# Software Development and Maintenance

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## Development Environment

## Tools

- Compilers, debuggers
- Performance, memory analysis (Purify, Quantify)
- CVS (version control system)
- Gnats (bug tracking system)
- Internal tools
  - Regression tests
  - Build tools

# Windows Development Environment

Windows development environment Most developers now use both platforms • Cheaper, faster Reflects user platforms Standardized setup Custom tools Move code between platforms Extensive internal documents

# **Development Process**

#### Development Steps

- Design
  - Analysis, requirements, and design documents
  - Design review meetings
- Write code
  - Conform to internal standards
- Peer code review
- Functional Testing
- Purify (memory analysis tool)

#### Software Maintenance

- Bug fixesGnats bug tracking system
- Third-party libraries
  Upgrade and monitor releases
  Qt migration