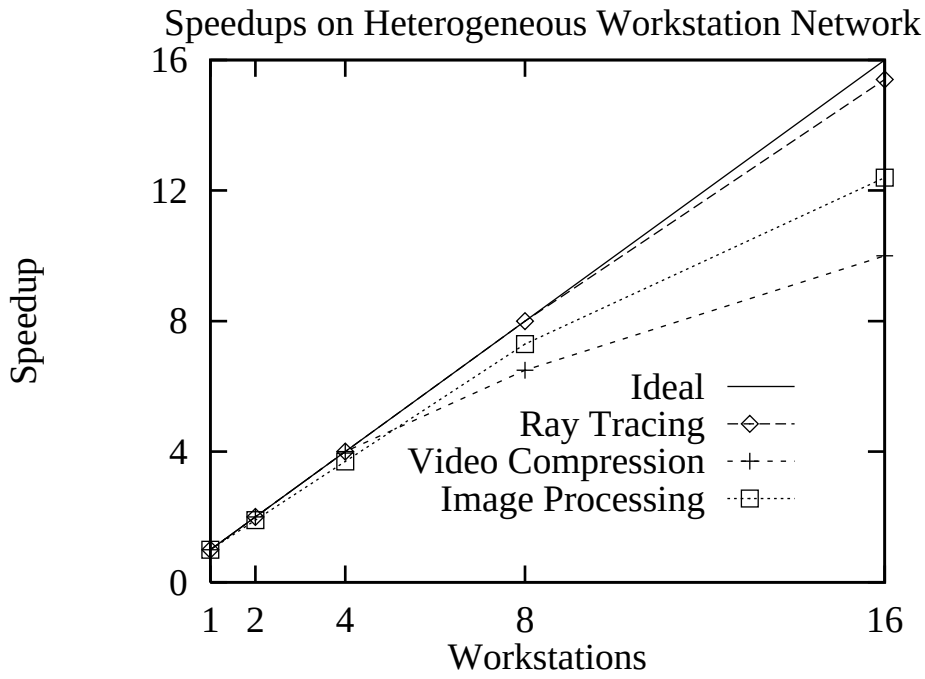
Experience

The GLU toolkit has been used to develop high-performance applications from existing sequential (C, Fortran, C++) applications in several areas including:

- video compression
- computed tomography
- structural stress analysis
- high-throughput message handling
- real-time image processing
- graphics rendering



Availability

GLU toolkit is currently available for

- Unix workstation clusters consisting of any combination of Sun4/Solaris, IBM RS6000/AIX, SGI/IRIX, Dec 3000AXP/OSF-1, HP/UX, or x486/Linux.
- Unix multiprocessors including SunMP/Solaris and SGI ONYX/IRIX.
- Massively parallel computers (CM-5).

Contact

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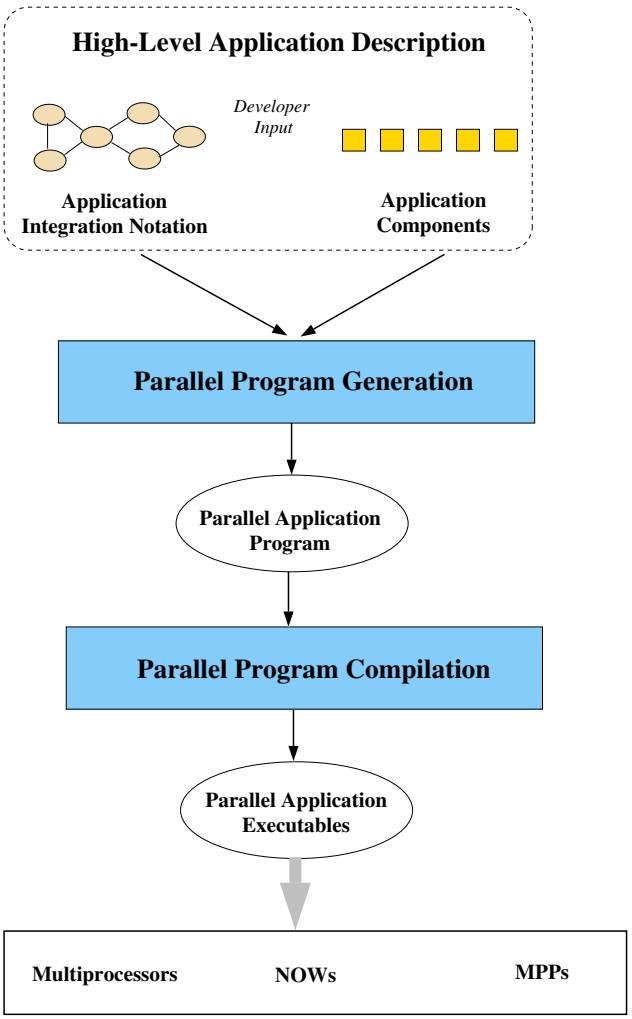
GLU^{TM}

A Toolkit for Constructing and Executing High Performance Software

GLU is a toolkit for constructing and executing high-performance applications software for diverse parallel and distributed systems including heterogeneous workstation clusters (over WAN, LAN, and wireless networks), multiprocessors, and massively parallel processors. The GLU toolkit consists of a high-level application description notation, a compiler, a graphical application execution user-interface, and a comprehensive performance analysis tool. GLU can be used to develop new parallel applications or convert sequential legacy applications to parallel equivalents.



GLU toolkit enables programmers to rapidly develop parallel and distributed applications reusing existing sequential code that can run on diverse platforms without requiring any application modification. GLU application performance is significantly speeded up by exploiting intrinsic parallelism and by optimally partitioning the application over multiple processors. GLU application can also automatically and dynamically adapt to fluctuating processing power.