

20 Years - Unleashing the Power of HPC

SC99

1999 Chair
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Figure 2: Photograph of the GRAPE-5 system

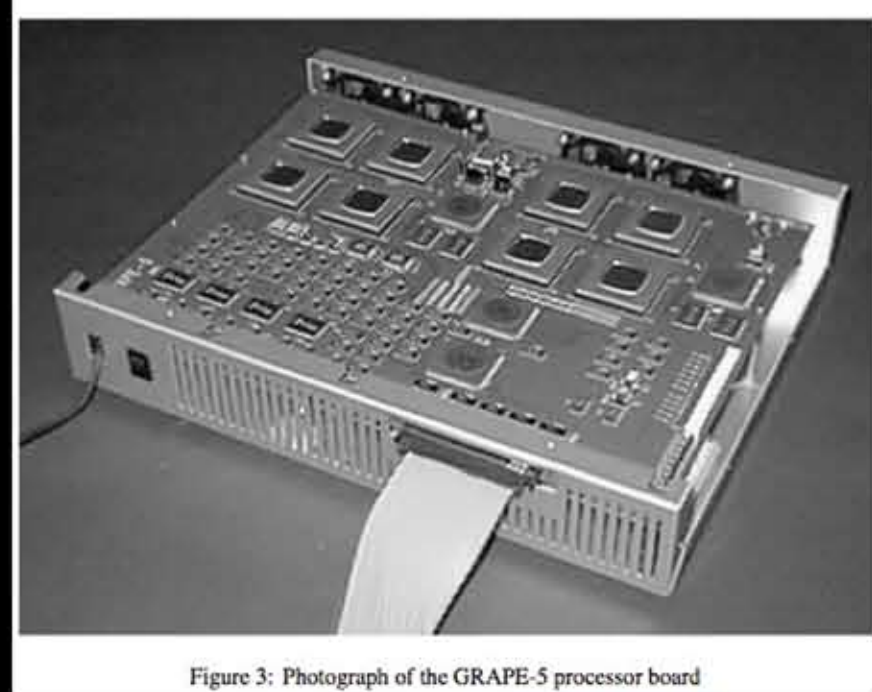


Figure 3: Photograph of the GRAPE-5 processor board

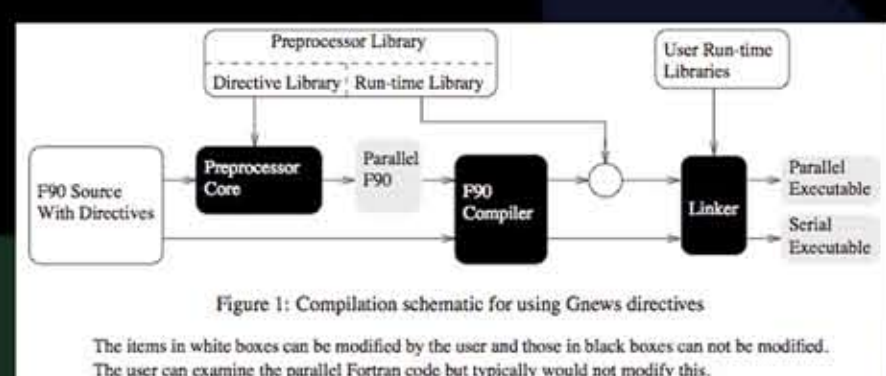


Figure 1: Compilation schematic for using Gnuws directives
 The items in white boxes can be modified by the user and those in black boxes can not be modified. The user can examine the parallel Fortran code but typically would not modify this.

