Making Intent work with what we already have

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The Problem

The vision
- User
- Intent
- Renderers
- Devices

Current Reality
- User
- Intent
- Renderers
- Device 1
- Device 2
- Device 3

These are the same devices!
Problem is that we have apps that currently work and assume direct access.

Apps and users both talk intent.

Intent can (hopefully) resolve conflicts.
Can intent and non-intent coexist?
Can’t we all just get along?

• Not as well as if everyone used intent...
• ...but still maybe.

• Build context where we can
  – What app installed conflicting config?
  – Ideally also group it so it can be backed out?
• Provide sane conflict resolution mechanisms
In the OpenFlow Context

• Slightly change flow programming model
  – Not just flowmods
  – Instead groups of flowmods with a bit of metadata
    • e.g., does this group expect to be (partially) overridden or does it need to be fully installed
  – Let apps know if their flows get backed out

• Now, we can (kind of) make “legacy” apps play well with intent-based apps
In the broader context?

• Tracking who installed configuration
• Understanding *if* there is a conflict
• Understanding how to back things out when there is