

# Hello World Application

This section presents a very simple (but complete) client and server.



Writing an Ice application involves the following steps:

1. Write a Slice definition and compile it.
2. Write a server and compile it.
3. Write a client and compile it.

If someone else has written the server already and you are only writing a client, you do not need to write the Slice definition, only compile it (and, obviously, you do not need to write the server in that case).

The application described here enables remote printing: a client sends the text to be printed to a server, which in turn sends that text to a printer. For simplicity (and because we do not want to concern ourselves with the idiosyncrasies of print spoolers for various platforms), our printer will simply print to a terminal instead of a real printer. This is no great loss: the purpose of the exercise is to show how a client can communicate with a server; once the thread of control has reached the server application code, that code can of course do anything it likes (including sending the text to a real printer). How to do this is independent of Ice and therefore not relevant here.



Much of the detail of the source code will remain unexplained for now. The intent is to show you how to get started and give you a feel for what the development environment looks like; we will provide all the detail throughout the remainder of this manual.

## Topics

- [Writing a Slice Definition](#)
- [Writing an Ice Application with C++ \(C++11\)](#)
- [Writing an Ice Application with C++ \(C++98\)](#)
- [Writing an Ice Application with C-Sharp](#)
- [Writing an Ice Application with Java](#)
- [Writing an Ice Application with Java Compat](#)
- [Writing an Ice Application with JavaScript](#)
- [Writing an Ice Application with MATLAB](#)
- [Writing an Ice Application with Objective-C](#)
- [Writing an Ice Application with PHP](#)
- [Writing an Ice Application with Python](#)
- [Writing an Ice Application with Ruby](#)

