- security.oauth2.client.resource-ids
 Comma-separated list of resource IDs associated with the client.
- security.oauth2.client.scopeScope assigned to the client.
- security.oauth2.client.token-name
 The token name.
- security.oauth2.client.use-current-uri
 Whether the current URI (if set) in the request should be used in preference to the pre-established redirect URI. (Default value: true)
- security.oauth2.client.user-authorization-uri
 The URI to which the user is to be redirected to authorize an access token.
- security.oauth2.resource.id
 Identifier of the resource.
- security.oauth2.resource.jwt.key-uri
 The URI of the JWT token. Can be set if the value is not available and the key is public.
- security.oauth2.resource.jwt.key-value
 The verification key of the JWT token. Can either be a symmetric secret or PEM-encoded RSA public key. If the value is not available, you can set the URI instead.
- security.oauth2.resource.prefer-token-infoUse the token info; can be set to false to use the user info. (Default value: true)
- security.oauth2.resource.service-id
 The service ID. (Default value: resource)
- security.oauth2.resource.token-info-uri URI of the token decoding endpoint.
- security.oauth2.resource.token-type
 The token type to send when using the userInfoUri.
- security.oauth2.resource.user-info-uri URI of the user endpoint.
- security.oauth2.sso.filter-order
 Filter order to apply if not providing an explicit WebSecurityConfigurerAdapter (otherwise the order can be provided there instead).
- security.oauth2.sso.login-path
 Path to the login page—the page that triggers the redirect to the OAuth2 Authorization Server. (Default value: /login)

security.require-ssl

Enable secure channel for all requests. (Default value: false)

security.sessions

Session creation policy. (Default values: always, never, if required, stateless).

security.user.name

Default user name. (Default value: user)

security.user.password

Password for the default user name.

security.user.role

Granted roles for the default user name.

server.address

Network address to which the server should bind.

server.compression.enabled

Whether or not compression should be enabled. (Default value: false)

server.compression.excluded-user-agents

Comma-separated list of user agents for which responses should not be compressed. (Default values: text/html,text/xml,text/plain,text/css)

server.compression.mime-types

Comma-separated list of MIME types that should be compressed.

server.compression.min-response-size

Minimum response size (in bytes) that is required for compression to be performed. (Default value: 2048)

server.context-parameters.[param name]

Sets a servlet context parameter.

server.context-path

Context path of the application.

server.display-name

Display name of the application. (Default value: application)

server.jsp-servlet.class-name

The class name of the servlet to use for JSPs. (Default value: org.apache.jasper .servlet.JspServlet)

server.jsp-servlet.init-parameters.[param name]

Sets a JSP servlet initialization parameter.

server.jsp-servlet.registered

Whether or not the JSP servlet should be registered with the embedded servlet container. (Default value: true)

server.port
Server HTTP port.

server.servlet-pathPath of the main dispatcher servlet. (Default value: /)

server.session.cookie.comment
Comment for the session cookie.

server.session.cookie.domainDomain for the session cookie.

server.session.cookie.http-only HttpOnly flag for the session cookie.

server.session.cookie.max-ageMaximum age of the session cookie in seconds.

server.session.cookie.name
Session cookie name.

server.session.cookie.pathPath of the session cookie.

server.session.cookie.secure"Secure" flag for the session cookie.

server.session.persistent
 Persist session data between restarts. (Default value: false)

server.session.timeout
 Session timeout in seconds.

server.session.tracking-modes
 Session tracking modes (one or more of the following: cookie, url, ssl).

server.ssl.ciphersSupported SSL ciphers.

server.ssl.client-auth
 Whether client authentication is wanted (want) or needed (need). Requires a trust store.

server.ssl.enabledWhether SSL is enabled or not. (Default value: true)

server.ssl.key-alias
 Alias that identifies the key in the key store.

server.ssl.key-passwordPassword used to access the key in the key store.

- server.ssl.key-storePath to the key store that holds the SSL certificate (typically a .jks file).
- server.ssl.key-store-passwordPassword used to access the key store.
- server.ssl.key-store-provider Provider for the key store.
- server.ssl.key-store-type
 Type of the key store.
- server.ssl.protocolSSL protocol to use. (Default value: TLS)
- server.ssl.trust-store
 Trust store that holds SSL certificates.
- server.ssl.trust-store-password
 Password used to access the trust store.
- server.ssl.trust-store-provider
 Provider for the trust store.
- server.ssl.trust-store-typeType of the trust store.
- server.tomcat.access-log-enabledWhether or not the access log is enabled. (Default value: false)
- server.tomcat.access-log-patternFormat pattern for access logs. (Default value: common)
- server.tomcat.accesslog.directory
 Directory in which log files are created. Can be relative to the tomcat base dir or absolute. (Default value: logs)
- server.tomcat.accesslog.enabledEnable access log. (Default value: false)
- server.tomcat.accesslog.patternFormat pattern for access logs. (Default value: common)
- server.tomcat.accesslog.prefixLog filename prefix. (Default value: access log)
- server.tomcat.accesslog.suffix
 Log filename suffix. (Default value: .log)
- server.tomcat.background-processor-delay
 Delay in seconds between the invocation of backgroundProcess methods.
 (Default value: 30)

- server.tomcat.basedir
 Tomcat base directory. If not specified, a temporary directory will be used.
- server.tomcat.internal-proxies Regular expression that matches proxies that are to be trusted. Default: $10 \d{1,3} \d{1,3$
- server.tomcat.max-http-header-size
 Maximum size in bytes of the HTTP message header. (Default value: 0)
- server.tomcat.max-threads
 Maximum number of worker threads. (Default value: 0)
- server.tomcat.port-headerName of the HTTP header used to override the original port value.
- server.tomcat.protocol-header
 Header that holds the incoming protocol, usually named X-Forwarded-Proto.
 Configured as a RemoteIpValve only if remoteIpHeader is also set.
- server.tomcat.protocol-header-https-value
 Value of the protocol header that indicates that the incoming request uses SSL.
 (Default value: https)
- server.tomcat.remote-ip-header
 Name of the HTTP header from which the remote IP is extracted. Configured as a RemoteIpValve only if remoteIpHeader is also set.
- server.tomcat.uri-encodingCharacter encoding to use to decode the URI.
- server.undertow.access-log-dir
 Undertow access log directory. (Default value: logs)
- server.undertow.access-log-enabledWhether or not the access log is enabled. (Default value: false)
- server.undertow.access-log-patternFormat pattern for access logs. (Default value: common)
- server.undertow.accesslog.dirUndertow access log directory.
- server.undertow.accesslog.enabled Enable access log. (Default value: false)
- server.undertow.accesslog.patternFormat pattern for access logs. (Default value: common)

- server.undertow.buffer-size Size of each buffer in bytes.
- server.undertow.buffers-per-regionNumber of buffers per region.
- server.undertow.direct-buffersAllocate buffers outside the Java heap.
- server.undertow.io-threads
 Number of I/O threads to create for the worker.
- server.undertow.worker-threads Number of worker threads.
- spring.activemq.broker-urlURL of the ActiveMQ broker. Auto-generated by default.
- spring.activemq.in-memory
 Specify if the default broker URL should be in memory. Ignored if an explicit broker has been specified. (Default value: true)
- spring.activemq.passwordLogin password of the broker.
- spring.activemq.pooled
 Specify if a PooledConnectionFactory should be created instead of a regular
 ConnectionFactory. (Default value: false)
- spring.activemq.user Login user of the broker.
- spring.aop.auto
 Add @EnableAspectJAutoProxy. (Default value: true)
- spring.aop.proxy-target-class
 Whether subclass-based (CGLIB) proxies are to be created (true) as opposed to standard Java interface-based proxies (false). (Default value: false)
- spring.application.admin.enabledEnable admin features for the application. (Default value: false)
- spring.application.admin.jmx-name
 JMX name of the application admin MBean. (Default value: org.springframework.boot:type=Admin,name=SpringApplication)
- spring.artemis.embedded.cluster-passwordCluster password. Randomly generated on startup by default.
- spring.artemis.embedded.data-directory
 Journal file directory. Not necessary if persistence is turned off.

- spring.artemis.embedded.enabled
 Enable embedded mode if the Artemis server APIs are available. (Default value: true)
- spring.artemis.embedded.persistentEnable persistent store. (Default value: false)
- spring.artemis.embedded.queuesComma-separated list of queues to create on startup. (Default value: [])
- spring.artemis.embedded.server-id
 Server ID. By default, an auto-incremented counter is used. (Default value: 0)
- spring.artemis.embedded.topicsComma-separated list of topics to create on startup. (Default value: [])
- spring.artemis.hostArtemis broker host. (Default value: localhost)
- spring.artemis.mode
 Artemis deployment mode, auto-detected by default. Can be explicitly set to native or embedded.
- spring.artemis.portArtemis broker port. (Default value: 61616)
- spring.autoconfigure.excludeAuto-configuration classes to exclude.
- spring.batch.initializer.enabled
 Create the required batch tables on startup if necessary. (Default value: true)
- spring.batch.job.enabledExecute all Spring Batch jobs in the context on startup. (Default value: true)
- spring.batch.job.names
 Comma-separated list of job names to execute on startup. By default, all jobs found in the context are executed.
- spring.batch.schema
 Path to the SQL file to use to initialize the database schema. (Default value:
 classpath:org/springframework/batch/core/schema-@@platform@@.sql)
- spring.batch.table-prefixTable prefix for all the batch metadata tables.
- spring.cache.cache-names
 Comma-separated list of cache names to create if supported by the underlying cache manager. Usually this disables the ability to create additional caches on the fly.

