Extending Infinispan

The Infinispan community

This guide is intended for anyone extending or customizing Infinispan.

Chapter 1. Custom Commands

Infinispan makes use of a [command/visitor pattern](#) to implement the various top-level methods you see on the public-facing API. This is explained in further detail in the [Architectural Overview](#) on the Infinispan public wiki. However, these commands - and their corresponding visitors - are hard-coded as a part of Infinispan's core module, making it impossible for module authors to extend and enhance Infinispan to create new arbitrary commands and visitors.

However, since Infinispan 5.0, this capability has now been added. As a module author (such as [infinispan-tree](#), [infinispan-query](#), etc.) you can now define your own commands.

From Infinispan 5.1 onwards, you do so by:

1. Create a `META-INF/services/org.infinispan.commands.module.ModuleCommandExtensions` file and ensure this is packaged in your jar.

2. Implementing `ModuleCommandFactory`, `ModuleCommandInitializer` and `ModuleCommandExtensions`

3. Specifying the fully-qualified class name of the `ModuleCommandExtensions` implementation in `META-INF/services/org.infinispan.commands.module.ModuleCommandExtensions`.

4. Implement your custom commands and visitors for these commands

1.1. An Example

Here is an example of an `META-INF/services/org.infinispan.commands.module.ModuleCommandExtensions` file, configured accordingly:

org.infinispan.commands.module.ModuleCommandExtensions

```
org.infinispan.query.QueryModuleCommandExtensions
```

For a full, working example of a sample module that makes use of custom commands and visitors, check out [Infinispan Sample Module](#) .

1.2. Preassigned Custom Command Id Ranges

This is the list of `Command` identifiers that are used by Infinispan based modules or frameworks. Infinispan users should avoid using ids within these ranges. (RANGES to be finalised yet!) Being this a single byte, ranges can't be too large.

Infinispan Query:	100 - 119
Hibernate Search:	120 - 139