



VisualAge[®] TPF for Windows NT^{**}

Fact Sheet

Take a look at what IBM is doing for TPF application development. The VisualAge TPF remote development environment provides the tools you need to improve quality and productivity. Bring your application development process to a new level with this set of workstation tools and technologically advanced remote tools.

Development Environment User Interface

IBM designed the graphical user interface for VisualAge TPF for ease of use. The GUI is a three-paned window. The first pane contains a tree-based view and the second a contents view. The third pane is used to monitor any remote communications during the development cycle. The user interface lets you easily interact with remote and local tools, software configuration management tools, and state-of-the-art HTML online

information. The interface is intuitive and easy to use, but powerful at the same time. A menu bar and toolbar allow easy manipulation of the information in the window. Context menus display the appropriate actions for each type of part.

Editor

VisualAge TPF provides a 32-bit editor that is fast, simple to use, and easily customizable. The editor provides all of the general features expected of a workstation editor – cut and paste, insert, delete, join, and find. But the editor also provides extra features through language extensions supporting C, C++, Sabretalk, and assembler. These language extensions format and display code structures, perform lexical parsing, and support contextual help. The editor also allows you to customize its look and behavior.

Remote Compile/Assemble

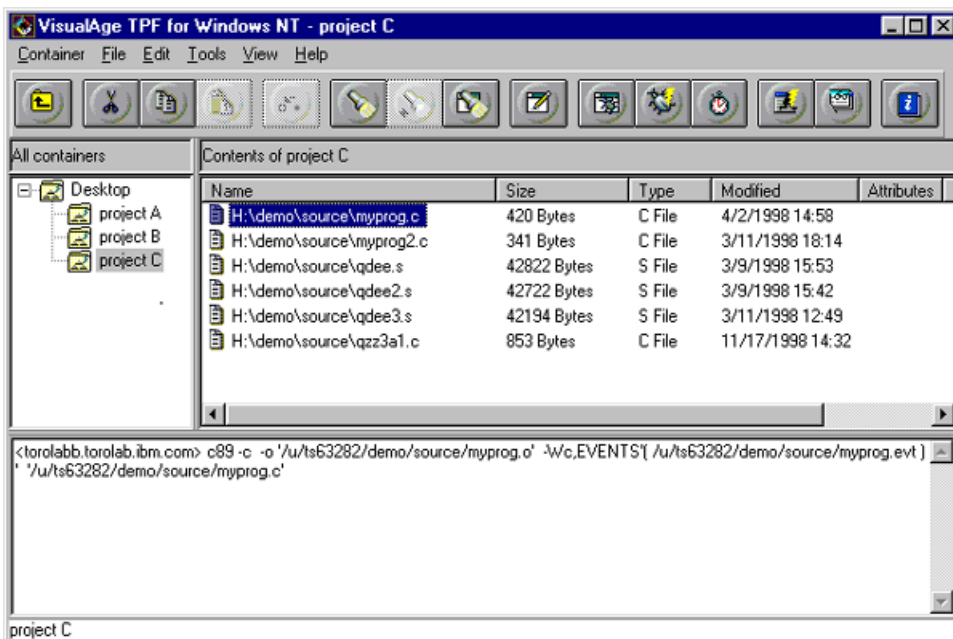
Remote compile/assemble capability allows you to invoke an OS/390[®] compile/assemble action from a Windows NT client just by selecting a source file. Depending on the file type (C, C++, or assembler), the context menu will contain the appropriate remote compile or assemble choice. When you select that action, the compile/assemble command executes on OS/390 UNIX System Services[®], and the results of the compilation are displayed on the workstation. If there are any error messages, just double-click on one and the editor is invoked and positioned at the appropriate place in the code with the error indicated.

Local Applications

VisualAge TPF provides local C and C++ compilers to assist in early syntax checking and logic validation before you deploy your application on TPF. Compile your code on your workstation to either create a workstation C or C++ application or to help remove compile-time errors from the code that will be used on TPF. VisualAge TPF provides access to the local tools you need to debug and analyze the workstation application.

Configuration Management and Version Control

VisualAge TPF provides an open Software Configuration Management (SCM) interface. You can integrate any SCM which is accessible from a Windows NT command, such as Rational ClearCase^{**} and ClearQuest^{**}. VisualAge TPF provides the tools to easily create the custom interface to the SCM functions that you need. A sample customization for ClearCase is provided to get you started quickly.



Remote Debugger

The remote debugger for VisualAge TPF is an interactive source-level debugger. A Windows NT client is connected through TCP/IP to a native TPF environment.

The remote debugger allows you to debug assembler, C, or C++ applications. The debugger displays application source files and the functions in those source files. You can single-step, step through, step over, or stop execution at a specified line or condition. While controlling execution, you can monitor variables, registers, memory, call stacks, TPF control blocks, and other elements.

Performance Analyzer

The application performance analyzer is a development tool that traces the execution of a program and creates a trace file. You can use it to identify performance problems early in the development cycle.

Performance analyzer offers function profiling, which shows the time spent in each function.

You can display the acquired information in several ways. The Call Nesting view shows the program as a series of function calls and returns. The Dynamic Call Graph is a visual representation of the program. As well as providing timing information, the graph shows the components of your application as boxes and the interaction between the components as arcs. The Statistics view provides a spreadsheet with all of the information available for the trace.

Prerequisites

OS/390

- V2.4 or higher
- C/C++ Compiler feature
- High Level Assembler
- UNIX System Services
- TCP/IP V3R2
- NFS
- REXEC

TPF V4.1

- latest maintenance recommended
- TCP/IP

Workstation

- Intel-based Pentium 166 Mhz
- 4 Gb Hard Drive
- 128 Mb Memory
- Windows NT 4.0 Service Pack 3 or higher
- NFS Client
- Browser, frames capable
- TCP/IP

Network

- Token Ring or Ethernet LAN
- TCP/IP

Visit us on the web at:

<http://www.ibm.com/software/ad/vatpf/>

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