- spring.cache.ehcache.config
 The location of the configuration file to use to initialize EhCache.
- spring.cache.guava.spec
 The spec to use to create caches. Check CacheBuilderSpec for more details on the spec format.
- spring.cache.hazelcast.config
 The location of the configuration file to use to initialize Hazelcast.
- spring.cache.infinispan.configThe location of the configuration file to use to initialize Infinispan.
- spring.cache.jcache.config
 The location of the configuration file to use to initialize the cache manager. The configuration file is dependent on the underlying cache implementation.
- spring.cache.jcache.provider Fully qualified name of the CachingProvider implementation to use to retrieve the JSR-107 compliant cache manager. Only needed if more than one JSR-107 implementation is available on the classpath.
- spring.cache.typeCache type, auto-detected according to the environment by default.
- spring.dao.exceptiontranslation.enabled
 Enable the PersistenceExceptionTranslationPostProcessor. (Default value:
 true)
- spring.data.elasticsearch.cluster-name
 Elasticsearch cluster name. (Default value: elasticsearch)
- spring.data.elasticsearch.cluster-nodes
 Comma-separated list of cluster node addresses. If not specified, starts a client node.
- spring.data.elasticsearch.properties
 Additional properties used to configure the client.
- spring.data.elasticsearch.repositories.enabled
 Enable Elasticsearch repositories. (Default value: true)
- spring.data.jpa.repositories.enabled Enable JPA repositories. (Default value: true)
- spring.data.mongodb.authentication-database
 Authentication database name.
- spring.data.mongodb.database Database name.

- spring.data.mongodb.field-naming-strategy
 Fully qualified name of the FieldNamingStrategy to use.
- spring.data.mongodb.grid-fs-database
 GridFS database name.
- spring.data.mongodb.host Mongo server host.
- spring.data.mongodb.passwordLogin password of the Mongo server.
- spring.data.mongodb.port
 Mongo server port.
- spring.data.mongodb.repositories.enabled
 Enable Mongo repositories. (Default value: true)
- spring.data.mongodb.uri
 Mongo database URI. When set, the host and port are ignored. (Default value:
 mongodb://localhost/test)
- spring.data.mongodb.username
 Login user of the Mongo server.
- spring.data.rest.base-pathThe base path to expose repository resources under.
- spring.data.rest.default-page-size
 The default size of a page in paged data. (Default value: 20)
- spring.data.rest.limit-param-name
 The name of the URL query string parameter that indicates how many results to return at once. (Default value: size)
- spring.data.rest.max-page-size
 The maximum size of pages. (Default value: 1000)
- spring.data.rest.page-param-name
 The name of the URL query string parameter that indicates what page to return.
 (Default value: page)
- spring.data.rest.return-body-on-createWhether to return a response body after creating an entity. (Default value: false)
- spring.data.rest.return-body-on-update
 Whether to return a response body after updating an entity. (Default value: false)
- spring.data.rest.sort-param-name
 The name of the URL query string parameter that indicates what direction to sort results. (Default value: sort)

- spring.data.solr.host
 Solr host. Ignored if zk-host is set. (Default value: http://127.0.0.1:8983/solr)
- spring.data.solr.repositories.enabledEnable Solr repositories. (Default value: true)
- spring.data.solr.zk-host
 ZooKeeper host address in the form HOST:PORT.
- spring.datasource.abandon-when-percentage-full
 The percentage threshold above which connections that have been abandoned (timed out) will be closed and reported.
- spring.datasource.allow-pool-suspension Whether or not pool suspension is allowed. There is a performance impact when pool suspension is enabled. Unless you need it (for a redundancy system, for example) do not enable it. This property only applies when using the Hikari data pool. (Default value: false)
- spring.datasource.alternate-username-allowedWhether or not an alternate username is allowed.
- spring.datasource.auto-commitWhether or not updates are auto-committed.
- spring.datasource.catalogThe default catalog name.
- spring.datasource.commit-on-return
 Whether or not the connection pool should commit any pending transaction when a connection is returned.
- spring.datasource.connection-init-sql
 A SQL string that will be executed on all new connections when they are created, before they are added to the connection pool.
- spring.datasource.connection-init-sqls
 A list of SQL statements to be executed when a physical connection is first created.
 (For use with the DBCP connection pool.)
- spring.datasource.connection-properties. [key]
 Sets a property to be used when creating a connection. (For the DBCP connection pool.)
- spring.datasource.connection-test-query
 A SQL query to be executed to test the validity of connections.
- spring.datasource.connection-timeout
 The connection timeout (in milliseconds).

- spring.datasource.continue-on-error
 Do not stop if an error occurs while initializing the database. (Default value: false)
- spring.datasource.dataData (DML) script resource reference.
- spring.datasource.data-source-class-name
 The fully qualified class name of the data source to use to get connections.
- spring.datasource.data-source-jndi
 The JNDI location of the data source to use to get connections.
- spring.datasource.data-source-properties.[key]
 Sets a property to be used when creating the data source. (For the Hikari connection pool.)
- spring.datasource.db-properties
 Sets a property to be used when creating the data source. (For the Tomcat connection pool.)
- spring.datasource.default-auto-commit
 Whether or not to auto-commit on connections.
- spring.datasource.default-catalogThe default catalog for connections.
- spring.datasource.default-read-only
 The default read-only state for connections.
- spring.datasource.default-transaction-isolation
 The default transaction isolation for connections.
- spring.datasource.driver-class-name
 Fully qualified name of the JDBC driver. Auto-detected based on the URL by default.
- spring.datasource.fair-queue
 Whether or not to return connections in a FIFO fashion.
- spring.datasource.health-check-properties. [key]
 Sets a property to be included in the health check. (For the Hikari connection pool.)
- spring.datasource.idle-timeout
 The maximum amount of time (in milliseconds) that a connection is allowed to sit idle in the pool. (Default value: 10)

- spring.datasource.ignore-exception-on-pre-load
 Whether or not to ignore connections while initializing the datasource pool.
- spring.datasource.init-sql
 A custom query to run when a connection is first created.
- spring.datasource.initial-size
 The number of connections that will be established when the connection pool is started.
- spring.datasource.initialization-fail-fast
 Whether or not the construction of the pool should throw an exception if the minimum number of connections cannot be created. (Default value: true)
- spring.datasource.initializePopulate the database using data.sql. (Default value: true)
- spring.datasource.isolate-internal-queries
 Whether internal queries should be isolated. (Default value: false)
- spring.datasource.jdbc-interceptors
 A semicolon-separated list of classnames extending the JdbcInterceptor class.
 These interceptors will be inserted as an interceptor into the chain of operations on a java.sql.Connection object. (For the Tomcat connection pool.)
- spring.datasource.jdbc-url
 The JDBC URL to create connections with.
- spring.datasource.jmx-enabledEnable JMX support (if provided by the underlying pool). (Default value: false)
- spring.datasource.jndi-name
 JNDI location of the datasource. Class, URL, username, and password are ignored when set.
- spring.datasource.leak-detection-threshold
 The threshold, in milliseconds, for detecting connection leaks with the Hikari connection pool.
- spring.datasource.log-abandoned
 Whether to log stack traces for application code that abandoned a statement or connection. For use with the DBCP connection pool. (Default value: false)
- spring.datasource.log-validation-errors
 Whether validation errors should be logged when using the Tomcat connection pool.
- spring.datasource.login-timeout
 The timeout (in seconds) for connecting to the database.

- spring.datasource.max-active
 The maximum number of active connections in the connection pool.
- spring.datasource.max-ageThe maximum age of a connection in the connection pool.
- spring.datasource.max-idle
 The maximum number of idle connections in the connection pool.
- spring.datasource.max-lifetimeThe maximum lifetime (in milliseconds) of a connection in the connection pool.
- spring.datasource.max-open-prepared-statementsThe maximum number of open prepared statements.
- spring.datasource.max-wait
 The maximum number of milliseconds that the pool will wait for a connection to be returned before throwing an exception.
- spring.datasource.maximum-pool-size
 The maximum size that the pool is allowed to reach, including both idle and in-use connections.
- spring.datasource.min-evictable-idle-time-millis
 The minimum amount of time an object may sit idle in the pool before it is eligible for eviction by the idle object evictor (if any).
- spring.datasource.min-idle
 The minimum number of established connections that should be kept in the pool at all times. (For DBCP and Tomcat connection pools.)
- spring.datasource.minimum-idle
 The minimum number of idle connections that HikariCP tries to maintain in the pool.
- spring.datasource.name The datasource name.
- spring.datasource.num-tests-per-eviction-run The number of objects to examine during each run of the idle object evictor thread (if any).
- spring.datasource.passwordLogin password of the database.
- spring.datasource.platform
 Platform to use in the schema resource (schema-\${platform}.sql). (Default value: all)

- spring.datasource.pool-name The connection pool name.
- spring.datasource.pool-prepared-statements
 Whether to pool statements or not.
- spring.datasource.propagate-interrupt-state
 Whether to propagate interrupt state for interrupted threads waiting for a connection.
- spring.datasource.read-only
 Set a datasource as read-only when using the Hikari connection pool.
- spring.datasource.register-mbeansWhether or not the Hikari connection pool should register JMX MBeans.
- spring.datasource.remove-abandoned
 Whether abandoned connections should be removed if they exceed the abandoned timeout.
- spring.datasource.remove-abandoned-timeout
 The time in seconds before a connection can be considered abandoned.
- spring.datasource.rollback-on-return
 Whether any pending transactions should be rolled back when a connection is returned to the pool.
- spring.datasource.schemaSchema (DDL) script resource reference.
- spring.datasource.separator
 Statement separator in SQL initialization scripts. (Default value: ;)
- spring.datasource.sql-script-encoding SQL scripts encoding.
- spring.datasource.suspect-timeout
 How long in seconds before logging a suspected abandoned connection.
- spring.datasource.test-on-borrow
 Whether a connection should be tested upon being borrowed from the connection pool.
- spring.datasource.test-on-connectWhether a connection should be tested upon creation.
- spring.datasource.test-on-returnWhether a connection should be tested upon return to the connection pool.
- spring.datasource.test-while-idle
 Whether a connection should be tested while idle.

- spring.datasource.time-between-eviction-runs-millis
 The number of milliseconds to sleep between runs of the idle connection validation, abandoned cleaner, and idle pool resizing.
- spring.datasource.transaction-isolationSet the default transaction isolation level when using the Hikari connection pool.
- spring.datasource.url IDBC URL of the database.
- spring.datasource.use-disposable-connection-facade Whether the connection will be wrapped with a facade that will disallow the connection to be used after Connection.close() is called.
- spring.datasource.use-equalsWhether to use String.equals() instead of == when comparing method names.
- spring.datasource.use-lock
 Whether a lock should be used when operations are performed on the connection object.
- spring.datasource.username Login user of the database.
- spring.datasource.validation-interval
 How often, in milliseconds, to run connection validation.
- spring.datasource.validation-query
 The SQL query that will be used to validate connections from this pool before returning them to the caller or pool.
- spring.datasource.validation-query-timeout
 The timeout in seconds before a connection validation query fails.
- spring.datasource.validation-timeout
 The timeout in seconds before a connection validation fails. (For use with the Hikari connection pool.)
- spring.datasource.validator-class-name
 The fully qualified class name for an optional validator class that will be used in place of test queries.
- spring.datasource.xa.data-source-class-name XA datasource fully qualified name.
- spring.datasource.xa.propertiesProperties to pass to the XA data source.
- spring.freemarker.allow-request-override
 Set whether HttpServletRequest attributes are allowed to override (hide)
 controller-generated model attributes of the same name.