Preprocessing and compilation for Parallel Fortran 90

1999

Notable Systems first mentioned this year in the proceedings:

- IBM SP3
- Hitachi SR8000
- Sun Wildfire

Notable Processors

- DEC Alpha 21264

Not mentioned in the proceedings after this year:

- Compaq AlphaServer

Noteworthy Architecture Topics:

- Globus and MPICH-G Grid toolsets
- Network performance monitoring tools for Grid environments
- Cost-effectiveness of PC clusters over traditional supercomputers
- Multimedia instruction set architectures

Notable Operating Systems:

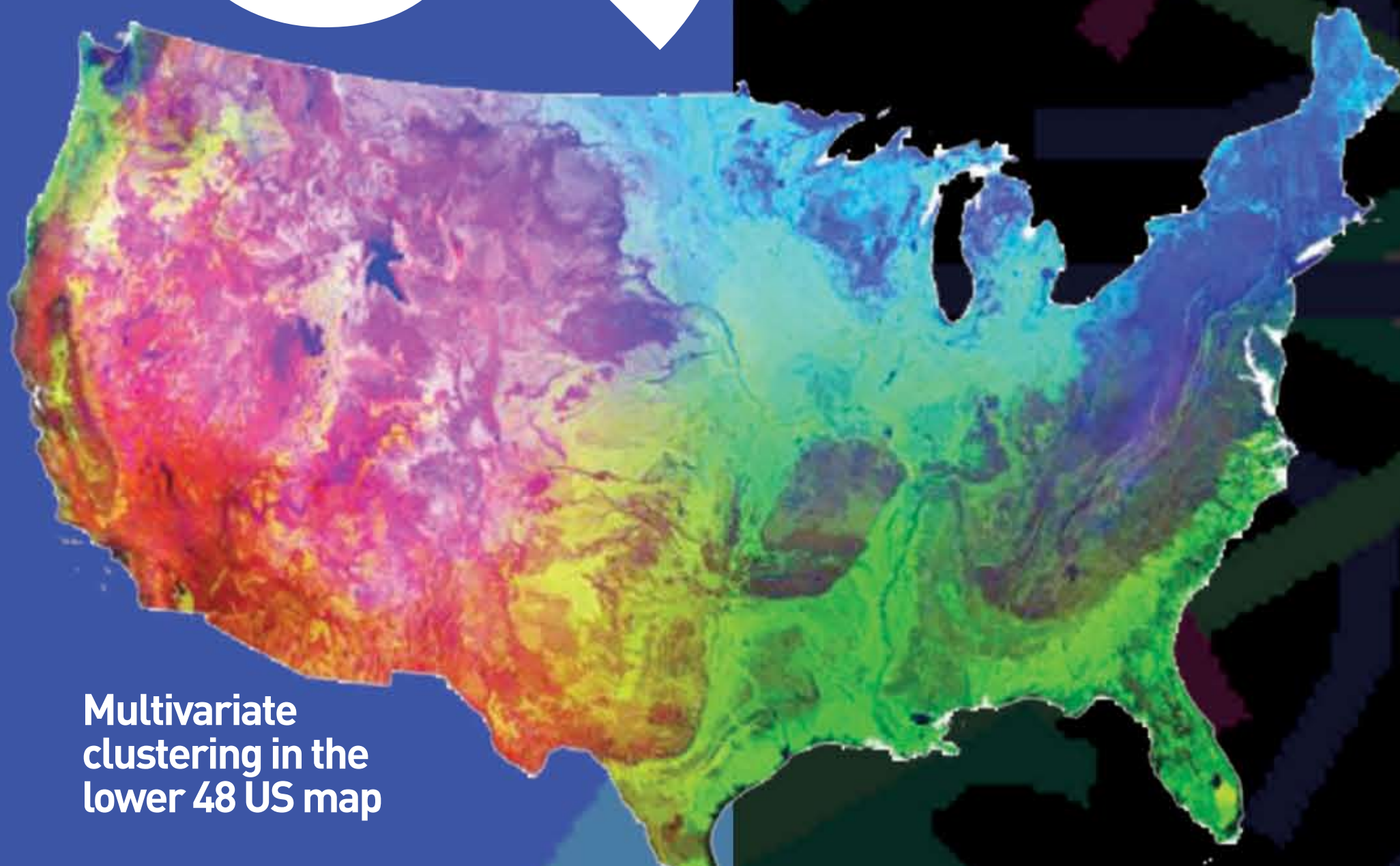
- MTX

Notable Programming Languages:

- Java
- Titanium

Research Machines:

