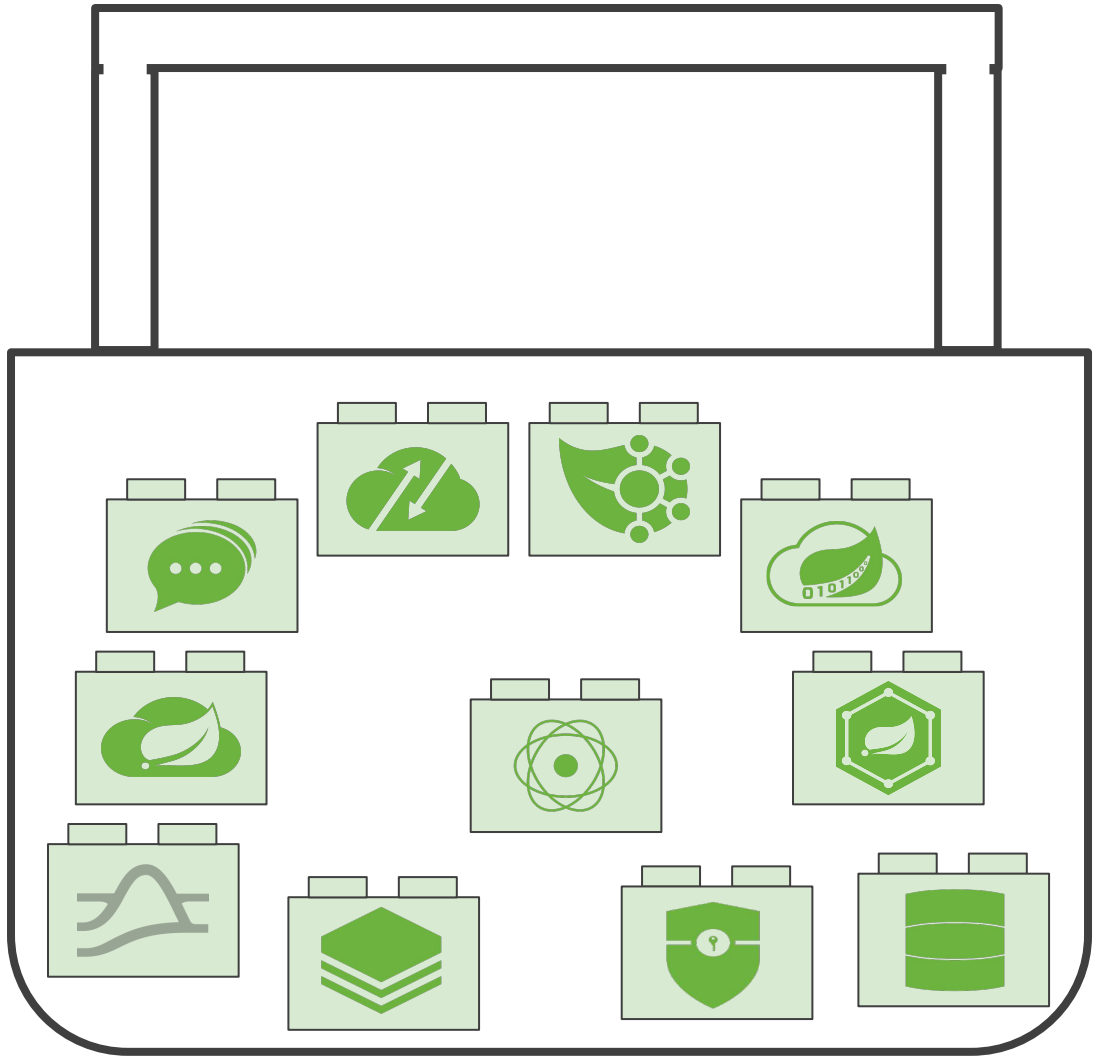


Spring for Apache Kafka

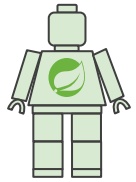


Cloud Stream

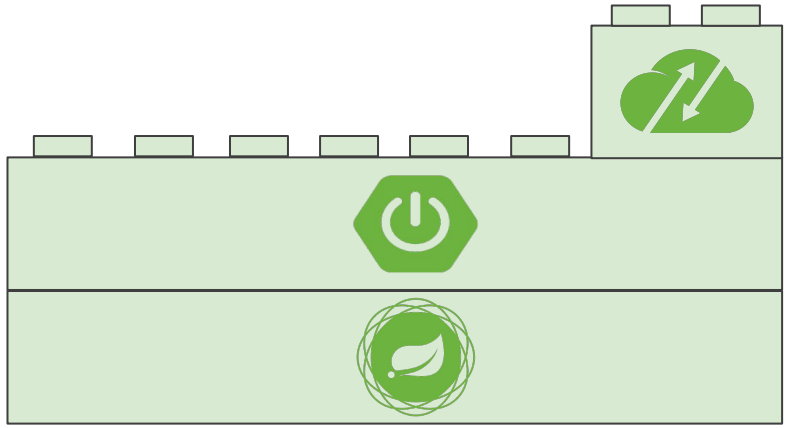


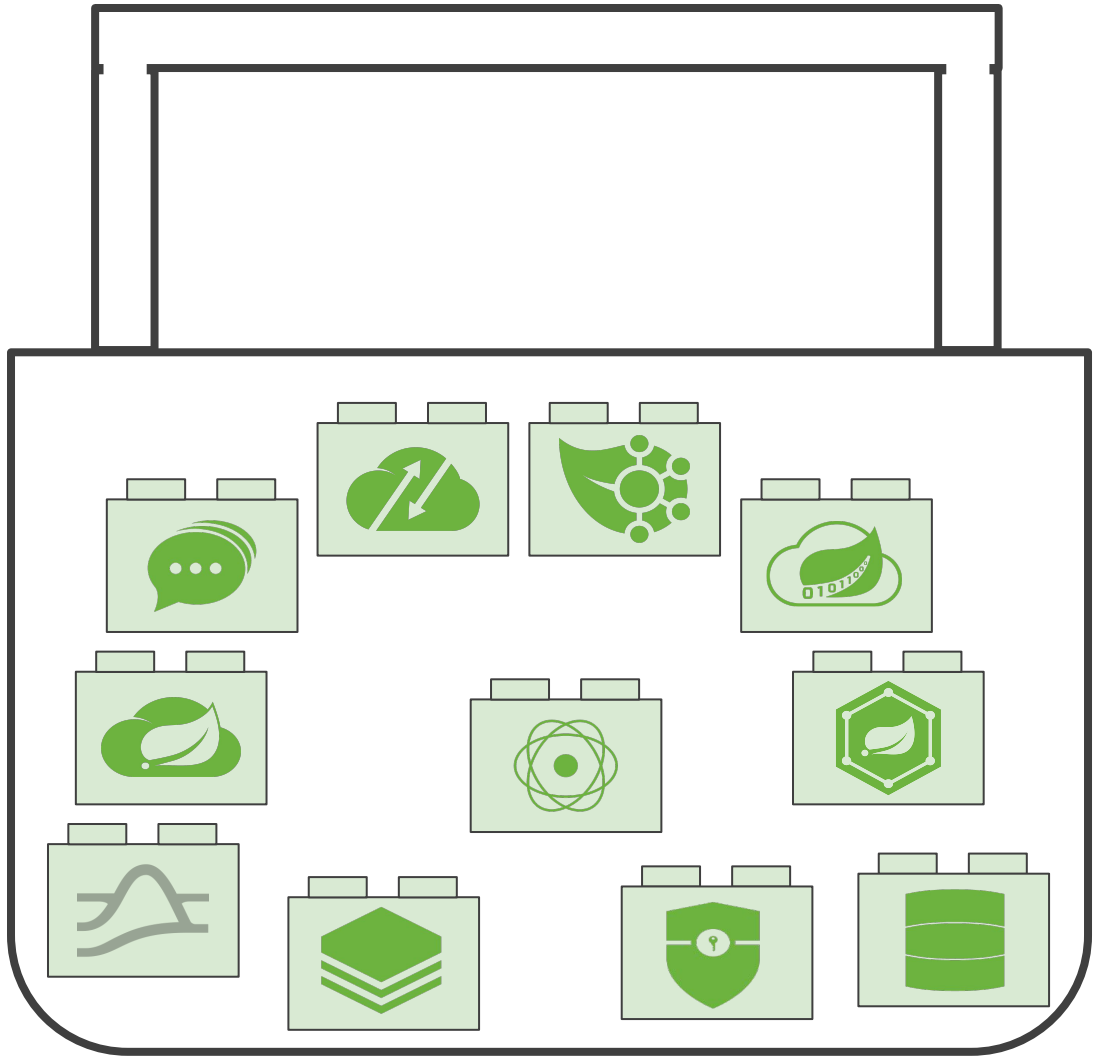