- spring.freemarker.allow-session-override
 Set whether HttpSession attributes are allowed to override (hide) controller-generated model attributes of the same name.
- spring.freemarker.cacheEnable template caching.
- spring.freemarker.charsetTemplate encoding.
- spring.freemarker.check-template-location Check that the templates location exists.
- spring.freemarker.content-type Content-Type value.
- spring.freemarker.enabledEnable MVC view resolution for this technology.
- spring.freemarker.expose-request-attributes
 Set whether all request attributes should be added to the model prior to merging with the template.
- spring.freemarker.expose-session-attributes
 Set whether all HttpSession attributes should be added to the model prior to merging with the template.
- spring.freemarker.expose-spring-macro-helpers Set whether to expose a RequestContext for use by Spring's macro library, under the name springMacroRequestContext.
- spring.freemarker.prefer-file-system-access
 Prefer filesystem access for template loading. Filesystem access enables hot detection of template changes. (Default value: true)
- spring.freemarker.prefixPrefix that gets prepended to view names when building a URL.
- spring.freemarker.request-context-attributeName of the RequestContext attribute for all views.
- spring.freemarker.settingsWell-known FreeMarker keys that will be passed to FreeMarker's configuration.
- spring.freemarker.suffix
 Suffix that gets appended to view names when building a URL.
- spring.freemarker.template-loader-path
 Comma-separated list of template paths. (Default value: ["classpath:/templates/"])

- spring.freemarker.view-names
 Whitelist of view names that can be resolved.
- spring.groovy.template.allow-request-override Set whether HttpServletRequest attributes are allowed to override (hide) controller-generated model attributes of the same name.
- spring.groovy.template.allow-session-override
 Set whether HttpSession attributes are allowed to override (hide) controller-generated model attributes of the same name.
- spring.groovy.template.cacheEnable template caching.
- spring.groovy.template.charsetTemplate encoding.
- spring.groovy.template.check-template-locationCheck that the templates location exists.
- spring.groovy.template.configuration.auto-escape
 Whether or not model variables are escaped when rendered in the template.
 (Default value: false)
- spring.groovy.template.configuration.auto-indent
 Whether or not the template renders indentation automatically. (Default value: false)
- spring.groovy.template.configuration.auto-indent-string
 The string used for indentation when auto-indentation is enabled. Either SPACES or TAB. (Default value: SPACES)
- spring.groovy.template.configuration.auto-new-line
 Whether or not new lines should be rendered by the template. (Default value: false)
- spring.groovy.template.configuration.base-template-class
 The template base class.
- spring.groovy.template.configuration.cache-templatesWhether or not templates should be cached. (Default value: true)
- spring.groovy.template.configuration.declaration-encoding
 The encoding used to write the declaration header.
- spring.groovy.template.configuration.expand-empty-elements Whether elements without a body should be written in the short form (e.g.,
or expanded form (e.g.,
br></br>). (Default value: false)

- spring.groovy.template.configuration.locale
 Set the template locale.
- spring.groovy.template.configuration.new-line-string
 The string to render for a new line when auto-newlines are enabled. (Default is the value of the system's line.separator property)
- spring.groovy.template.configuration.resource-loader-path
 The path to the Groovy templates. (Default value: classpath:/templates/)
- spring.groovy.template.configuration.use-double-quotes
 Whether attributes should use double quotes or single quotes. (Default value: false)
- spring.groovy.template.content-type
 Content-Type value.
- spring.groovy.template.enabledEnable MVC view resolution for this technology.
- spring.groovy.template.expose-request-attributes
 Set whether all request attributes should be added to the model prior to merging with the template.
- spring.groovy.template.expose-session-attributes
 Set whether all HttpSession attributes should be added to the model prior to merging with the template.
- spring.groovy.template.expose-spring-macro-helpers Set whether to expose a RequestContext for use by Spring's macro library, under the name springMacroRequestContext.
- spring.groovy.template.prefixPrefix that gets prepended to view names when building a URL.
- spring.groovy.template.request-context-attributeName of the RequestContext attribute for all views.
- spring.groovy.template.resource-loader-path
 Template path. (Default value: classpath:/templates/)
- spring.groovy.template.suffixSuffix that gets appended to view names when building a URL.
- spring.groovy.template.view-namesWhitelist of view names that can be resolved.
- spring.h2.console.enabled
 Enable the console. (Default value: false)

- spring.h2.console.path
 Path at which the console will be available. (Default value: /h2-console)
- spring.hateoas.apply-to-primary-object-mapper
 Specify if HATEOAS support should be applied to the primary ObjectMapper.
 (Default value: true)
- spring.hornetq.embedded.cluster-password
 Cluster password. Randomly generated on startup by default.
- spring.hornetq.embedded.data-directory
 Journal file directory. Not necessary if persistence is turned off.
- spring.hornetq.embedded.enabled
 Enable embedded mode if the HornetQ server APIs are available. (Default value: true)
- spring.hornetq.embedded.persistent
 Enable persistent store. (Default value: false)
- spring.hornetq.embedded.queuesComma-separated list of queues to create on startup. (Default value: [])
- spring.hornetq.embedded.server-id
 Server ID. By default, an auto-incremented counter is used. (Default value: 0)
- spring.hornetq.embedded.topicsComma-separated list of topics to create on startup. (Default value: [])
- spring.hornetq.hostHornetQ broker host. (Default value: localhost)
- spring.hornetq.mode
 HornetQ deployment mode, auto-detected by default. Can be explicitly set to native or embedded.
- spring.hornetq.portHornetQ broker port. (Default value: 5445)
- spring.http.converters.preferred-json-mapper
 Preferred JSON mapper to use for HTTP message conversion.
- spring.http.encoding.charset
 Charset of HTTP requests and responses. Added to the Content-Type header if not set explicitly. (Default value: UTF-8)
- spring.http.encoding.enabledEnable HTTP encoding support. (Default value: true)

- spring.http.encoding.force
 Force the encoding to the configured charset on HTTP requests and responses.
 (Default value: true)
- spring.jackson.date-format
 Date format string (yyyy-MM-dd HH:mm:ss) or a fully qualified date format class name.
- spring.jackson.deserialization
 Jackson on/off features that affect the way Java objects are deserialized.
- spring.jackson.generatorJackson on/off features for generators.
- spring.jackson.joda-date-time-format
 Joda date/time format string (yyyy-MM-dd HH:mm:ss). If not configured, date-format will be used as a fallback if it's configured with a format string.
- spring.jackson.locale Locale used for formatting.
- spring.jackson.mapperJackson general purpose on/off features.
- spring.jackson.parserJackson on/off features for parsers.
- spring.jackson.property-naming-strategy
 One of the constants on Jackson's PropertyNamingStrategy (CAMEL_CASE_TO _LOWER_CASE_WITH_UNDERSCORES). Can also be a fully qualified class name of a PropertyNamingStrategy subclass.
- spring.jackson.serialization
 Jackson on/off features that affect the way Java objects are serialized.
- spring.jackson.serialization-inclusion Controls the inclusion of properties during serialization. Configured with one of the values in Jackson's JsonInclude.Include enumeration.
- spring.jackson.time-zone
 Time zone used when formatting dates. Configured using any recognized time zone identifier, such as America/Los_Angeles or GMT+10.
- spring.jersey.filter.order
 Jersey filter chain order. (Default value: 0)
- spring.jersey.initInit parameters to pass to Jersey via the servlet or filter.
- spring.jersey.typeJersey integration type. Can be either servlet or filter.

- spring.jms.jndi-name
 Connection factory JNDI name. When set, takes precedence to others' connection factory auto-configurations.
- spring.jms.listener.acknowledge-mode
 Acknowledge mode of the container. By default, the listener is transacted with automatic acknowledgment.
- spring.jms.listener.auto-startupStart the container automatically on startup. (Default value: true)
- spring.jms.listener.concurrency
 Minimum number of concurrent consumers.
- spring.jms.listener.max-concurrency
 Maximum number of concurrent consumers.
- spring.jms.pub-sub-domain
 Specify if the default destination type supports publish/subscribe (if it is a topic as opposed to a queue). (Default value: false)
- spring.jmx.default-domain JMX domain name.
- spring.jmx.enabled
 Expose management beans to the JMX domain. (Default value: true)
- spring.jmx.serverMBeanServer bean name. (Default value: mbeanServer)
- spring.jooq.sql-dialect
 SQLDialect JOOQ used when communicating with the configured datasource, such as POSTGRES.
- spring.jpa.database
 Target database to operate on, auto-detected by default. Can be alternatively set using the databasePlatform property.
- spring.jpa.database-platform
 Name of the target database to operate on, auto-detected by default. Can be alternatively set using the Database enum.
- spring.jpa.generate-ddl
 Initialize the schema on startup. (Default value: false)
- spring.jpa.hibernate.ddl-auto DDL mode (none, validate, update, create, create-drop). This is actually a shortcut for the hibernate.hbm2ddl.auto property. Default to create-drop when using an embedded database; none otherwise.

