## Server-Side Slice-to-Objective-C Mapping

The mapping for Slice data types to Objective-C is identical on the client side and server side, except for operation parameters, which map slightly differently for types that have mutable and immutable variants (strings, sequence, and dictionaries). This means that the mappings in the Client-Side Slice-to-Objective-C Mapping also apply to the server side. However, for the server side, there are a few additional things you need to know — specifically, how to:

- Initialize and finalize the server-side run time
- Implement servants
- Pass parameters and throw exceptions
- Create servants and register them with the Ice run time.

Although the examples we present are very simple, they accurately reflect the basics of writing an Ice server. Of course, for more sophisticated servers, you will be using additional APIs, for example, to improve performance or scalability. However, these APIs are all described in Slice, so, to use these APIs, you need not learn any Objective-C mapping rules beyond those described here.

## **Topics**

- The Server-Side main Function in Objective-C
- Server-Side Objective-C Mapping for Interfaces
- Parameter Passing in Objective-C
- Raising Exceptions in Objective-C
- Object Incarnation in Objective-C
- Example of a File System Server in Objective-C