I want to route requests to the right API from a central location so that I can consistently handle cross cutting concerns

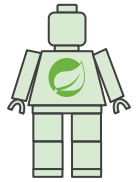


Spring Cloud Gateway

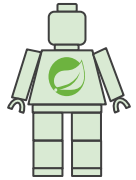




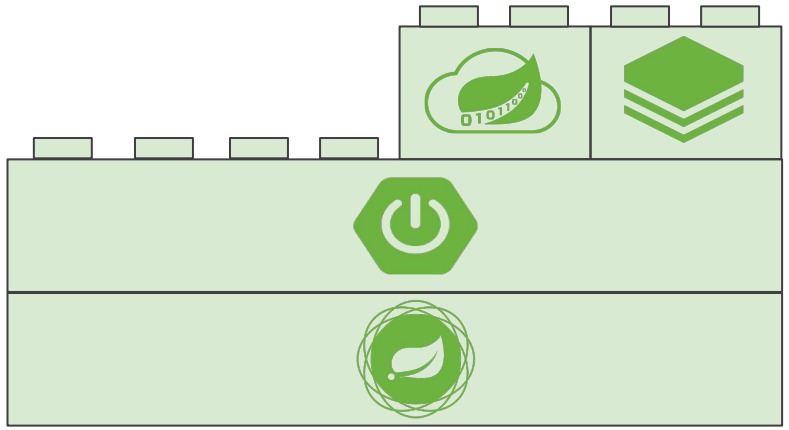
I want to process large amounts of data periodically so that I can make good use of my available compute

