Programming of Supercomputers

Assignment 2:
Parallel Debugging with TotalView

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Schedule Updates

SuperMUC maintenance cycle extended due to unexpected issues. There is a small change in the course's schedule:

- **Assignment 1:** Deadline extended by 1 week due to delays while setting up your accounts
- **Assignment 2:** Its deadline remains the same; content scaled to 2 weeks.
  Deadline: 02.12.2016 @23:55
- **SuperMUC maintenance:** from 14.11. – 16.11.2016 . Make sure to subscribe to their mailing list and take these outages into account in your schedule

Assignment 1 Discussions

- After submissions we encourage you to interact
  - Compare your results among each other
  - Learn from each other's experience

Discussion:

- Postponed until next session since the deadline is extended

Introduction to TotalView

- Commercial product from Rogue Wave Software
- GUI and CLI interfaces included
  - We will use the GUI
- Support for distributed memory applications with MPI
  - There are not many alternatives, if any
- Support for parallel codes with MPI and OpenMP
- Available in SuperMUC for all users
  - ‘totalview’ module
  - We have tested in Phase 1 thin nodes with IBM MPI only
    - https://www.lrz.de/services/compute/supermuc/access_and_login/
    - You can login with:
      ssh -YC sb.supermuc.lrz.de
    - TotalView was not working on Phase 2 nodes last year
      - You are welcome to experiment with other setups

TotalView GUI

Today's agenda:

1. Build AMG2013 for T.W.
2. Create a new session
3. Start AMG2013 with T.W.
4. We will avoid 

5. Discussion to get you started and motivated