

Server-Side Slice-to-Python Mapping

The mapping for Slice data types to Python is identical on the client side and server side. This means that everything in the [Client-Side Slice-to-Python Mapping](#) section also applies 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 in this chapter are 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 Python mapping rules beyond those described here.



The Python interpreter's Global Interpreter Lock (GIL) can impact an Ice server's ability to utilize multiple processing cores. Refer to our [FAQ](#) for more information.

Topics

- [The Server-Side main Program in Python](#)
- [Server-Side Python Mapping for Interfaces](#)
- [Parameter Passing in Python](#)
- [Raising Exceptions in Python](#)
- [Object Incarnation in Python](#)
- [Asynchronous Method Dispatch \(AMD\) in Python](#)
- [Example of a File System Server in Python](#)