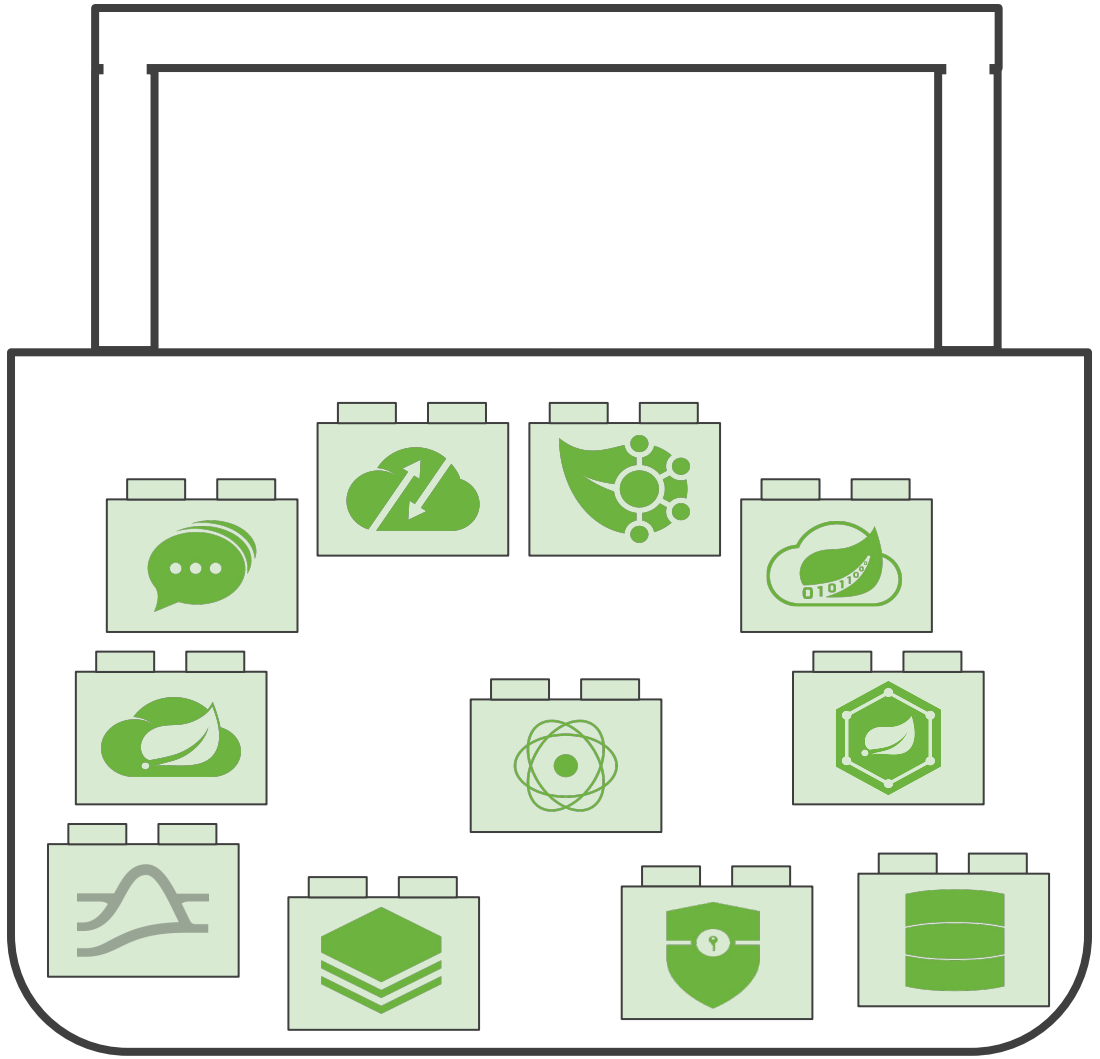


Spring Batch

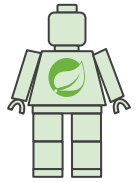


Spring Cloud Task

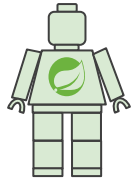




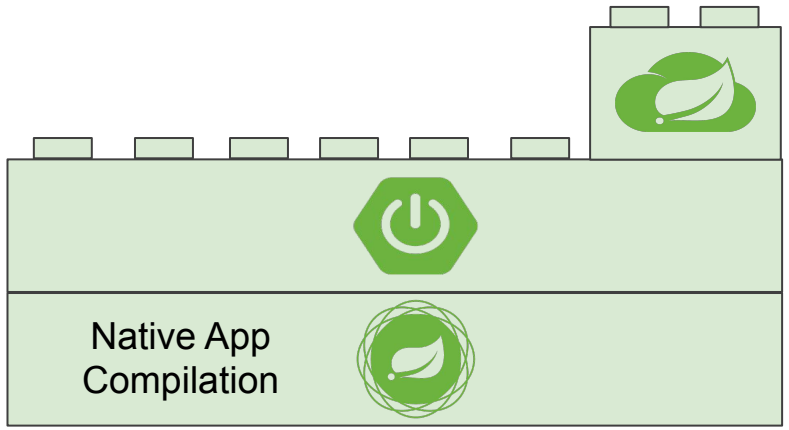
I want to use a serverless architecture that starts fast so that I can focus on business logic and be more flexible