- spring.jpa.hibernate.naming-strategy
 The fully qualified class name of a Hibernate naming strategy.
- spring.jpa.open-in-view
 Register OpenEntityManagerInViewInterceptor. Binds a JPA EntityManager to the thread for the entire processing of the request. (Default value: true)
- spring.jpa.propertiesAdditional native properties to set on the JPA provider.
- spring.jpa.show-sql
 Enable logging of SQL statements when using the Bitronix Transaction Manager.
 (Default value: false)
- spring.jta.allow-multiple-lrc
 Whether the transaction manager should allow enlistment of multiple LRC resources in a single transaction when using the Bitronix Transaction Manager. (Default value: false)
- spring.jta.asynchronous2-pc
 Whether two-phase commit should be executed asynchronously when using the Bitronix Transaction Manager. (Default value: false)
- spring.jta.background-recovery-interval
 How often, in minutes, to run the recovery process when using the Bitronix Transaction Manager. (Default value: 1)
- spring.jta.background-recovery-interval-seconds
 How often, in seconds, to run the recovery process when using the Bitronix Transaction Manager. (Default value: 60)
- spring.jta.current-node-only-recovery
 Whether recovery should filter out recovered XIDs that don't contain this JVM's unique ID when using the Bitronix Transaction Manager. (Default value: true)
- spring.jta.debug-zero-resource-transaction
 Whether creation and commit call stacks of transactions executed without a single enlisted resource should be tracked and logged when using the Bitronix Transaction Manager. (Default value: false)
- spring.jta.default-transaction-timeout
 The default transaction timeout, in seconds, when using the Bitronix Transaction
 Manager. (Default value: 60)
- spring.jta.disable-jmx
 Whether the registration of JMX MBeans should be disabled when using the Bitronix Transaction Manager. (Default value: false)

- spring.jta.enabledEnable JTA support. (Default value: true)
- spring.jta.exception-analyzer The exception analyzer to use when using the Bitronix Transaction Manager. Can be null for the default exception analyzer or the fully qualified class name of a custom exception analyzer.
- spring.jta.filter-log-status
 Whether mandatory logs should be written when using the Bitronix Transaction
 Manager. Enabling this parameter lowers space usage of the fragments but makes
 debugging more complex. (Default value: false)
- spring.jta.force-batching-enabled
 Whether disk forces are batched when using the Bitronix Transaction Manager.
 Disabling batching can seriously lower the transaction manager's throughput.
 (Default value: true)
- spring.jta.forced-write-enabled
 Whether logs are forced to disk when using the Bitronix Transaction Manager. Do not set to false in production because without disk force, integrity is not guaranteed. (Default value: true)
- spring.jta.graceful-shutdown-interval
 Maximum number of seconds the transaction manager will wait for transactions to be done before aborting them at shutdown time when using the Bitronix Transaction Manager. (Default value: 60)
- spring.jta.jndi-transaction-synchronization-registry-name
 The name that the transaction synchronization registry should be bound under in
 JNDI when using the Bitronix Transaction Manager. (Default value: java:comp/
 TransactionSynchronizationRegistry)
- spring.jta.jndi-user-transaction-name
 The name the user transaction should be bound under in JNDI when using the
 Bitronix Transaction Manager. (Default value: java:comp/UserTransaction)
- spring.jta.journal
 The journal name, when using the Bitronix Transaction Manager. Can be disk, null, or a fully qualified class name. (Default value: disk)
- spring.jta.log-dirTransaction logs directory.
- spring.jta.log-part1-filename
 The journal fragment file 1 name. (Default value: btm1.tlog)

- spring.jta.log-part2-filename
 The journal fragment file 2 name. (Default value: btm2.tlog)
- spring.jta.max-log-size-in-mb The maximum size in megabytes of the journal fragments. Larger logs allow transactions to stay longer in-doubt. If, however, the size is too small, the transaction manager will pause longer when a fragment is full. For use with the Bitronix Trans-
- spring.jta.resource-configuration-filename
 The Bitronix Transaction Manager configuration filename.
- spring.jta.server-id
 The ID that uniquely identifies the Bitronix Transaction Manager instance.
- spring.jta.skip-corrupted-logsWhether corrupted log files should be skipped. (Default value: false)
- spring.jta.transaction-manager-idTransaction manager unique identifier.

action Manager. (Default value: 2)

- spring.jta.warn-about-zero-resource-transaction
 Whether to warn about transactions executed without a single enlisted resource when using the Bitronix Transaction Manager. (Default value: true)
- spring.mail.default-encoding
 Default MimeMessage encoding. (Default value: UTF-8)
- spring.mail.host
 SMTP server host.
- spring.mail.jndi-name
 Session JNDI name. When set, takes precedence over any other mail settings.
- spring.mail.password
 Login password of the SMTP server.
- spring.mail.port
 SMTP server port.
- spring.mail.propertiesAdditional JavaMail session properties.
- spring.mail.protocolProtocol used by the SMTP server. (Default value: smtp)
- spring.mail.test-connectionTest that the mail server is available on startup. (Default value: false)

- spring.mail.usernameLogin user of the SMTP server.
- spring.messages.basename Comma-separated list of basenames, each following the ResourceBundle convention. Essentially a fully qualified classpath location. If it doesn't contain a package qualifier (such as org.mypackage), it will be resolved from the classpath root. (Default value: messages)
- spring.messages.cache-seconds
 Loaded resource bundle files cache expiration, in seconds. When set to -1, bundles are cached forever. (Default value: -1)
- spring.messages.encodingMessage bundles encoding. (Default value: UTF-8)
- spring.mobile.devicedelegatingviewresolver.enable-fallback
 Enable support for fallback resolution. (Default value: false)
- spring.mobile.devicedelegatingviewresolver.enabled
 Enable device view resolver. (Default value: false)
- spring.mobile.devicedelegatingviewresolver.mobile-prefix
 Prefix that gets prepended to view names for mobile devices. (Default value:
 mobile/)
- spring.mobile.devicedelegatingviewresolver.mobile-suffix
 Suffix that gets appended to view names for mobile devices.
- spring.mobile.devicedelegatingviewresolver.normal-prefix
 Prefix that gets prepended to view names for normal devices.
- spring.mobile.devicedelegatingviewresolver.normal-suffix
 Suffix that gets appended to view names for normal devices.
- spring.mobile.devicedelegatingviewresolver.tablet-prefix
 Prefix that gets prepended to view names for tablet devices. (Default value: tablet/)
- spring.mobile.devicedelegatingviewresolver.tablet-suffix
 Suffix that gets appended to view names for tablet devices.
- spring.mobile.sitepreference.enabled
 Enable SitePreferenceHandler. (Default value: true)
- spring.mongodb.embedded.featuresComma-separated list of features to enable.
- spring.mongodb.embedded.versionVersion of Mongo to use. (Default value: 2.6.10)

- spring.mustache.cacheEnable template caching.
- spring.mustache.charsetTemplate encoding.
- spring.mustache.check-template-locationCheck that the templates location exists.
- spring.mustache.content-type
 Content-Type value.
- spring.mustache.enabledEnable MVC view resolution for this technology.
- spring.mustache.prefix
 Prefix to apply to template names. (Default value: classpath:/templates/)
- spring.mustache.suffixSuffix to apply to template names. (Default value: .html)
- spring.mustache.view-names
 Whitelist of view names that can be resolved.
- spring.mvc.async.request-timeout Amount of time (in milliseconds) before asynchronous request handling times out. If this value is not set, the default timeout of the underlying implementation is used, such as 10 seconds on Tomcat with Servlet 3.
- spring.mvc.date-format
 Date format to use (such as dd/MM/yyyy).
- spring.mvc.favicon.enabled
 Enable resolution of favicon.ico. (Default value: true)
- spring.mvc.ignore-default-model-on-redirect
 If the content of the "default" model should be ignored during redirect scenarios.
 (Default value: true)
- spring.mvc.locale
 Locale to use.
- spring.mvc.message-codes-resolver-format
 Formatting strategy for message codes (PREFIX_ERROR_CODE, POSTFIX_ERROR_CODE).
- spring.mvc.view.prefix Spring MVC view prefix.
- spring.mvc.view.suffix Spring MVC view suffix.

- spring.rabbitmq.addressesComma-separated list of addresses to which the client should connect.
- spring.rabbitmq.dynamicCreate an AmqpAdmin bean. (Default value: true)
- spring.rabbitmq.host
 RabbitMQ host. (Default value: localhost)
- spring.rabbitmq.listener.acknowledge-mode Acknowledge mode of container.
- spring.rabbitmq.listener.auto-startupStart the container automatically on startup. (Default value: true)
- spring.rabbitmq.listener.concurrency Minimum number of consumers.
- spring.rabbitmq.listener.max-concurrency Maximum number of consumers.
- spring.rabbitmq.listener.prefetch
 Number of messages to be handled in a single request. It should be greater than or equal to the transaction size (if used).
- spring.rabbitmq.listener.transaction-size
 Number of messages to be processed in a transaction. For best results, it should be less than or equal to the prefetch count.
- spring.rabbitmq.passwordLogin to authenticate against the broker.
- spring.rabbitmq.portRabbitMQ port. (Default value: 5672)
- spring.rabbitmq.requested-heartbeatRequested heartbeat timeout in seconds; 0 for none.
- spring.rabbitmq.ssl.enabled
 Enable SSL support. (Default value: false)
- spring.rabbitmq.ssl.key-storePath to the key store that holds the SSL certificate.
- spring.rabbitmq.ssl.key-store-password
 Password used to access the key store.
- spring.rabbitmq.ssl.trust-storeTrust store that holds SSL certificates.

- spring.rabbitmq.ssl.trust-store-passwordPassword used to access the trust store.
- spring.rabbitmq.usernameLogin user to authenticate to the broker.
- spring.rabbitmq.virtual-hostVirtual host to use when connecting to the broker.
- spring.redis.databaseDatabase index used by the connection factory. (Default value: 0)
- spring.redis.host
 Redis server host. (Default value: localhost)
- spring.redis.passwordLogin password of the Redis server.
- spring.redis.pool.max-active
 Max number of connections that can be allocated by the pool at a given time. Use a negative value for no limit. (Default value: 8)
- spring.redis.pool.max-idle
 Max number of idle connections in the pool. Use a negative value to indicate an unlimited number of idle connections. (Default value: 8)
- spring.redis.pool.max-wait
 Maximum amount of time (in milliseconds) a connection allocation should block before throwing an exception when the pool is exhausted. Use a negative value to block indefinitely. (Default value: -1)
- spring.redis.pool.min-idle
 Target for the minimum number of idle connections to maintain in the pool. This setting only has an effect if it is positive. (Default value: 0)
- spring.redis.port
 Redis server port. (Default value: 6379)
- spring.redis.sentinel.master Name of Redis server.
- spring.redis.sentinel.nodesComma-separated list of host:port pairs.
- spring.redis.timeoutConnection timeout in milliseconds. (Default value: 0)
- spring.resources.add-mappings
 Enable default resource handling. (Default value: true)

- spring.resources.cache-period
 Cache period for the resources served by the resource handler, in seconds.
- spring.resources.chain.cache
 Enable caching in the resource chain. (Default value: true)
- spring.resources.chain.enabled
 Enable the Spring resource handling chain. (Disabled by default unless at least one strategy has been enabled.)
- spring.resources.chain.html-application-cache
 Enable HTML5 application cache manifest rewriting. (Default value: false)
- spring.resources.chain.strategy.content.enabledEnable the content version strategy. (Default value: false)
- spring.resources.chain.strategy.content.paths
 Comma-separated list of patterns to apply to the version strategy. (Default value: [/**])
- spring.resources.chain.strategy.fixed.enabled
 Enable the fixed version strategy. (Default value: false)
- spring.resources.chain.strategy.fixed.paths
 Comma-separated list of patterns to apply to the version strategy.
- spring.resources.chain.strategy.fixed.versionVersion string to use for the version strategy.
- spring.resources.static-locations
 Locations of static resources. Defaults to classpath:[/META-INF/resources/,
 /resources/, /static/, /public/] plus context:/ (the root of the servlet
 context).
- spring.sendgrid.password SendGrid password.
- spring.sendgrid.proxy.host SendGrid proxy host.
- spring.sendgrid.proxy.portSendGrid proxy port.
- spring.sendgrid.usernameSendGrid username
- spring.social.auto-connection-viewsEnable the connection status view for supported providers. (Default value: false)
- spring.social.facebook.app-id Application ID.

