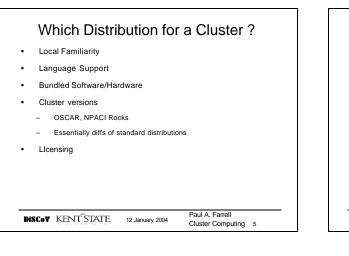
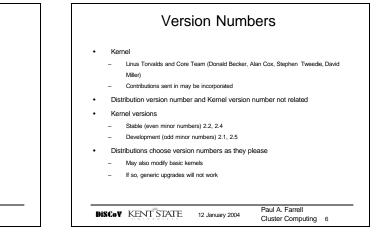
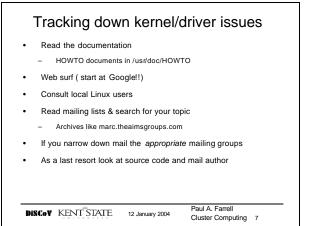


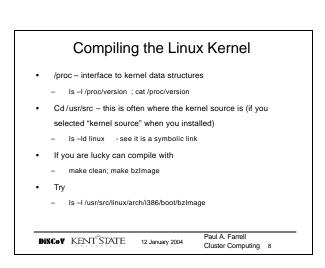
GPL v Open Source
 Modifications of GPLed software must not be distributed as binary only . Source must be made available Linux is GPLed
 Open Source software which is not GPLed may be modified and sold as binary only code. Mozilla, X-windows, BSD, MPICH
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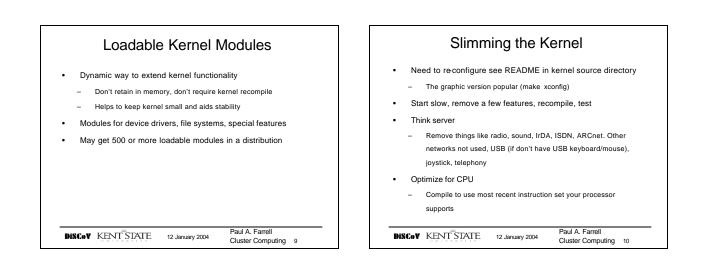
Linux	Distributions
Red Hat	www.redhat.com
SuSe	www.suse.com
Mandrake	www.mandrake.com
Debian	www.debian.org
SlackWare	www.slackware.com
TurboLinux	www.turbolinux.com
Connectiva	www.connectiva.com
Fedora	www.fedora.us fedora.redhat.com
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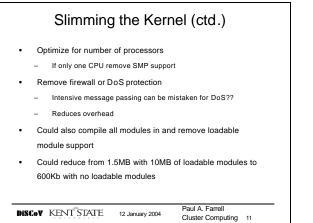




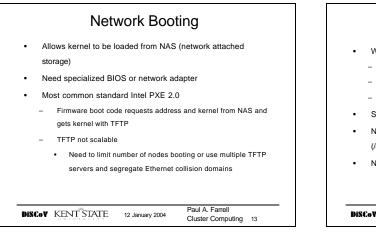








	Possibly Worth Su	ipponing	
•	NFS – for small clusters		
•	Serial console		
•	Kernel IP configuration – get IP address using BOOTP or DHCP		
•	NFS root – supports diskless booting by allowing mounting of root file systems		
•	Special high performance network dr Myrinet	ivers – Gigabit Ethernet,	
•	A file system		



Diskless Operation

- Why?
 - Security reasons
 - If need to change kernels/distributions frequently
 - Only need to maintain one image
- See Diskless-HOWTO and Diskless-root-NFS-HOWTO
- Need NFS root to mount other needed configuration files (/etc/passwd etc) and dynamic libraries
- NFS is not scalable for large clusters (see later)

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Downloading and Compiling Kernel				
Download from <u>www.kernel.org</u>				
Read documentation – may need to download other				
components (e.g. libc)				
Distribution kernels may have mods from stock kernel e.g.				
device drivers, tuning, etc				
 Can go to entirely generic 				
 Can try to download from distribution company 				
 Can try to add mods to stock kernel 				
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Linux File Systems

- Default is EXT2 (extended file system version 2)
- EXT2 is not a journalling file system, one where writes ensure that file system is always or can always be put in a consistent state – avoids the need for fsck
- Slightly slower must write "journal" to disk first, which will enable restoration of consistent state
- So depends on whether want optimum disk performance on local nodes
- Journalling systems: EXT3, ReiserFS (SuSe, better for small files/large dirs), IBM JFS, SGI XFS (optimized for large block writes from virtual memory)

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