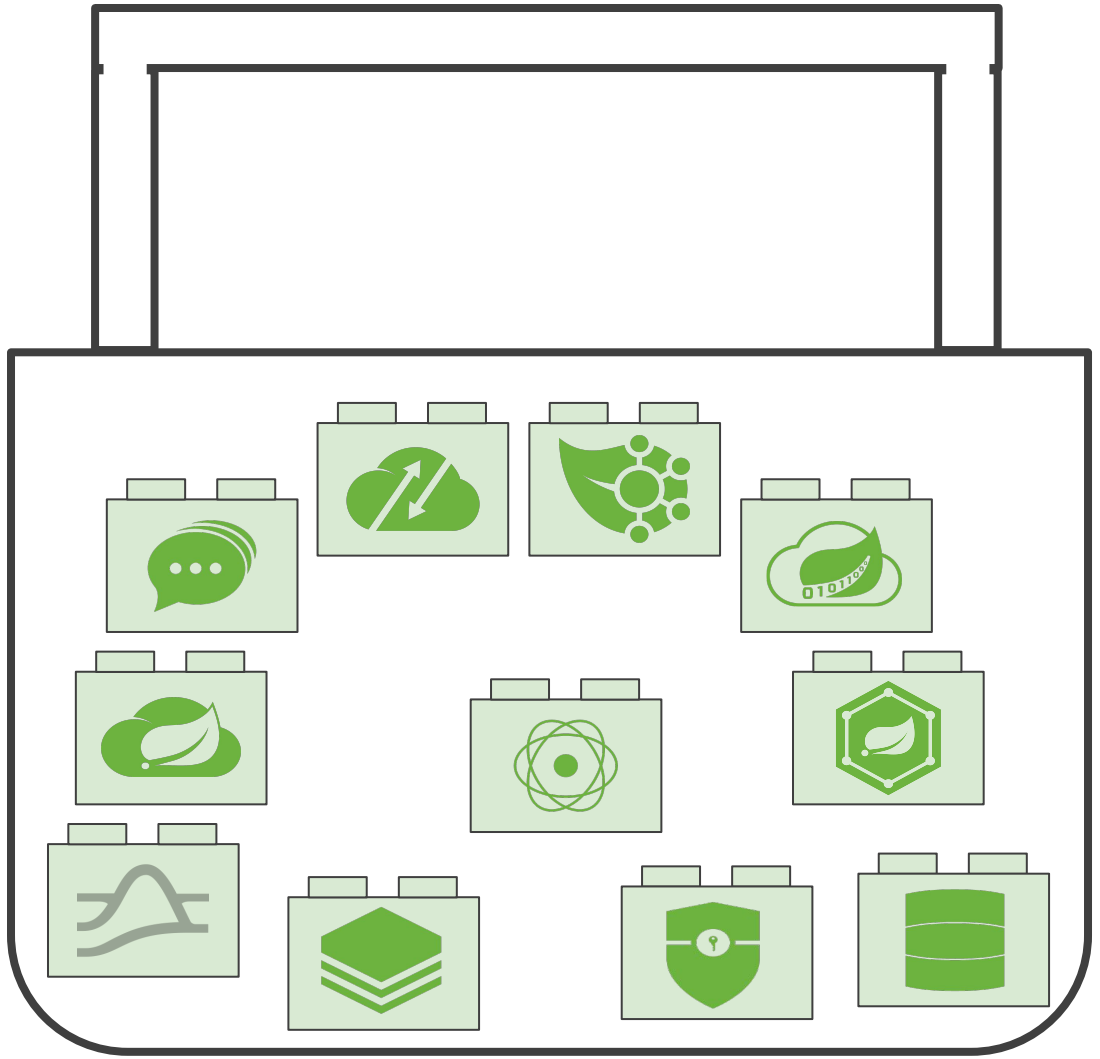


Spring Cloud Function

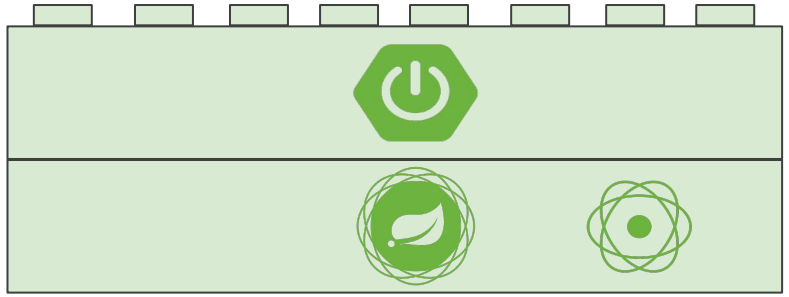


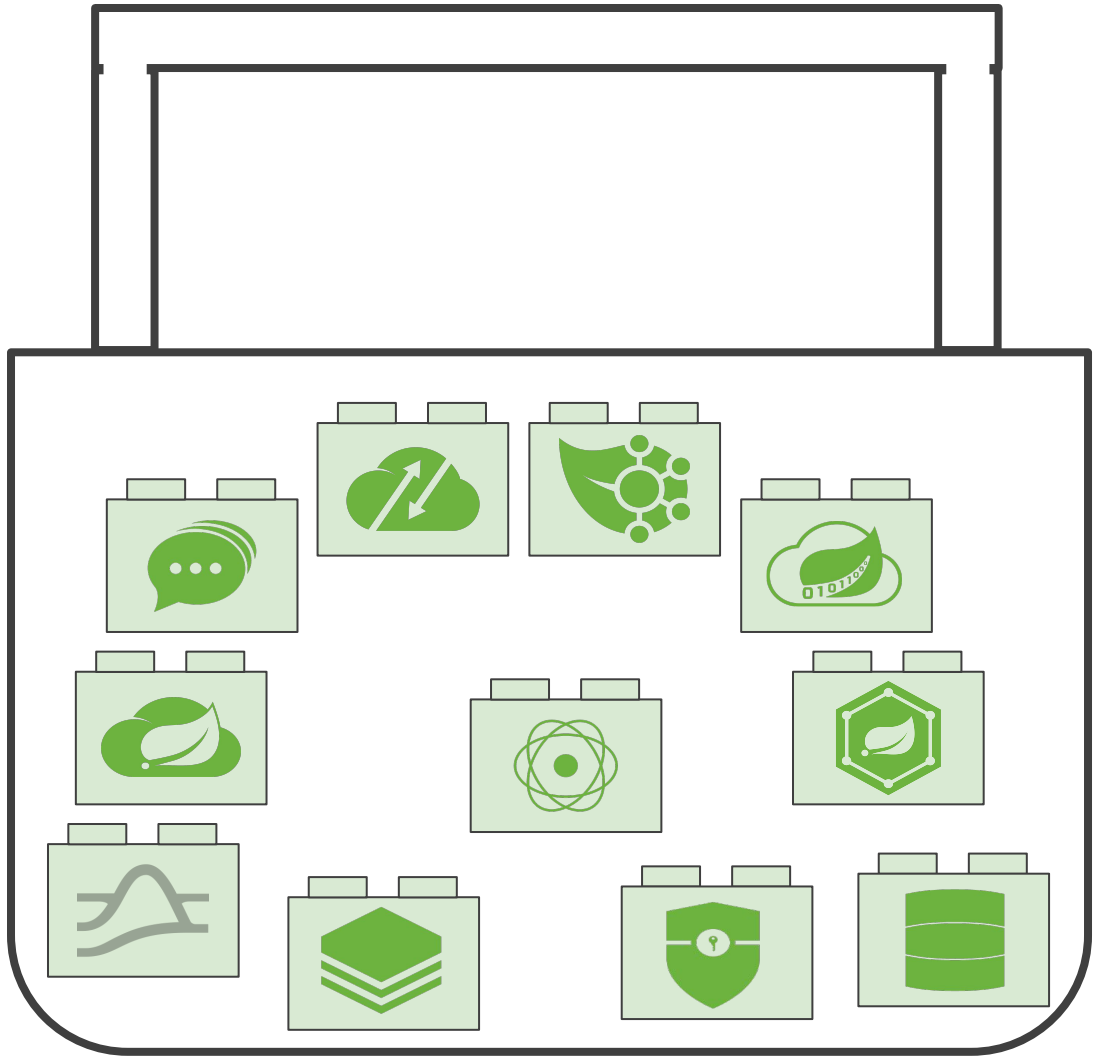
Native App Compilation





I want to write extremely performant code
so that I can make the most of the resources I have





I want to pick the right framework
so that I have a strong foundation to build my business

Breadth of use cases

Stable

Flexible

Growing

vmware EXPLORE

SpringOne

Thank you

vmware EXPLORE

Please take your survey.