- spring.social.facebook.app-secret Application secret.
- spring.social.linkedin.app-id Application ID.
- spring.social.linkedin.app-secret Application secret.
- spring.social.twitter.app-id Application ID.
- spring.social.twitter.app-secretApplication secret.
- spring.thymeleaf.cacheEnable template caching. (Default value: true)
- spring.thymeleaf.check-template-location
 Check that the templates location exists. (Default value: true)
- spring.thymeleaf.content-type
 Content-Type value. (Default value: text/html)
- spring.thymeleaf.enabled
 Enable MVC Thymeleaf view resolution. (Default value: true)
- spring.thymeleaf.encodingTemplate encoding. (Default value: UTF-8)
- spring.thymeleaf.excluded-view-namesComma-separated list of view names that should be excluded from resolution.
- spring.thymeleaf.mode
 Template mode to be applied to templates. See also StandardTemplateModeHandlers.
 (Default value: HTML5)
- spring.thymeleaf.prefix Prefix that gets prepended to view names when building a URL. (Default value: classpath:/templates/)
- spring.thymeleaf.suffix Suffix that gets appended to view names when building a URL. (Default value: .html)
- spring.thymeleaf.template-resolver-order Order of the template resolver in the chain. By default, the template resolver is first in the chain. Ordering starts at 1 and should only be set if you have defined additional TemplateResolver beans.

- spring.thymeleaf.view-namesComma-separated list of view names that can be resolved.
- spring.velocity.allow-request-override Set whether HttpServletRequest attributes are allowed to override (hide) controller-generated model attributes of the same name.
- spring.velocity.allow-session-override
 Set whether HttpSession attributes are allowed to override (hide) controller-generated model attributes of the same name.
- spring.velocity.cacheEnable template caching.
- spring.velocity.charsetTemplate encoding.
- spring.velocity.check-template-locationCheck that the templates location exists.
- spring.velocity.content-type Content-Type value.
- spring.velocity.date-tool-attribute
 Name of the DateTool helper object to expose in the Velocity context of the view.
- spring.velocity.enabledEnable MVC view resolution for this technology.
- spring.velocity.expose-request-attributes
 Set whether all request attributes should be added to the model prior to merging with the template.
- spring.velocity.expose-session-attributes
 Set whether all HttpSession attributes should be added to the model prior to merging with the template.
- spring.velocity.expose-spring-macro-helpers
 Set whether to expose a RequestContext for use by Spring's macro library, under the name springMacroRequestContext.
- spring.velocity.number-tool-attribute
 Name of the NumberTool helper object to expose in the Velocity context of the view.
- spring.velocity.prefer-file-system-access
 Prefer filesystem access for template loading. Filesystem access enables hot detection of template changes. (Default value: true)

- spring.velocity.prefixPrefix that gets prepended to view names when building a URL.
- spring.velocity.properties Additional velocity properties.
- spring.velocity.request-context-attribute
 Name of the RequestContext attribute for all views.
- spring.velocity.resource-loader-path
 Template path. (Default value: classpath:/templates/)
- spring.velocity.suffix
 Suffix that gets appended to view names when building a URL.
- spring.velocity.toolbox-config-location Velocity Toolbox config location, such as /WEB-INF/toolbox.xml. Automatically loads a Velocity Tools toolbox definition file and exposes all defined tools in the specified scopes.
- spring.velocity.view-namesWhitelist of view names that can be resolved.
- spring.view.prefixSpring MVC view prefix.
- spring.view.suffix Spring MVC view suffix.

appendix D Spring Boot dependencies

Whether you're building your project with Maven or Gradle or you're working with the Spring Boot CLI, Spring Boot provides dependency management support for several libraries that are commonly used in Spring applications. Table D.1 lists all of the library dependencies supported by Spring Boot version 1.3.0.

In many cases, these dependencies will automatically be added to your project's build and classpath by one of the Spring Boot starters (described in appendix A). If, however, you need a library that isn't covered by the starters you're using, you can explicitly declare the dependency in your Maven or Gradle build specification.

For instance, suppose you want to include the H2 embedded database in your project. In a Gradle build, you'd need to declare the following:

```
compile("com.h2database:h2")
```

The same dependency can be declared in a Maven build like this:

```
<dependency>
  <groupId>com.h2database</groupId>
  <version>h2</version>
</dependency>
```

Notice that in both cases, you shouldn't need to specify the version. Spring Boot's dependency management will take care of that for you. You may, however, explicitly provide the version if you want to override the version chosen by Spring Boot.

If you're using the Spring Boot CLI to run your application, you can use the @Grab annotation from Groovy like this:

```
@Grab("h2")
```

When using the @Grab annotation to include any of the libraries in table D.1, you only need to specify the artifact. Spring Boot extends @Grab to infer the group and version for you.

Table D.1 Library dependencies supported by Spring Boot

		Version
antlr	antlr	2.7.7
ch.qos.logback	logback-access	1.1.3
ch.qos.logback	logback-classic	1.1.3
com.atomikos	transactions-jdbc	3.9.3
com.atomikos	transactions-jms	3.9.3
com.atomikos	transactions-jta	3.9.3
com.fasterxml.jackson.core	jackson-annotations	2.6.3
com.fasterxml.jackson.core	jackson-core	2.6.3
com.fasterxml.jackson.core	jackson-databind	2.6.3
com.fasterxml.jackson.dataformat	jackson-dataformat-csv	2.6.3
com.fasterxml.jackson.dataformat	jackson-dataformat-xml	2.6.3
com.fasterxml.jackson.dataformat	jackson-dataformat-yaml	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-hibernate4	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-hibernate5	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-jdk7	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-jdk8	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-joda	2.6.3
com.fasterxml.jackson.datatype	jackson-datatype-jsr310	2.6.3
com.fasterxml.jackson.module	jackson-module-parameter-names	2.6.3
com.gemstone.gemfire	gemfire	8.1.0
com.github.mxab.thymeleaf.extras	thymeleaf-extras-data-attribute	1.3
com.google.code.gson	gson	2.3.1
com.googlecode.json-simple	json-simple	1.1.1
com.h2database	h2	1.4.190
com.hazelcast	hazelcast	3.5.3
com.hazelcast	hazelcast-spring	3.5.3
com.jayway.jsonpath	json-path	2.0.0
com.jayway.jsonpath	json-path-assert	2.0.0
com.samskivert	jmustache	1.11
com.sendgrid	sendgrid-java	2.2.2

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
com.sun.mail	javax.mail	1.5.4
com.timgroup	java-statsd-client	3.1.0
com.zaxxer	HikariCP	2.4.2
com.zaxxer	HikariCP-java6	2.3.12
commons-beanutils	commons-beanutils	1.9.2
commons-collections	commons-collections	3.2.1
commons-dbcp	commons-dbcp	1.4
commons-digester	commons-digester	2.1
commons-pool	commons-pool	1.6
de.flapdoodle.embed	de.flapdoodle.embed.mongo	1.50.0
io.dropwizard.metrics	metrics-core	3.1.2
io.dropwizard.metrics	metrics-ganglia	3.1.2
io.dropwizard.metrics	metrics-graphite	3.1.2
io.dropwizard.metrics	metrics-servlets	3.1.2
io.projectreactor	reactor-bus	2.0.7.RELEASE
io.projectreactor	reactor-core	2.0.7.RELEASE
io.projectreactor	reactor-groovy	2.0.7.RELEASE
io.projectreactor	reactor-groovy-extensions	2.0.7.RELEASE
io.projectreactor	reactor-logback	2.0.7.RELEASE
io.projectreactor	reactor-net	2.0.7.RELEASE
io.projectreactor	reactor-stream	2.0.7.RELEASE
io.projectreactor.spring	reactor-spring-context	2.0.6.RELEASE
io.projectreactor.spring	reactor-spring-core	2.0.6.RELEASE
io.projectreactor.spring	reactor-spring-messaging	2.0.6.RELEASE
io.projectreactor.spring	reactor-spring-webmvc	2.0.6.RELEASE
io.undertow	undertow-core	1.3.5.Final
io.undertow	undertow-servlet	1.3.5.Final
io.undertow	undertow-websockets-jsr	1.3.5.Final
javax.cache	cache-api	1.0.0
javax.jms	jms-api	1.1-rev-1

