PROFILER
Quality Assurance Testing Tool for NATURAL

Fact Sheet

PROFILER for NATURAL is a powerful quality assurance and testing tool which enables sites to thoroughly test NATURAL applications, resulting in lower maintenance and support requirements.

PROFILER can help identify problem programs and statements, inefficient code, poor application structure, expensive database accesses, and weak test data and procedures.

Ensuring Complete Test Coverage

PROFILER monitors the execution of NATURAL object code, generating statistics from the application level to the NATURAL statement level. Statistics include CPU Time, Database Elapsed Time, Program Run Count, Statement Execution information, and other valuable run-time data. PROFILER continuously monitors the execution of NATURAL programs, providing more complete and reliable statistics than "snapshots."

PROFILER shows the percentage of a NATURAL program or application that has been tested. PROFILER also identifies untested statements. Critical test data can be built to satisfy all untested conditions, assuring application quality.

Statistics for copycode are collected during program execution and reported by PROFILER. Blocks of NATURAL Optimized Code are identified.

Trace sessions display program statements in the order they were executed, enabling detection of poorly written code.

Ease of Use

The PROFILER user interface is written in NATURAL for familiarity and ease of use. PROFILER requires no changes to NATURAL application source or object code.

Background Monitoring

PROFILER Background Monitoring eliminates the need for individual programmers to learn PROFILER or be aware that it is active. Statistics collection can automatically be activated for one or more users, based upon User-ID, Library, Program, and Date/Time.

PROFILER Provides Immediate Feedback on Testing Efforts

The PROFILER Enhanced Program Listing Source Code report shown below provides information about the executable statements in the program PAYEMPLP. Copycode PAYEMPLC has been expanded for easier reading (shown below in pink), and statements which were not executed (N/E) are identified with an asterisk. The command line (shown here in green) provides ease of navigation.

```
          Source listing for Library:  PAYTEST    Program:  PAYEMPLP
>top_
Statement     Total          Average         Stmt
Count         CPU (msec)     CPU (msec)  N/E  Nbr   NATURAL Statement
----------    -----------    ----------- ---  ----  -------------------------------
                                              0010  DEFINE DATA LOCAL USING PAYEMPLL
                                              0020  END-DEFINE
      442        14.551           .033         0030  READ EMPLOYEES-VIEW
<<DATABASE     20054.928         45.373>>
      441         2.816           .006         0040  DECIDE FOR FIRST CONDITION
                                              0050    WHEN ZIP = MASK ('9')
       10           .022           .002         0060    INCLUDE PAYEMPLC
       10           .068           .007       0010C SET KEY PF3
       10           .180           .018       0020C INPUT USING MAP 'PAYEMPLM'
       10           .084           .008       0030C  IF *PF-KEY = 'PF3'
                                           *  0040C    FETCH 'PAYENDP'
                                              0050C  END-IF
      441         2.672           .006         0070  WHEN ZIP = MASK ('0')
       22         8.617           .392         0080    WRITE 'UPDATE ZIP FOR EMPLOYEE'
```

Flexible, Powerful Reporting Features

PROFILER offers extensive reporting capabilities, showing detailed statistics about the execution of NATURAL programs based on a single User-ID and profiling session.

The PROFILER Enhanced Reporting feature offers additional reports which combine statistics for multiple users and sessions. With the Enhanced Reporting feature, sites may customize and write their own reports for unlimited reporting possibilities.

Software AG Interface Partnership

Treehouse Software and Software AG of Germany signed an Interface Partnering Agreement for PROFILER, ensuring that PROFILER remains compatible with all new releases of Software AG products.

System Requirements

PROFILER operates under Z/OS and VM/CMS.

Treehouse Software, Inc.
2605 Nicholson Road, Suite 1230 • Sewickley, PA 15143 USA
Phone: 724.759.7070 • Fax: 724.759.7067 • Web: http://www.treehouse.com

Treehouse
SOFTWARE