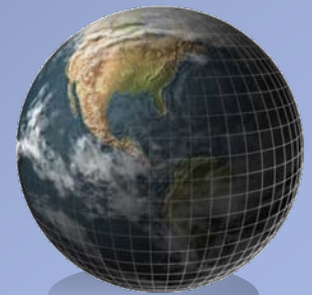


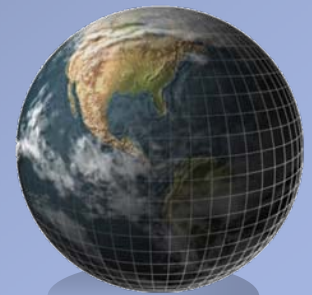
Agenda

1. Notulen van de vorige keer
2. User scenarios
 - Presentatie Sander (Class 2 – 5 minuten)
 - Presentatie Pieter (Class 3 – 20 minuten)
3. Presentatie Ronald (Security – 20 minuten)
4. Bespreken van project doelen en grenzen



Vragen voor vandaag

- Wat moeten de VMs kunnen en waarom?
 - Inbound/Outbound IP?
 - ... (Zie komende presentaties) ...
- Is het nodig om VMs te certificeren?
 - Zo ja, wat zijn de criteria in grote lijnen?
- Plan van aanpak/milestones
 - Geaccepteerde basis voor de VMs
 - Policies/procedures
 - Functionaliteit
 - Design meeting (tools, interface, etc.)



Class 2 VM Scenario



VM Working group
Sander Klous, Nikhef
18-08-2009

Content

- Use cases for HEP Virtual Machines
 - Analysis on VMs
 - Monte Carlo production on VMs
- Requirement overview
- Open issues



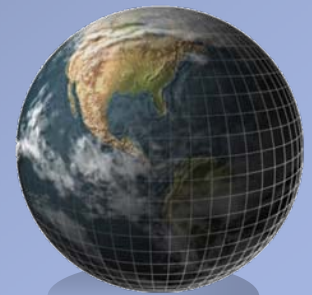
Analysis on Virtual Machines

- Run minimal analysis on desktop/laptop
 - Access to grid services: raw data, file catalog, configuration database, etc.
- Run full analysis on the grid
 - On an identical environment
 - With identical access to grid services
 - Preferably with interactive access (debugging)
- No interest to become system administrator
 - Currently we run on LXPlus / Stoomboot
 - Can VMs compete?



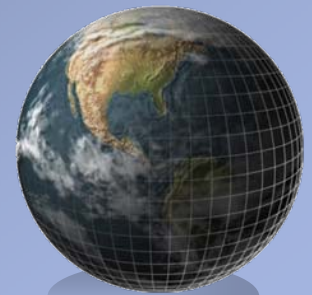
Monte Carlo production on VMs

- Large scale distributed productions
- Consistency across sites is crucial
- Pilot job frameworks
 - Resources join an overlay network
- Virtual machines are ideal for the job
 - Run them across sites
 - Tune them for the experiment/pilot job framework



Requirements overview

- Provide Virtual Machines to sites
 - No problem with certification process
- Schedule/run Virtual Machines
 - Don't break backward compatibility!
- Allow the VM to join an overlay network
- Store/reuse modified Virtual Machine
- Interactive access to the VM?
 - Install User Software in the VM
 - Debugging



Open Issues

- Who creates the Virtual Machines?
 - And who certifies them?
- How to get work done by the VMs?
 - Integration with batch processing
 - Overlay networking
- All issues on the previous page
 - Implementation needed
 - Tools/Policies/Procedures
- A lot of work for 6 months!