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
javax.mail	javax.mail-api	1.5.4
javax.servlet	javax.servlet-api	3.1.0
javax.servlet	jstl	1.2
javax.transaction	javax.transaction-api	1.2
jaxen	jaxen	1.1.6
joda-time	joda-time	2.8.2
junit	junit	4.12
log4j	log4j	1.2.17
mysql	mysql-connector-java	5.1.37
net.sf.ehcache	ehcache	2.10.1
net.sourceforge.nekohtml	nekohtml	1.9.22
nz.net.ultraq.thymeleaf	thymeleaf-layout-dialect	1.3.1
org.apache.activemq	activemq-amqp	5.12.1
org.apache.activemq	activemq-blueprint	5.12.1
org.apache.activemq	activemq-broker	5.12.1
org.apache.activemq	activemq-camel	5.12.1
org.apache.activemq	activemq-client	5.12.1
org.apache.activemq	activemq-console	5.12.1
org.apache.activemq	activemq-http	5.12.1
org.apache.activemq	activemq-jaas	5.12.1
org.apache.activemq	activemq-jdbc-store	5.12.1
org.apache.activemq	activemq-jms-pool	5.12.1
org.apache.activemq	activemq-kahadb-store	5.12.1
org.apache.activemq	activemq-karaf	5.12.1
org.apache.activemq	activemq-leveldb-store	5.12.1
org.apache.activemq	activemq-log4j-appender	5.12.1
org.apache.activemq	activemq-mqtt	5.12.1
org.apache.activemq	activemq-openwire-generator	5.12.1
org.apache.activemq	activemq-openwire-legacy	5.12.1
org.apache.activemq	activemq-osgi	5.12.1

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.apache.activemq	activemq-partition	5.12.1
org.apache.activemq	activemq-pool	5.12.1
org.apache.activemq	activemq-ra	5.12.1
org.apache.activemq	activemq-run	5.12.1
org.apache.activemq	activemq-runtime-config	5.12.1
org.apache.activemq	activemq-shiro	5.12.1
org.apache.activemq	activemq-spring	5.12.1
org.apache.activemq	activemq-stomp	5.12.1
org.apache.activemq	activemq-web	5.12.1
org.apache.activemq	artemis-jms-client	1.1.0
org.apache.activemq	artemis-jms-server	1.1.0
org.apache.commons	commons-dbcp2	2.1.1
org.apache.commons	commons-pool2	2.4.2
org.apache.derby	derby	10.12.1.1
org.apache.httpcomponents	httpasyncclient	4.1.1
org.apache.httpcomponents	httpclient	4.5.1
org.apache.httpcomponents	httpcore	4.4.4
org.apache.httpcomponents	httpmime	4.5.1
org.apache.logging.log4j	log4j-api	2.4.1
org.apache.logging.log4j	log4j-core	2.4.1
org.apache.logging.log4j	log4j-slf4j-impl	2.4.1
org.apache.solr	solr-solrj	4.10.4
org.apache.tomcat.embed	tomcat-embed-core	8.0.28
org.apache.tomcat.embed	tomcat-embed-el	8.0.28
org.apache.tomcat.embed	tomcat-embed-jasper	8.0.28
org.apache.tomcat.embed	tomcat-embed-logging-juli	8.0.28
org.apache.tomcat.embed	tomcat-embed-websocket	8.0.28
org.apache.tomcat	tomcat-jdbc	8.0.28
org.apache.tomcat	tomcat-jsp-api	8.0.28
org.apache.velocity	velocity	1.7

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.apache.velocity	velocity-tools	2.0
org.aspectj	aspectjrt	1.8.7
org.aspectj	aspectjtools	1.8.7
org.aspectj	aspectjweaver	1.8.7
org.codehaus.btm	btm	2.1.4
org.codehaus.groovy	groovy	2.4.4
org.codehaus.groovy	groovy-all	2.4.4
org.codehaus.groovy	groovy-ant	2.4.4
org.codehaus.groovy	groovy-bsf	2.4.4
org.codehaus.groovy	groovy-console	2.4.4
org.codehaus.groovy	groovy-docgenerator	2.4.4
org.codehaus.groovy	groovy-groovydoc	2.4.4
org.codehaus.groovy	groovy-groovysh	2.4.4
org.codehaus.groovy	groovy-jmx	2.4.4
org.codehaus.groovy	groovy-json	2.4.4
org.codehaus.groovy	groovy-jsr223	2.4.4
org.codehaus.groovy	groovy-nio	2.4.4
org.codehaus.groovy	groovy-servlet	2.4.4
org.codehaus.groovy	groovy-sql	2.4.4
org.codehaus.groovy	groovy-swing	2.4.4
org.codehaus.groovy	groovy-templates	2.4.4
org.codehaus.groovy	groovy-test	2.4.4
org.codehaus.groovy	groovy-testng	2.4.4
org.codehaus.groovy	groovy-xml	2.4.4
org.codehaus.janino	janino	2.7.8
org.crashub	crash.cli	1.3.2
org.crashub	crash.connectors.ssh	1.3.2
org.crashub	crash.connectors.telnet	1.3.2
org.crashub	crash.embed.spring	1.3.2
org.crashub	crash.plugins.cron	1.3.2

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.crashub	crash.plugins.mail	1.3.2
org.crashub	crash.shell	1.3.2
org.eclipse.jetty	jetty-annotations	9.2.14.v20151106
org.eclipse.jetty	jetty-continuation	9.2.14.v20151106
org.eclipse.jetty	jetty-deploy	9.2.14.v20151106
org.eclipse.jetty	jetty-http	9.2.14.v20151106
org.eclipse.jetty	jetty-io	9.2.14.v20151106
org.eclipse.jetty	jetty-jsp	9.2.14.v20151106
org.eclipse.jetty	jetty-jmx	9.2.14.v20151106
org.eclipse.jetty	jetty-plus	9.2.14.v20151106
org.eclipse.jetty	jetty-security	9.2.14.v20151106
org.eclipse.jetty	jetty-server	9.2.14.v20151106
org.eclipse.jetty	jetty-servlet	9.2.14.v20151106
org.eclipse.jetty	jetty-servlets	9.2.14.v20151106
org.eclipse.jetty	jetty-util	9.2.14.v20151106
org.eclipse.jetty	jetty-webapp	9.2.14.v20151106
org.eclipse.jetty	jetty-xml	9.2.14.v20151106
org.eclipse.jetty.orbit	javax.servlet.jsp	2.2.0.v201112011158
org.eclipse.jetty.websocket	javax-websocket-server-impl	9.2.14.v20151106
org.eclipse.jetty.websocket	websocket-server	9.2.14.v20151106
org.elasticsearch	elasticsearch	1.5.2
org.firebirdsql.jdbc	jaybird-jdk16	2.2.9
org.firebirdsql.jdbc	jaybird-jdk17	2.2.9
org.firebirdsql.jdbc	jaybird-jdk18	2.2.9
org.flywaydb	flyway-core	3.2.1
org.freemarker	freemarker	2.3.23
org.glassfish	javax.el	3.0.0
org.glassfish.jersey.containers	jersey-container-servlet	2.19
org.glassfish.jersey.containers	jersey-container-servlet-core	2.19
org.glassfish.jersey.core	jersey-server	2.22.1

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.glassfish.jersey.ext	jersey-bean-validation	2.22.1
org.glassfish.jersey.ext	jersey-spring3	2.22.1
org.glassfish.jersey.media	jersey-media-json-jackson	2.22.1
org.hamcrest	hamcrest-core	1.3
org.hamcrest	hamcrest-library	1.3
org.hibernate	hibernate-core	4.3.11.Final
org.hibernate	hibernate-ehcache	4.3.11.Final
org.hibernate	hibernate-entitymanager	4.3.11.Final
org.hibernate	hibernate-envers	4.3.11.Final
org.hibernate	hibernate-jpamodelgen	4.3.11.Final
org.hibernate	hibernate-validator	5.2.2.Final
org.hibernate	hibernate-validator-annotation-processor	5.2.2.Final
org.hornetq	hornetq-jms-client	2.4.7.Final
org.hornetq	hornetq-jms-server	2.4.7.Final
org.hsqldb	hsqldb	2.3.3
org.infinispan	infinispan-jcache	8.0.1.Final
org.infinispan	infinispan-spring4	8.0.1.Final
org.javassist	javassist	3.18.1-GA
org.jdom	jdom2	2.0.6
org.jolokia	jolokia-core	1.3.2
org.json	json	20140107
org.jooq	jooq	3.7.1
org.jooq	jooq-meta	3.7.1
org.jooq	jooq-codegen	3.7.1
org.liquibase	liquibase-core	3.4.1
org.mariadb.jdbc	mariadb-java-client	1.2.3
org.mockito	mockito-core	1.10.19
org.mongodb	mongo-java-driver	2.13.3
org.postgresql	postgresql	9.4-1205-jdbc41
org.skyscreamer	jsonassert	1.2.3

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.slf4j	jcl-over-slf4j	1.7.13
org.slf4j	jul-to-slf4j	1.7.13
org.slf4j	log4j-over-slf4j	1.7.13
org.slf4j	slf4j-api	1.7.13
org.slf4j	slf4j-jdk14	1.7.13
org.slf4j	slf4j-log4j12	1.7.13
org.slf4j	slf4j-simple	1.7.13
org.spockframework	spock-core	1.0-groovy-2.4
org.spockframework	spock-spring	1.0-groovy-2.4
org.springframework	spring-core	4.2.3.RELEASE
org.springframework	spring-framework-bom	4.2.3.RELEASE
org.springframework	springloaded	1.2.4.RELEASE
org.springframework.amqp	spring-amqp	1.5.2.RELEASE
org.springframework.amqp	spring-rabbit	1.5.2.RELEASE
org.springframework.batch	spring-batch-core	3.0.5.RELEASE
org.springframework.batch	spring-batch-infrastructure	3.0.5.RELEASE
org.springframework.batch	spring-batch-integration	3.0.5.RELEASE
org.springframework.batch	spring-batch-test	3.0.5.RELEASE
org.springframework.cloud	spring-cloud-cloudfoundry-connector	1.2.0.RELEASE
org.springframework.cloud	spring-cloud-core	1.2.0.RELEASE
org.springframework.cloud	spring-cloud-heroku-connector	1.2.0.RELEASE
org.springframework.cloud	spring-cloud-localconfig-connector	1.2.0.RELEASE
org.springframework.cloud	spring-cloud-spring-service-connector	1.2.0.RELEASE
org.springframework.data	spring-data-releasetrain	Gosling-SR1RELEASE
org.springframework.hateoas	spring-hateoas	0.19.0.RELEASE
org.springframework.integration	spring-integration-bom	4.2.1.RELEASE
org.springframework.integration	spring-integration-http	4.2.1.RELEASE
org.springframework.mobile	spring-mobile-device	1.1.5.RELEASE
org.springframework.plugin	spring-plugin-core	1.2.0.RELEASE
org.springframework.retry	spring-retry	1.1.2.RELEASE

