Welcome to the Xen Summit
September 7th-8th 2006, San Jose
Logistics

- Three rooms:
  - Track A – Plaza Room
  - Track B – Park Room
  - Food/breakout sessions – Centre Room

- WiFi network name:
  - xensummitA/B/C no key

- Restrooms around corner past front desk
## Schedule

<table>
<thead>
<tr>
<th>Day/Time</th>
<th>Track A</th>
<th>Track B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurs 08.30-09.00</td>
<td>Session 1 Intro/plenary (C)</td>
<td></td>
</tr>
<tr>
<td>Thurs 09.00-10.30</td>
<td>Session 2A Xen Core Chair: Keir Fraser</td>
<td>Session 2B Security #1 Chair: Steve Hand</td>
</tr>
<tr>
<td>Thurs 11.00-12.30</td>
<td>Session 3A HVM Core Chair: Ian Pratt</td>
<td>Session 3B Security #2 Chair: Reiner Salier</td>
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<tr>
<td>Thurs 13.30-15.00</td>
<td>Session 4A Non x86 Chair: Alex Williamson</td>
<td>Session 4B Performance Chair: Ian Pratt</td>
</tr>
<tr>
<td>Thurs 15.30-17.00</td>
<td>Session 5A Testing Chair: James Bulpin</td>
<td>Session 5B HVM Devices Chair: Christian Limpach</td>
</tr>
<tr>
<td>Thurs 18.30-+</td>
<td>Dinner and Billiards</td>
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</tbody>
</table>
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<tr>
<th>Day/Time</th>
<th>Track A</th>
<th>Track B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri 09.00-10.30</td>
<td><strong>Session 6A Virtual Devices</strong>&lt;br&gt;Chair: Andy Warfield</td>
<td><strong>Session 6B OS Ports</strong>&lt;br&gt;Chair: Chris Wright</td>
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<tr>
<td>Fri 11.00-12.30</td>
<td><strong>Session 7A Smart IO H/W #1</strong>&lt;br&gt;Chair: Ian Pratt</td>
<td><strong>Session 7B Control Stack #1</strong>&lt;br&gt;Chair: Ewan Mellor</td>
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<tr>
<td>Fri 13.30-15.00</td>
<td><strong>Session 8A Smart IO H/W #2</strong>&lt;br&gt;Chair: Steve Hand</td>
<td><strong>Session 8B Control Stack #2</strong>&lt;br&gt;Chair: Jim Fehlig</td>
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<tr>
<td>Fri 15.30-16.30</td>
<td><strong>Session 9 Closing (C)</strong></td>
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</table>
Xen 3-unstable Change Log

Xen 2.0.0 to 3.0.0 #csets per week (excl. merges)
# Post-3.0.0 Rough Code Stats

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<thead>
<tr>
<th>Domain</th>
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<th>Insertions</th>
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<td>ibm.com</td>
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<td>valinux.co.jp</td>
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<td>fujitsu.com</td>
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</tbody>
</table>

Stats since 3.0.0 Release
Post-3.0 Development Model

- Stabilize “unstable” tree every 8-12 weeks
  - Sweep unstable into 3.0.x-testing
  - Release as 3.0.1, 3.0.2 etc
- Bug fixes cherry picked into 3.0.x-testing at least until next release
  - After being in unstable for a few days, requests to push into 3.0.x-testing
  - Release as 3.0.x-y etc.
  - (much like Linux)
Achievements: 3.0.1/3.0.2

- AMDV support, generic ‘HVM’ layer
- Linux 2.6.16 upgrade in –unstable
  - subarch of i386/x86_64
  - Linux tip maintained in linux-2.6.tip-xen.hg
- Progress on linux patch upstreaming
  - Patch queue in linux-2.6-patchqueue.hg
- PCI pass-through is back
- API enhancements
- Many bug fixes and stabilization work driven by SLES10
3.0.3 Release (next week?)

- Postponed to synchronize with FC6 freeze and drive more features:
  - New CPU scheduler with CPU migration
  - Xenoprofile support
  - Blktap/qcow for file-backed virtual disks
  - Upgrade qemu for HVM IO (net, usb, vnc)
  - New shadow pagetable code
  - PV extensions to HVM guests (net, block IO)
  - Segmentation Offload in netfront/back
  - Power architecture merge
3.0.4 Release Proposal

- mid Q4 2006
  - Linux 2.6.18 – maintained in separate tree
  - PV framebuffer support
  - NUMA memory allocator support
  - Dom0 kexec/kdump support
  - dm-userspace
  - Performance optimizations
  - Xend life-cycle management
  - Xen control API
  - XML config files, extended ‘xm’ syntax
  - QEMU ‘v2e’ integration?
API stability

- Guest API stability (hypercall, IO)
  - Backward guaranteed:
    - Old 3.0 guests must run on new xen
  - Need to add forward compatibility as well
    - Important now SLES10 hypervisor in the wild
    - [Linux upstreaming may force API change]
- Privileged domain hypercall API
  - Dom0 API stabilizing, tools API still evolving
  - Aim to stabilize tools API
- Xen API control protocol and CLI syntax
  - Finalize wire format, create bindings
Performance

- Performance and scalability work
  - Time is right for some close attention
  - 1-4 socket systems the priority
  - Optimizations for bigger systems must not hurt smaller ones (they often help)
    - Onus is on submitter to demonstrate
    - (Patches that clearly hurt larger systems should be rejected too)

- Good performance tools now available
  - s/w perf counters, xen oprofile, tracebuf etc