- GRAPE-5



Multivariate clustering in the lower 48 US map

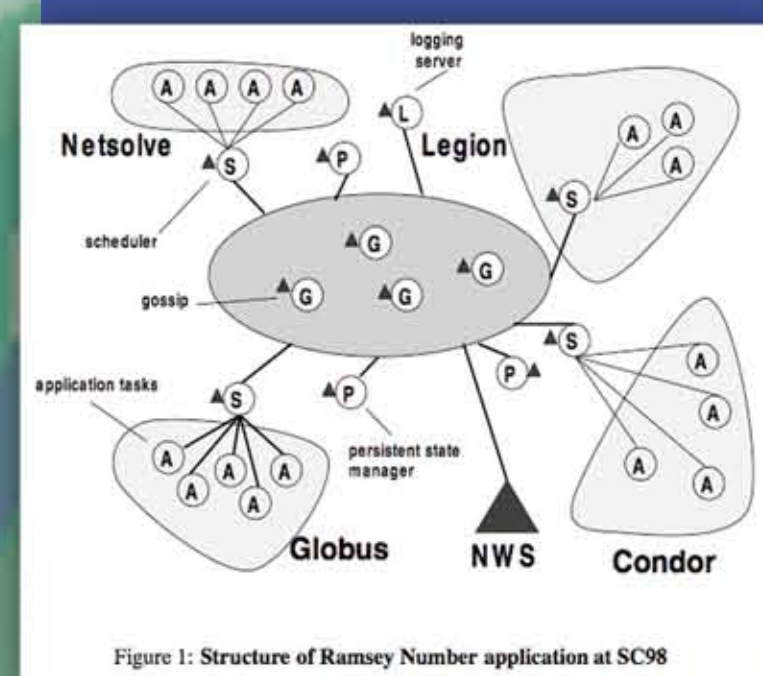


Figure 1: Structure of Ramsey Number application at SC98

An application for Everywhere on the Grid

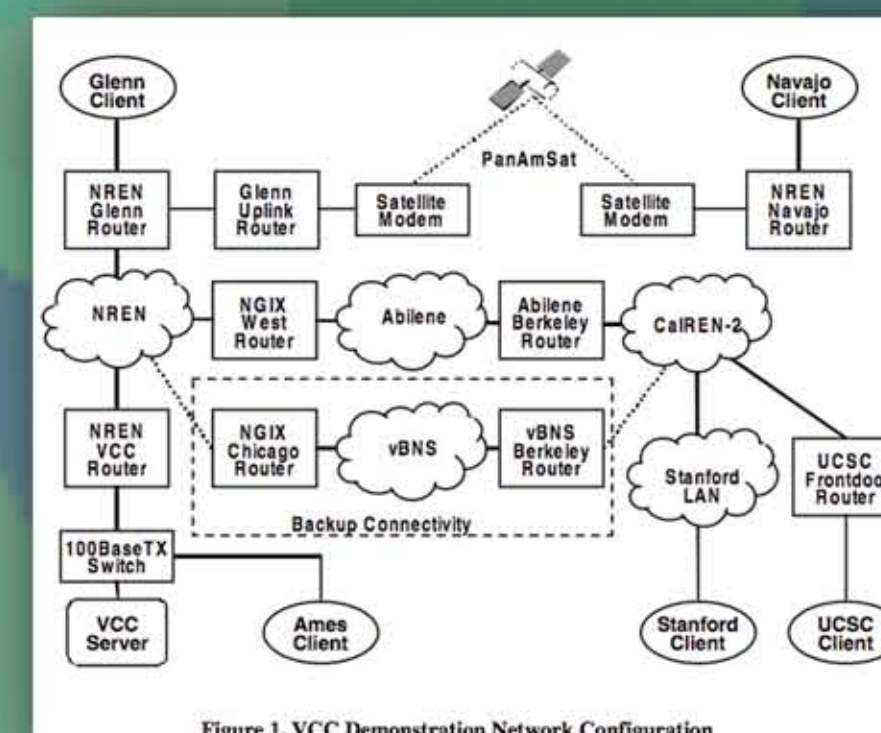


Figure 1: VCC Demonstration Network Configuration

Virtual collaborative clinic architecture