 Table D.1
 Library dependencies supported by Spring Boot (continued)

Group	Artifact	Version
org.springframework.security	spring-security-bom	4.0.3.RELEASE
org.springframework.security	spring-security-jwt	1.0.3.RELEASE
org.springframework .security.oauth	spring-security-oauth	2.0.8.RELEASE
org.springframework .security.oauth	spring-security-oauth2	2.0.8.RELEASE
org.springframework.session	spring-session	1.0.2.RELEASE
org.springframework.session	spring-session-data-redis	1.0.2.RELEASE
org.springframework.social	spring-social-config	1.1.3.RELEASE
org.springframework.social	spring-social-core	1.1.3.RELEASE
org.springframework.social	spring-social-security	1.1.3.RELEASE
org.springframework.social	spring-social-web	1.1.3.RELEASE
org.springframework.social	spring-social-facebook	2.0.2.RELEASE
org.springframework.social	spring-social-facebook-web	2.0.2.RELEASE
org.springframework.social	spring-social-linkedin	1.0.2.RELEASE
org.springframework.social	spring-social-twitter	1.1.2.RELEASE
org.springframework.ws	spring-ws-core	2.2.3.RELEASE
org.springframework.ws	spring-ws-security	2.2.3.RELEASE
org.springframework.ws	spring-ws-support	2.2.3.RELEASE
org.springframework.ws	spring-ws-test	2.2.3.RELEASE
org.thymeleaf	thymeleaf	2.1.4.RELEASE
org.thymeleaf	thymeleaf-spring4	2.1.4.RELEASE
org.thymeleaf.extras	thymeleaf-extras-conditionalcomments	2.1.1.RELEASE
org.thymeleaf.extras	thymeleaf-extras-springsecurity4	2.1.2.RELEASE
org.webjars	hal-browser	9f96c74
org.yaml	snakeyaml	1.16
redis.clients	jedis	2.7.3
wsdl4j	wsdl4j	1.6.3



index

ActiveMQ configuration 207 Actuator connecting to remote shell invoking Actuator endpoints 145–146 listing application beans 143-144 overview 141-142 viewing autoconfig report 142–143 watching application metrics 144-145 customizing changing endpoint IDs 148 creating custom trace repository 153–155 custom health indicators 155–156 custom metrics 149-153 enabling and disabling endpoints 149 endpoints for 125–126 fetching application information 140–141 monitoring application with JMX 146–147 overview 6-7 runtime metrics application metrics 133–136 dumping thread activity 137-138 monitoring application health 138-139

```
tracing web requests
         136–137
  securing endpoints 156–159
  shutting down
    application 139–140
  viewing configuration details
    explaining auto-
         configuration 128-129
    getting bean wiring
         report 126-128
    inspecting configuration
         properties 129–131
    producing endpoint-to-
         controller map 131–133
admin features 196
AmqpAdmin bean creation 197
annotations, conditional 45–48
application server deployment
  building WAR file 162–164
  creating production
    profile 164–168
  database migration
    overview 168
    with Flyway 168–170
    with Liquibase 170–173
application.properties configu-
    ration file 29-30
ApplicationContextMetrics 152
ApplicationHealthIndicator 139
Artemis configuration 207
authentication, Basic 51, 200
auto-configuration
  application error pages 71–74
  conditional annotations
    in 45-48
  explaining 128–129
```

externalizing with properties configuring application beans 64–69 configuring data source 63-64 configuring embedded server 59-60 configuring logging 60-63 disabling template caching 58-59 overview 57-58 integration testing for 77–79 leveraging creating web interface defining domain 38–39 defining repository interface 39–40 running application 43-45 overriding configuration classes for 55–56 custom security configuration 51–55 general discussion 50 overview 37 security for application 50-51 using environment profiles overview 69-70 properties files for 70 using multi-profile YAML files 70–71 autoconfig command 142 autoconfig endpoint 125, 128 automatic restart 182 @Autowired annotation 80

code noise 94-98

В	command-line completion	inspecting configuration properties 129–131
Basic authentication 51, 200	command-line interface. See CLI	producing endpoint-to-
beans command 142–143	compilation, CLI capabilities 3	controller map 131–133
beans endpoint 125–126	@ComponentScan	@ConfigurationProperties
beans, application,	annotation 27	annotation 66–67, 195
configuring 64–69	compression 203	configure() method 52–53
@Before annotation 81	Condition interface 45	constraints variable 119
Bitronix Transaction	conditional annotations 45–48	@ContextConfiguration
Manager 224	@ConditionalOnMissingBean	annotation 78
bootRun task 28	annotation 55–56	contextLoads() method 29
bootstrap class 27–28	configprops endpoint 125	continue-on-error property 166
-build parameter 21	configuration	@Controller annotation 41 controllers, creating using
building applications 30–33	application error pages 71–74	Grails 119–120
	auto-configuration	cookies 203–204
C	overview 4–5	CounterService interface 150
	conditional annotations	CRaSH 141
cache configuration	in 45–48	create-controller command 119
properties 208	creating web interface 40–43	create-domain-class
cf tool 173	defining domain 38–39	command 118
changeset command 172	defining repository	cross-site scripting. See XSS
CLI (command-line interface)	interface 39–40	CSRF (Cross-Site Request
applications using	developer tools 186–187	Forgery) 114
creating executable JARs 105–106	externalizing with properties	curl command 139
eliminating code noise with	configuring application beans 64–69	D
Groovy 94–98	configuring data	D
@Grab annotation 100–101	source 63–64	-d parameter 21
@GrabMetadata	configuring embedded	data property 165
annotation 101–102	server 59–60	databases, migrating
@GrabResolver	configuring logging 60–63	overview 168
annotation 102	disabling template	with Flyway 168–170
overview 93, 98–99	caching 58–59	with Liquibase 170–173
running tests 102–105	overview 57–58	DataSource, configuration
setting up project 93–94	overriding auto	properties 165–167,
initializing projects using	configuration classes	210–215
20–22	for 55–56	DataSourceAutoConfiguration class 46–48
installation	custom security	DataSourceHealthIndicator 139
enabling command-line	configuration 51–55	default command 10
completion 11–12	general discussion 50	dependencies
manually 8–9 overview 8	properties reference 195–231 security for application 50–51	CLI-based applications
with Groovy Environment	Spring history and 2	@Grab annotation 100–101
Manager 9–10	using environment profiles	@GrabMetadata
with Homebrew 10	overview 69–70	annotation 101–102
with MacPorts 10–11	properties files for 70	@GrabResolver
JPA compatibility with 95	using multi-profile YAML	annotation 102 facet-based 34–35
overview 6	files 70–71	library dependencies
closeBrowser() method 89	viewing using Actuator	reference 233–241
cloud deployment	explaining auto-	overriding transitive 35–37
Cloud Foundry 173–176, 184	configuration 128–129	overview 232
Heroku 177–180	getting bean wiring	starter 5–6, 33–34

report 126-128

-dependencies parameter 21

deployment application server building WAR file 162–164 creating production profile 164–168	excluding classes 196 –extract parameter 21	Groovy Adaptable Packaging Engine. See Grape Groovy Environment Manager. See GVM GSP (Groovy Server Pages)
database migration overview 168 database migration with Flyway 168–170 database migration with Liquibase 170–173 cloud	Facebook support 193, 229 facet-based dependencies 34–35 favicon.ico resolution 197 findByUsername() method 112 FirefoxDriver 89 Flyway	overview 113–114 template example 120–122 GVM (Groovy Environment Manager), installing CLI with 9–10
Cloud Foundry 173–176 Heroku 177–180	configuration properties 197–199	H
overview of options 161–162 developer tools automatic restart 182 configuring globally 186–187 development property defaults 186	database migration with 168–170 FreeMarker configuration 215–217	HATEOAS support 219 health endpoint 125, 138 health() method 156 Heroku deployment 177–180 Homebrew, installing CLI with 10 HornetO configuration 219
LiveReload 183 remote development 183–186 DiskSpaceHealthIndicator 139 domain, defining in configuration 38–39 driver-class-name property 166 dump endpoint 125, 137	garbage collection 134 GaugeService interface 150 generate-all command 119 generate-controller command 119 GORM (Grails object-relational mapping) 108–112	HornetQ configuration 219 HSTS (HTTP Strict Transport Security) 200 HTTP encoding 196 HTTP headers configuration 200
<u>E</u>	@Grab annotation 100–101, 232 @GrabMetadata	info endpoint 125, 140
EJBs (Enterprise JavaBeans) 2 Elasticsearch configuration 196, 208–209 @EnableAspectJAutoProxy annotation 195 @EnableAutoConfiguration annotation 27 @EnableConfigurationProperties annotation 67 @EnableWebSecurity annotation 56 endpoint command 142, 145 endpoints, Actuator changing IDs 148 enabling and disabling 149 overview 125–126 securing 156–159 Enterprise JavaBeans. See EJBs env endpoint 125, 129–130 environment profiles overview 69–70 properties files for 70 using multi-profile YAML files 70–71 error pages, customizing 71–74	annotation 101–102 @GrabResolver annotation 102 Gradle dependencies in 232 excluding transitive dependencies 36 starter dependencies and 5 Grails controller using 119–120 creating projects 116–117 defining domain 118–119 GORM 108–112 GSP 113–114 installing Grails 3 115 running application 117–118 views using 120–123 Grails object-relational mapping. See GORM Grape (Grape (Groovy Adaptable Packaging Engine) 100 Groovy configuration properties 217–218	init command 20, 22, 26 initial-size property 166 initialize property 165 initializing projects building created application 30–33 overview 12 project files created application.properties configuration file 29–30 bootstrap and configuration class 27–28 test class 28–29 using CLI 20–22 using IntelliJ IDEA 17–19 using Spring Tool Suite 15–17 using web interface 13–15, 24–26 install command 9 installation CLI enabling command-line completion 11–12
error pages, customizing 71–74 exclude property 182	eliminating code noise with 94–98	manually 8–9 overview 8

installation (continued) with Groovy Environment Manager 9-10 with Homebrew 10 with MacPorts 10-11 Grails 3 115 integration testing autoconfiguration 77-79 Intelli IDEA, initializing projects using 17–19 Jackson configuration 219-220 JAR files building executable 32 creating executable JAR from CLI 105-106 Java Database Connectivity. See **JDBC** Java Enterprise Edition. See JEE Java Management Extensions. See JMX Java Persistence API. See JPA **JAVA OPTS** environment variable 186 JDBC (Java Database Connectivity) JPA vs. 95 **IdbcTemplateConfiguration** class 47 JEE (Java Enterprise Edition) 2 Jersey configuration 220 JmsHealthIndicator 139 JMX (Java Management Extensions) configuration properties 196 monitoring application with 146-147 jmx-enabled property 166 jndi-name property 166 JPA (Java Persistence API) 5, 95 configuration properties 221 enabling repositories 196 JpaRepository interface 39–40 JSON mapper configuration 196 JTA support 197, 222–224 K keytool utility 60

