Outline

Introduction
A bit o’ perspective
Pitfalls
Conclusions
Q&A
Introduction

Setting expectations
A bit o’ perspective (History)
A bit o’ perspective (History)
Pitfalls
Pitfalls – Some Fundamentals

Hardware and software: an impedance mismatch?
Pitfalls – Some Fundamentals

NIH syndrome
What do you mean this runs on my desktop?
Pitfalls - Maintenance

Building the “Tower of Babel”

Click icon to add table
Carrying too many patches
Pitfalls – System Design

Interfaces, APIs, & contracts
Pitfalls – System Design

Upgrade path
Debuggers are your friend. No, really.
Pitfalls – Tools

Use NFS to mount your target rootfs
Conclusions
Questions?
Pitfalls

Fundamentals:
  What do you mean that I can’t use my hammer?
  What do you mean this runs on my desktop?
  Treating Linux the same as you would your commercial/bare metal OS
  Hardware isn’t a product
  NIH syndrome

Planning/Design:
  What’s in the choice of a CPU? Know thy footprint!
  Interfaces, interfaces, interfaces
  Forgetting the upgrade path until the end, if at all
  Hardening

Maintenance:
  Building a tower of Babel
  Carrying too many patches

Tools
  Debugging with printf()
  Are you ready to cross Canada?
Pitfalls – Some Fundamentals

Failure to learn about Linux specifics early on