Parallel LOD for Static and Dynamic Generic Geo-Referenced Data

Application structure

- Problems:
  - huge and heterogeneous dataset
  - up to 350 millions elevation data
  - up to 550 1000x1000 textures
  - no preprocessing (due to possibly dynamic data)

- Objectives:
  - Generic Level Of Details technique
  - well-suited to interactive and distant visualization

- Results:
  - Multi-screen visualization
  - View-dependent parallel LOD for Heightfields and Textures
  - Dynamic load from disk
  - FlowVR middleware for distributed parallel VR applications and logical network building
  - Additional geo-referenced dynamic informations

Hardware architecture

FlowVR Graph: Application network description