

Expression

Expressions

Expressions and [Predicates](#) can then be used to create the various [Enterprise Integration Patterns](#) in the [DSL](#) or [Xml Configuration](#) like the [Recipient List](#). To support dynamic rules Camel supports pluggable [Expression](#) strategies using a variety of different [Languages](#).

API

If you are outside of the [DSL](#) and want to create your own expressions you can either implement the [Expression interface](#), reuse one of the other builders or try the [ExpressionBuilder class](#).

Expression

The API for a Camel Expression is defined in the `org.apache.camel.Expression` interface as shown:

```
public interface Expression {

    /**
     * Returns the value of the expression on the given exchange
     *
     * @param exchange the message exchange on which to evaluate the expression
     * @param type the expected type of the evaluation result
     * @return the value of the expression
     */
    <T> T evaluate(Exchange exchange, Class<T> type);
}
```

Predicate

The API for a Camel Predicate is defined in the `org.apache.camel.Predicate` interface as shown:

```
public interface Predicate {

    /**
     * Evaluates the predicate on the message exchange and returns true if this
     * exchange matches the predicate
     *
     * @param exchange the message exchange
     * @return true if the predicate matches
     */
    boolean matches(Exchange exchange);
}
```

Expression Languages

The following languages are supported out of the box

Error rendering macro 'include'

org.owasp.validator.html.ScanException: java.util.EmptyStackException

Using Expressions in your IDE

To use different expression and predicates in your IDE you need to perform a static import of the builder class for the language(s) you wish to use.

Language(s)	Builder class to import
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Scripting Languages such as BeanShell, JavaScript, Groovy, PHP, Python and Ruby	org.apache.camel.builder.script.ScriptBuilder
SQL	org.apache.camel.builder.josql.SqlBuilder
XPath	org.apache.camel.builder.xml.XPathBuilder
XQuery	org.apache.camel.builder.saxon.XQueryBuilder

See Also

- [Predicate](#)