VGA passthrough in Xen

Author: Y. Schaeffer
Supervisor: M. Mobach
Concept

- Only host OS has direct hardware access
- Guest OS has virtualized hardware
- Xen has no notion of devices
- Hardware accelerated guest
PCI passthrough

- Normal situation
- Virtualized situation
- Hardware support
- Does not work for VGA :-(
Xen patch

- Existing patch J. Guyader, may 2008
- Not in open source tree
- Analyse
- Not (very well) documented
VGA passthrough

- VGA has long history
- VGA is expected to work
- Adapter has own BIOS
Problems

- Ridged design
- Xen assumes no VGA available
- Re execute BIOS
Conclusion

- Promising
- Only Intel
- Multiple adapters
- Vmware's alternative
- Lack of documentation
End.