



Contents

1	Introduction	11
2	Application File Formats	13
2.1	Source Code	13
2.2	FASL	14
2.3	Binary	14
2.4	Conclusion	15
3	Reproducible Builds	17
3.1	Single step process	17
3.2	Library versions	18
3.3	Qlot essentials	19
3.3.1	Setup	20
4	Project Layout	23

5	Standalone Executables	27
5.1	Hello world	28
5.1.1	Preparation	28
5.1.2	Building	31
5.2	Production ready executable	31
5.2.1	Preparation	32
5.2.2	Building	34
5.3	Multi-program executable	35
5.3.1	Preparation	36
5.3.2	Building	39
5.4	Asset files	40
5.5	Threads and other resources	42
5.6	Shared library dependencies	42
5.7	A note about application installers	44
6	Server-side Applications	45
6.1	Deployment	45
6.2	Example	47
6.2.1	Execution	52
7	Portability	55
7.1	Portable source code	56
7.1.1	Operating system independence	56
7.1.2	Compiler independence	57
7.1.3	Location independence	59
7.2	Portable binaries	61
8	Application Architectures	63
8.1	Basic architectures	63
8.1.1	Single-pass programs	63
8.1.2	Long-running programs	63

8.2	Web technology	64
8.2.1	Basic structure	64
8.2.2	Web frameworks	65
8.2.3	Production architecture	70
8.2.4	Graphical user interfaces for desktop applications . .	71