



Welcome to the Xen
Winter Summit 2006

Local arrangements



- Thanks to AMD (and Heather) !
- Building #4 today, #1 tomorrow
 - NB: bring badges to get in to building #1 and for dinner this evening!
- Two parallel tracks
- Break-out rooms

- WLAN ESSID "external", not broadcast

Plan



- ~60mins talks, 30min discussion
 - Let's try and make this interactive
- OHP slides and pens available
- Ideally, let session chair know you have slides to present in advance


- Please send slides to gandhi@xensource.com

Schedule



Tu 9:00 – 10: 30	Welcome	
Tu 11:00 – 12:30	IA64 Dan	Security Leendert
Tu 13:30 – 15:00	VT/SVM Keir	Graphics, sound Anthony
Tu 15:30 – 17:00	PPC Hollis	OS ports Ian
Tu 19:00	Dinner	

Schedule (building #1)



We 9:00 – 10:30	Smart IO Andrew W	Control tools Gandhi
We 11:00 – 12:30	IOMMUs Keir	Testing, tuning Ian
We 13:30 – 15:00	NUMA Keir	Linux guest Robert
We 15:30 – 17:00	Roadmap discussion	

Outline



- Release facts and figures
- What can we learn?
- Development going forward

- Roadmap

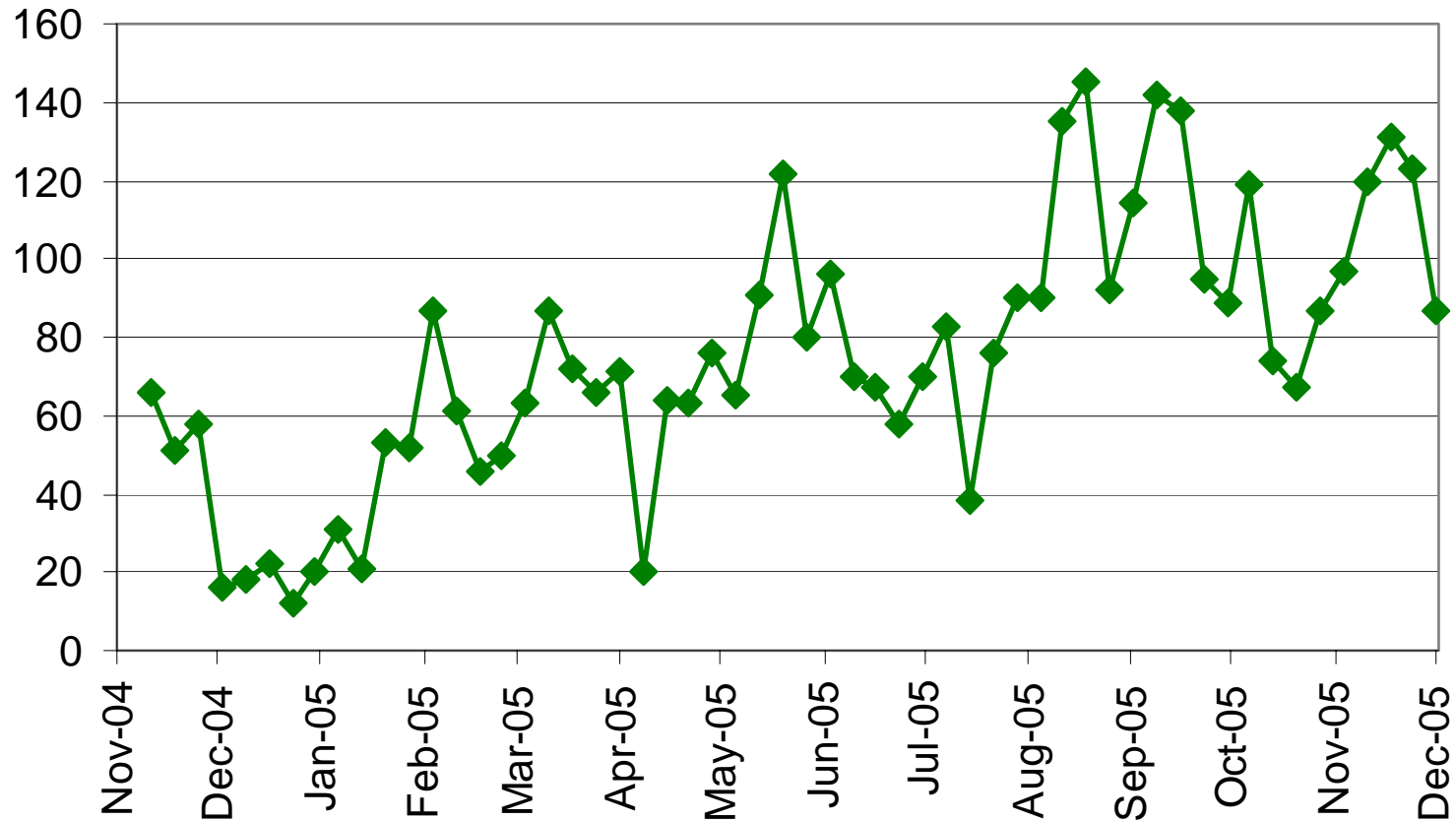
Release history



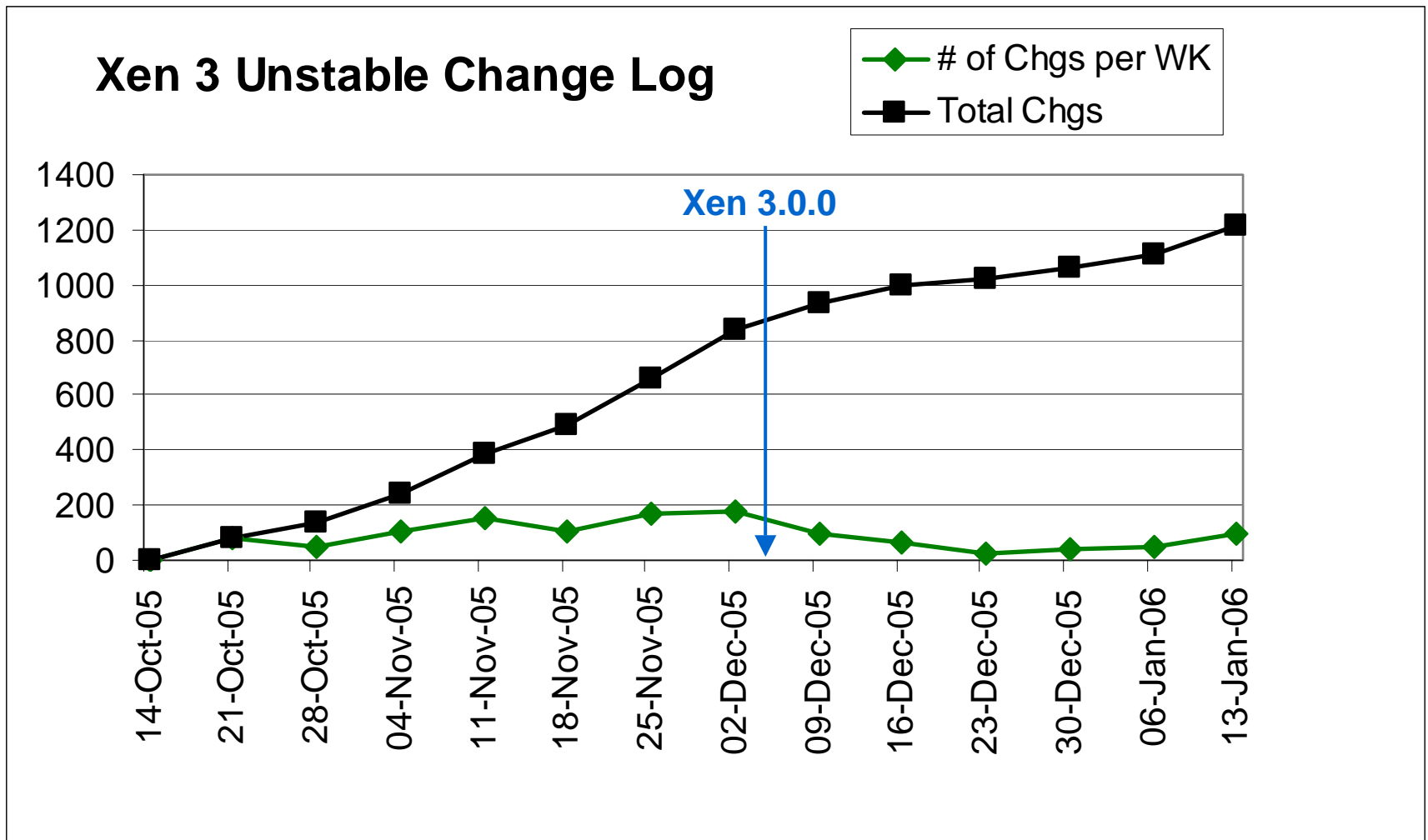
- First public Xen release 5 October 2003
- Xen 2.0.0 released 5 November 2004
- Xen 3.0.0 released 5 December 2005

