MRNet Startup Issues

- Attendees: Dorian Arnold, Bronis de Supinski, Jeff Hollingsworth, Madhavi Krishnan, Matt Legendre, Bart Miller
- Can be implemented at different SW stack levels
  - Best level is probably resource manager but…
  - How do we get the RM community to buy-in?
  - STAT (over MRNet) as motivating use case
- Target architectures: BG, XT, clusters
- Refactoring MRNet or LaunchMon or both?
Bootstrapping abstractions

• Ratify simple abstractions
  – Low-level primitives for process launch and information dissemination
• Identify deficiencies in LaunchMON API
  – Modify/extend API as necessary…
• Encapsulate in lightweight library/component
  – Support for pluggable mechanisms (launchMON/slurm/rsh/…)
• Intelligent topology configuration?
  – Should not require user interaction
  – “Smart topology" component could be built on top of bootstrapping
• Follow-ups:
  – UNM (Dorian) to propose low-level API and semantics
  – Rationalize among core group: Dong Ahn, Mike Brim, Greg Lee and Phil Roth