Semiassignment

The best of both worlds
Device Assignment

QEMU

QEMU

Donnerstag, 20. September 12
Device Assignment
### Pros and Cons

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<th>Emulation</th>
<th>Assignment</th>
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Device Assignment

- Preferred for runtime
- No migration
- Static assignment
Getting both

- Assigned device during normal operation
- Emulated device during migration
The Xen Way

Bridge

netback

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The Xen Way

Bridge

netback

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The Xen Way

- Guest changes for bridge
- Migration is guest visible
The VMware Way
The VMware Way

- Emu
- vmxnet
- Guest mapped blob driver

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The VMware Way

- Provide network driver in magic memory region
- Requires new drivers
- Not GPL friendly
- Migration is guest exposed
The Alex way
The Alex way
The Alex Way

• Emulate real device in QEMU

• Migrate state between emulated and real adapter

• Need to write emulation and migration code for every adapter

• Only works well if cluster uses the same cards
### Pros and Cons

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Semiassignment

- Is it a good idea?
- How much effort really? We only need support for a few (SR-IOV) adapters.
- More complicated network configuration
- Volunteers?