Xen 3-unstable Change Log

Xen 2.0.0 to 3.0.0 #csets per week (excl. merges)



Xen 3 Unstable Change Log



Xen 3.0 Rough Code Stats

	aliases	checkins	insertions
xensource.com	14	2009	445973
intel.com	32	367	181307
ibm.com	33	342	77838
hp.com	5	109	30439
cam.ac.uk	9	106	27156
redhat.com	2	36	1015
novell.com	4	30	3924
gmail.com	4	39	43172
osdl.org	1	18	921
fujitsu.com	4	7	113
ucsd.edu	1	5	63
bull.net	1	4	42
ncsc.mil	1	2	277
other	30	100	25007

Stats since 28 Jan 2005

Xen 3.0 was late!



- Xen 3.0 originally scheduled for Jul/Aug
- Suffered badly from feature creep relative to original plan on website in Nov 2003
 - PAE (>4GB x86_32 support)
 - VT-x
 - xenstore / xenbus ; robustified xend
- Interface audit/cleanup took a lot of time

Release quality



- Xen 3.0.0 quality was actually pretty good
 - Most issues related to specific h/w
 - Only a couple of embarrassing bugs
 - Still some festering issues to clean up
- We owe a great deal to:
 - XenRT QA Lab (James)
 - xm-test (Dan, Sean); LTP etc
 - Community testing; David Barrera
 - TestCD (Andy Peace)

Development going forward




- Proposal:
- Bug fixes cherry picked into 3.0.0-testing
 - Used to generate 3.0.0-x etc
- Every 4-8 weeks stabilize –unstable, release as 3.0.1 etc
 - Sweep –unstable into 3.0-testing
- Hence, more frequent releases

Development going forward



- More use of other hg trees
 - E.g. ia64, ppc, vt, hvm, xm-test
- Sub-system maintainers/reviewers list
 - Please ensure you cc: on patches
- [tool like bugzilla to track patches]

Roadmap – close in



- Linux subarch xen
- 2.6.15
- hvm (AMD SVM / Intel VT abstraction)
- PCI pass-through (driver domains)

Roadmap – to be decided



- Enhanced full-virtualization support
- Linux upstream merge effort
- Performance benchmarking / auto-tuning
- Desktop/mobile device virtualization
 - Graphics, sound, USB; power management
- Scheduler enhancements
- NUMA enhancements
- Control tool APIs (DMTF CIM)
- Smart IO device support
- PowerPC port