Server-Creation DSL

RestExpress server = new RestExpress()...

Server Config

.setName(String)
.setBaseUrl(String)
.setPort(int)
.setExecutorThreadCount(int)
.setIoThreadCount(int)

Serialization

.putResponseProcessor(String format, ResponseProcessor)
.setDefaultFormat(String)
.noJson()
.noXml()
.supportJson()
.supportJson(boolean isDefault)
.supportXml()
.supportXml(boolean isDefault)

Socket-Level Config

.setConnectTimeoutMillis(int)
.setKeepAlive(boolean)
.setReceiveBufferSize(int)
.setReuseAddress(boolean)
.setSoLinger(int)
.setUseTcpNoDelay(boolean)

Processors/Observers/Plugins

.addPreprocessor(Preprocessor)
.addPostprocessor(Postprocessor)
.addFinallyProcessor(Postprocessor)
.addMessageObserver(MessageObserver)

Exception Handling

.mapException(Class<T> fromException, Class<U> toException)
.setExceptionMap(ExceptionMapping)

Server Execution

.bind()
.bind(int)
.awaitShutdown()

Example:

```
RestExpress server = new RestExpress()
        .setName("Sample Service")
        .setBaseUrl("http://localhost:8081")
        .setDefaultFormat(Format.JSON)
        .putResponseProcessor(Format.JSON, ResponseProcessors.json())
        .putResponseProcessor(Format.XML, ResponseProcessors.xml())
        .putResponseProcessor(Format.WRAPPED_JSON, ResponseProcessors.wrappedJson())
        .putResponseProcessor(Format.WRAPPED_XML, ResponseProcessors.wrappedXml())
        .addPreprocessor(new AuthenticationPreprocessor())
        .addPreprocessor(new AuthorizationPreprocessor())
        .addPostprocessor(new LastModifiedHeaderPostprocessor())
        .addMessageObserver(new SimpleConsoleLogMessageObserver());
```

Route-Definition DSL

server.uri(String pattern, Object controller) or
server.regex(String regex, Object controller)

where:

pattern = a string defining the resource URI path, containing optional parameters and optional format parameter after a period ('.'). The parameters are alpha-numeric strings surrounded by curly braces (e.g. "{personId}"). An example URI pattern is:
"/users/{userId}/enrollments.{format}"

DSL methods:

.method(HttpMethod...)
.action(String controllerMethod, HttpMethod)
.name(String)
.alias(String pattern) - uri() method only.
.baseUrl(String)
.defaultFormat(String)
.noSerialization()
.performSerialization()

.flag(String)
.parameter(String, Object)

Example:

```
server.uri("/samples.{format}", config.getSampleController())
        .method(HttpMethod.POST)
        .action("readAll", HttpMethod.GET)
        .name(Constants.Routes.SAMPLE_COLLECTION);

server.uri("/samples/{sampleId}.{format}", config.getSampleController())
        .method(HttpMethod.GET, HttpMethod.PUT, HttpMethod.DELETE)
        .name(Constants.Routes.SINGLE_SAMPLE);
```