L

less command 143 library dependencies reference 233-241 LinkedIn support 193, 229 Liquibase configuration properties 199 database migration with 170 - 173list command 9 LiveReload 183 Log4j 61 Log4j2 61 Logback 60 logging, configuring 60–63

M

MacPorts, installing CLI with 10–11 mail configuration 224 MailHealthIndicator 139 mappings endpoint 125, 132 Maven dependencies in 232 dependency management using 33 fetching @Grab-declared dependencies 102 starter dependencies and 5 max-active property 166 max-idle property 166 max-wait property 166 MediaType.APPLICATION FORM_URLENCODED 83 metrics application metrics 133–136 dumping thread activity 137 - 138monitoring application health 138-139 tracing web requests 136–137 metrics command 142, 144 metrics endpoint 125, 133 metrics() method 152 MIME types 203 min-evictable-idle-time-millis property 166 min-idle property 166 mocking Spring MVC 80-83 MockMvcBuilders class 80 MockMvcRequrestBuilders class 81

MockMycResultMatchers class 81 Mongo repositories, enabling 196 MongoDB 109, 209 MongoHealthIndicator 139 monitoring applications 146 - 147multi-part uploads 195 Mustache configuration 225

name property 165

OAuth configuration 200–202 openBrowser() method 89 OpenEntityManagerInView-Interceptor 196

-p parameter 21 PaaS (Platform as a Service) 106, 173 -packaging parameter 21 param() method 83 password property 166 PersistenceExceptionTranslation PostProcessor 196 Pivotal Web Services. See PWS Platform as a Service. See PaaS platform property 166 POJOs (plain old Java objects) 2, 79 port, starting server on random 87-88 @Profile annotation 69 profiles, configuration overview 69-70 properties files for 70 using multi-profile YAML files 70-71 properties configuring application beans 64-69 configuring data source 63 - 64configuring embedded server 59–60 configuring logging 60–63 defaults for development 186

properties (continued)	SecurityMockMvcConfigurers	using IntelliJ IDEA 17–19
disabling template	class 84	using Spring Tool Suite 15–17
caching 58–59	Selenium 88–90	using web interface 13–15,
overview 57–58	SendGrid configuration 229	24–26
PublicMetrics interface 151	sendKeys() method 90	Spring IO platform 101–102
PWS (Pivotal Web Services) 173	separator property 166	Spring Tool Suite, initializing
	server.port property 59–60	projects using 15–17
R	session cookies 203–204	spring-boot-starter 188
	shutting down application	@SpringApplicationConfigura-
RabbitHealthIndicator 139	139–140	tion annotation 29, 78
RabbitMQ configuration	SitePreferenceHandler 197	@SpringBootApplication
226–227	Solr	annotation 27
-random-route option 174	configuration properties 210	SpringBootServletInitializer
randomPort attribute 87	enabling repositories 196	78, 163
Redis configuration 227–228	SolrHealthIndicator 139	SpringJUnit4ClassRunner
RedisHealthIndicator 139	SpEL (Spring Expression	77–78
	Language) 46	springSecurity() method 84
RemoteSpringApplication class 184	Spring Boot	sql-script-encoding property 165
	Actuator 6–7	SSH (secure shell) 7
@RequestMapping	application structure using	SSL configuration 204–205
annotation 41, 132	2–3	standaloneSetup() method 80
restage command 176	auto-configuration 4–5	starter dependencies
restarting automatically 182	CLI overview 6	facet-based dependencies
root path 135	initializing projects	34–35
run goal 32	overview 12	importance of 33-34
run-app command 117–118	using CLI 20–22	overriding transitive
running applications, testing	using IntelliJ IDEA 17–19	dependencies 35–37
overview 86–87	using Spring Tool Suite	overview 5–6
starting server on random	15–17	starters
port 87–88	using web interface 13–15	spring-boot-starter 188
testing pages with	installing CLI	spring-boot-starter-
Selenium 88–90	enabling command-line	actuator 188
runtime metrics	completion 11–12	spring-boot-starter-amqp 188
application metrics 133–136	manually 8–9	spring-boot-starter-aop 189
dumping thread activity	overview 8	spring-boot-starter-
137–138	with Groovy Environment	artemis 189
monitoring application	Manager 9–10 with Homebrew 10	spring-boot-starter-batch 189
health 138–139	with MacPorts 10–11	spring-boot-starter-cache 189
tracing web requests 136–137	misconceptions about 7	spring-boot-starter-cloud-
@RunWith annotation 78	Spring history 2	connectors 189
	starter dependencies 5–6	spring-boot-starter-data-
S	Spring Expression Language. See	elasticsearch 189
	SpEL	spring-boot-starter-data-
schema property 165	Spring Initializr	gemfire 189
secure shell. See SSH	building created	spring-boot-starter-data-
security	application 30–33	jpa 189
adding using auto-	overview 12	spring-boot-starter-data-
configuration 50–51	project files created	mongodb 189
for Actuator endpoints	application.properties con-	spring-boot-starter-data-
156–159	figuration file 29–30	rest 190
overriding configuration	bootstrap and configuration	spring-boot-starter-data-
for 51–55	class 27–28	solr 190
testing for web	test class 28–29	spring-boot-starter-
applications 83–85	using CLI 20–22	freemarker 190
TT	0	

starters (continued)
spring-boot-starter-groovy-
templates 190
spring-boot-starter-
hateoas 190
spring-boot-starter-
honetq 190
spring-boot-starter-
integration 190
spring-boot-starter-jdbc 190
spring-boot-starter-jersey 191
spring-boot-starter-jetty 191
spring-boot-starter-jooq 191
spring-boot-starter-jta-
atomikos 191
spring-boot-starter-jta-
bitronix 191
spring-boot-starter-log4j 191
spring-boot-starter-log4j2 192
spring-boot-starter-
logging 192
spring-boot-starter-mail 192
spring-boot-starter-
mobile 192
spring-boot-starter-
mustache 192
spring-boot-starter-parent 192
spring-boot-starter-redis 192
spring-boot-starter-remote-
shell 192
spring-boot-starter-
security 193
spring-boot-starter-social-
facebook 193
spring-boot-starter-social-
linkedin 193
spring-boot-starter-social-
twitter 193
spring-boot-starter-test 193
spring-boot-starter-
thymeleaf 193
spring-boot-starter-
tomcat 193
spring-boot-starter-
undertow 194
spring-boot-starter-
validation 194
spring-boot-starter-
velocity 194
spring-boot-starter-web 194
spring-bookstarter-web 194

spring-boot-starterwebsocket 194 spring-boot-starter-ws 194 symbolic links 8

Т

test-on-borrow property 166 test-on-return property 166 test-while-idle property 166 testing integration testing autoconfiguration 77–79 running applications overview 86–87 starting server on random port 87-88 testing pages with Selenium 88–90 web applications mocking Spring MVC 80 - 83overview 79-80 security testing 83–85 tests class created by Spring Initializr 28-29 running for CLI-based applications 102–105 testService() method 78 Thymeleaf configuration properties 229-230 template caching for 58 time-between-eviction-runsmillis property 166 Tomcat configuration 205-206 trace endpoint 125, 136 TraceRepository interface 153 transitive dependencies, overriding 35–37 trigger-file property 182 Twitter support 193, 229

11

Undertow configuration 206–207 uploads, multi-part 195 url property 166 use command 10 UserDetails interface 55 UserDetailsService interface 112, 157 username property 166

V

validation-query property 166 VCAP_SERVICES environment variable 176 Velocity configuration 230–231 views, using Grails 120–123

W

WAR files 162–164 web applications, testing mocking Spring MVC 80–83 overview 79-80 security testing 83–85 @WebAppConfiguration annotation 80-81 webAppContextSetup() method 80 @WebIntegrationTest annotation 86–87, 89 WebSecurityConfigurerAdapter class 51–52 Windows, command-line completion and 12 withDetail() method 156 @WithMockUser annotation 84-85 @WithUserDetails annotation 84-85

X

-x parameter 21 XSS (cross-site scripting) 200

Y

YAML files 70–71

Z

ZooKeeper 210

Spring Boot IN ACTION

Craig Walls

he Spring Framework simplifies enterprise Java development, but it does require lots of tedious configuration work. Spring Boot radically streamlines spinning up a Spring application. You get automatic configuration and a model with established conventions for build-time and runtime dependencies. You also get a handy command-line interface you can use to write scripts in Groovy. Developers who use Spring Boot often say that they can't imagine going back to hand configuring their applications.

Spring Boot in Action is a developer-focused guide to writing applications using Spring Boot. In it, you'll learn how to bypass configuration steps so you can focus on your application's behavior. Spring expert Craig Walls uses interesting and practical examples to teach you both how to use the default settings effectively and how to override and customize Spring Boot for your unique environment. Along the way, you'll pick up insights from Craig's years of Spring development experience.

What's Inside

- Develop Spring apps more efficiently
- Minimal to no configuration
- Runtime metrics with the Actuator
- Covers Spring Boot 1.3

Written for readers familiar with the Spring Framework.

Craig Walls is a software developer, author of the popular book *Spring in Action, Fourth Edition*, and a frequent speaker at conferences.

To download their free eBook in PDF, ePub, and Kindle formats, owners of this book should visit manning.com/books/spring-boot-in-action



Easy to digest and fun to read."

—From the Foreword by Andrew Glover, Netflix

"The evolution of Spring continues, and this guide helps maximize its potential."

—Michael A. Angelo ThreatConnect

of a valuable toolset. The practical examples help bring agility and simplicity to application construction.

—Eric Kramer Research Institute at Nationwide Children's Hospital

Easy-to-follow, comprehensive, awesome!" —Furkan Kamaci, Alcatel-Lucent



