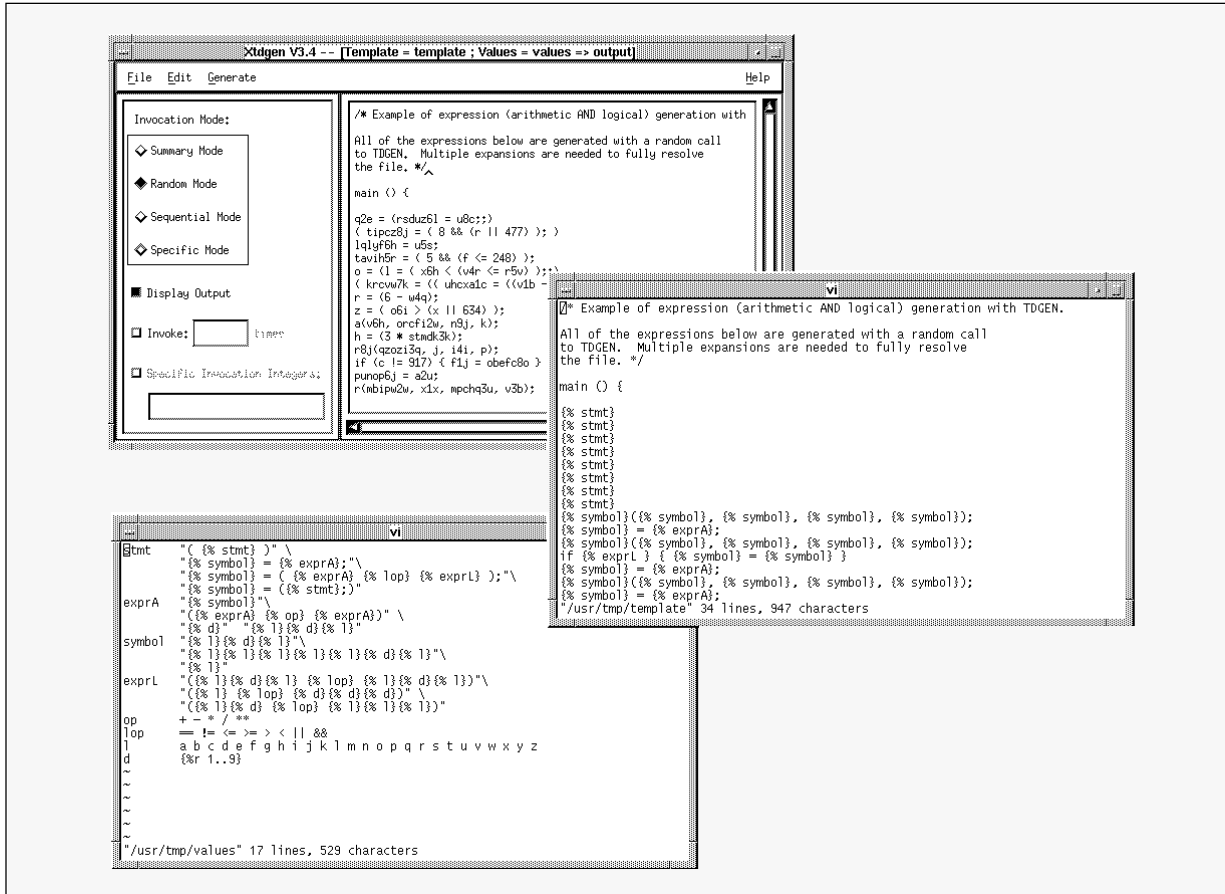




SOFTWARE RESEARCH, INC.

TDGEN

TEST DATA GENERATOR



TDGEN generates test data inputs from a user-specified template file that contains data from a user-edited values file. .

PRODUCT DESCRIPTION

STW/Advisor™'s test data generator, TDGEN™, provides the capability to take an existing test script and substitute new data values to create additional tests, increasing the size of a test suite with minimal work in order to more fully exercise the program-under-test.

TDGEN produces an input test data file based on the following user created files:

- A template file describes how selected test data values are to be placed in a typical test file through data descrip-

tors. This file provides an outline of the eventual output file.

- A values file indicates the actual test values, test value ranges or test value generation rules for each data descriptor.

According to user specification, such as sequential or random generation, TDGEN replaces the template file's data descriptors with the value file's actual values. The descriptors in the template file are denoted by a special syntax; all other text, except for comments, is reproduced verbatim.

TDGEN behaves as an intelligent macro

processor. The user either creates new test data files or configures existing test scripts to substitute different data items for selected fields. With TDGEN, tens or hundreds of additional tests can be created in a short amount of time.



TEST DATA/FILE GENERATION

- *Template File* — Describes how selected test data values are to be placed in a typical test file.
- *Values File* — Indicates the actual input test values, test value ranges or test value generation rules for data descriptors that appear in the template file.
- *Generation* — **TDGEN** processes the values file by constructing a data table with field names as keys, then scans the template file for special syntax with identifier field names, and finally substitutes values from the data table associated with corresponding field names.

SPECIAL CHARACTER PROCESSING

- Tabs
- Escape sequences
- (\) backslash character

TYPES OF VALUES

- Enumerated values with no size restrictions.
- Expanded values that included the first and last number in a sequence and are automatically expanded.
- Built-in Values that can be integers, ASCII and real (floating) numbers.

GENERATION MODES OF VALUES

- *Summary Mode* — Calculates the total number of combinations possible with all fields in a given specification.
- *Random Mode* — Selects field values at random.
- *Sequential Mode* — Selects field values sequentially.
- *Specific Mode* — User indicates a specific order of data to be generated with choices of location-specific data, uniformly distributed data, or value-factored data.

TEST DATA FILE CUSTOMIZATION

- Variable Width
- Fixed Width
- Left-Adjusted
- Right-Adjusted

```

<template file>
{%!date}
{%-10 name} {%-15 surname}    {%5 age}
{%-10 name} {%-15 surname}    {%5 age}

```

```

<values file>
name      Art David Saul Lamont John Jack\
          Jill Laura Ruth Regina
surname   Nguyen Rodriguez Steinberg Collins\
          McGraph Banducci Dumaine
age       {%r 1...100}

```

```

<TDGEN output>
Fri May 3 17:06:30 PST 1993
David      Rodriguez    29
John      Dumaine      50

```

TDGEN fills in the "descriptors" (i.e. name, surname and age) in the template file with the data associated with that descriptor in the values file.

MULTIPLE INTERFACES

- Graphical User Interfaces (GUI)
- Command Lines
- Menus

SUPPORTED PLATFORMS

- Sun SPARC
- x86 Solaris
- SCO
- SGI
- IBM RS/6000
- HP 9000 - 700/800
- DEC Alpha
- UNIXWare
- MS-DOS

TECHNICAL SUPPORT

- Telephone hot-line assistance for installation and technical questions is available.
- Maintenance contracts provide continuing product support and upgrades.



For more details on **TDGEN**, contact:



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