

Software Product

TomDoors-M (BS2000) Version 5.0

Tool Manager
Edition 5/95

Product Characteristics

TomDoors-M is a tool manager which integrates products and functions for developing BS2000 applications - particularly COBOL-OLTP applications - to produce a BS2000 workstation, and which offers the developer a standard user interface with a wide range of features and control options.

TomDoors-M thus provides a common interface and control of all BS2000 application development processes, for all functions, tools and utilities. This improves both the quality of the software and productivity in the software development process. Management of user-specific procedures is no longer required.

In version 5.0 of the Tool Manager, which provides an improvement in functionality, many user development requests have been implemented. With its graphical user interface on a Windows PC in the C/S environment, it also forms the basis for new applications.

TomDoors-M supplies the interfaces for tools, checks their runtime responses, generates and controls sequences associated with software production, and provides a standard user interface.

TomDoors-M, together with other tools of the BS2000 and TOM product family, e.g. TOM-CA or TOM-REF, represents a complete software production environment (see Fig. 1).

In addition to the TOM products, the following functions and tools are integrated by the tool manager TomDoors-M:

Compilers:

ASSEMB, ASSEMBH, COB1, COBOL85, C, Fortran

Linkage editors:
TSOSLNK and BINDER

Library functions:
LMS and FMS

Generation functions:
COLUMBUS85
Functions for program

structuring and documentation and generation of Nassi-Shneiderman structograms and ESQL precompilers

Mask generators:

IFG/FHS and FORMPLAG

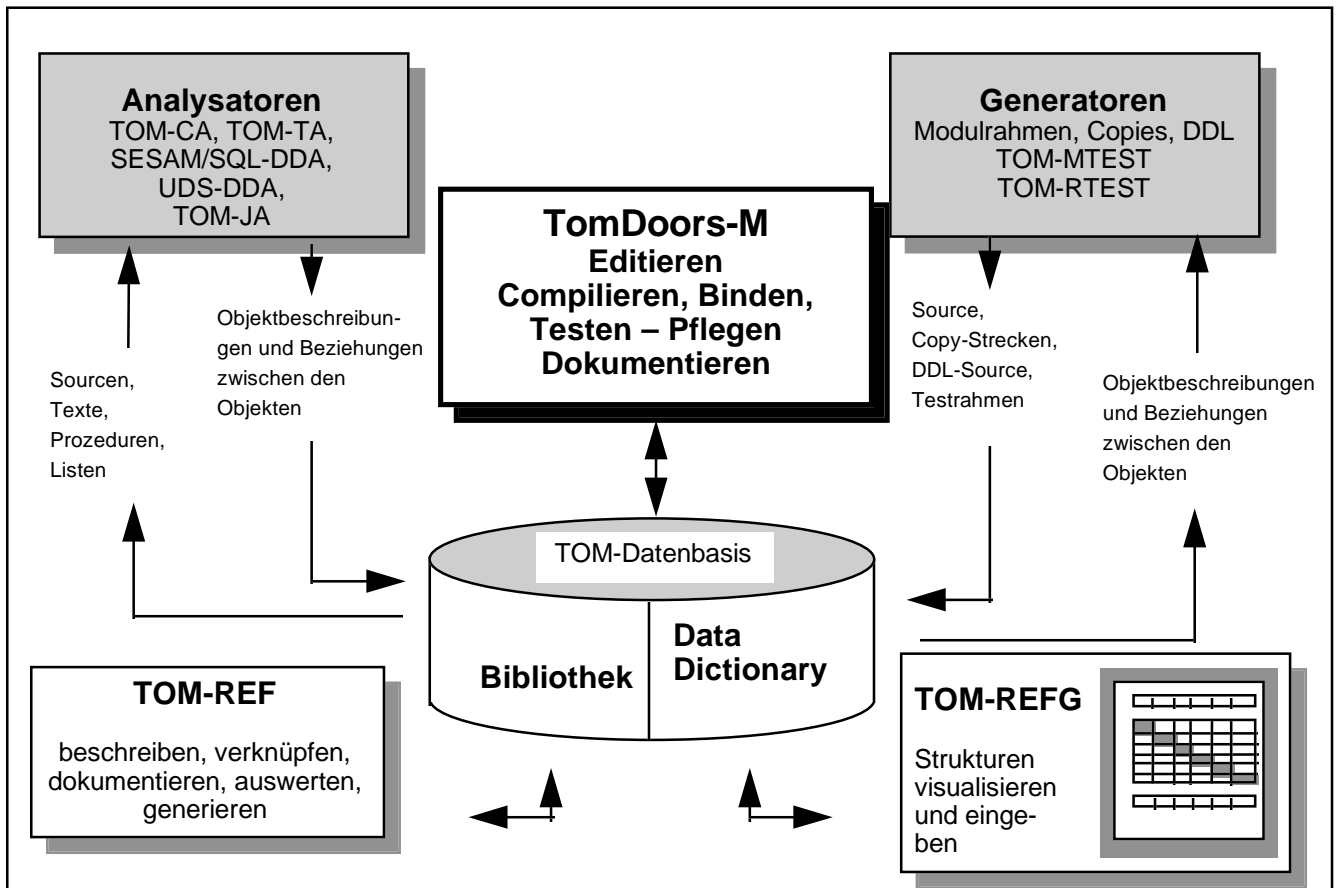


Bild 1: Funktionsverbund TomDoors-M

In client/server environments of BS2000 with Windows PCs TomDoors-M offers a convenient and powerful working platform thanks to its new user interface.

Functional Description

Each phase in the user's development process can be catered for individually and in line with specific user requirements. The objects are stored in a system library (development environment database) and managed via standard naming conventions. The naming conventions form the basis for communication between all functions, thus enabling

TomDoors-M to check the consistency of results.

TomDoors-M supports software developers in the design and development of software in the Assembler, COBOL, C and Fortran programming languages. In addition, the call for COLUMBUS85 (structured programming) and for the SQL precompiler (ESQL) is integrated in TomDoors-M.

The user-specific function sequence of a software development can be specified in a selection mask (see Fig. 2).

In TomDoors-M the user can call and initiate all functions either by entering a command or by marking items in the dialog window (guided mode/expert mode). Further details about additional formats may be obtained by the user if necessary.

Functions marked in the dialog window of the tool manager (e.g. compile, link, test) are converted and processed in call hierarchies and function sequences. The execution of the individual functions is constantly monitored.

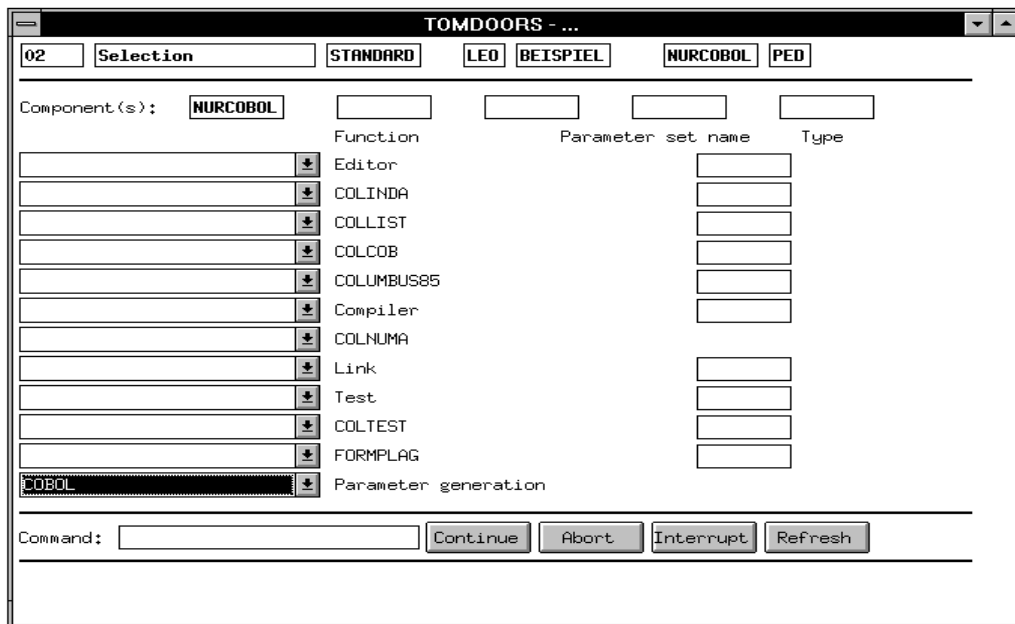


Bild 2: Auswahl dialog TomDoors-M

Default parameters are set via the tool manager's user-friendly interactive interface. These settings can be specified on a general, project-specific, or user-specific basis.

The job control function of TomDoors-M constantly monitors the individual functions. The tool manager responds immediately to error events even within individual functions (compile, link), interprets the error message from the utility routine, and automatically executes a logical follow-up process. For example, program error messages detected by the compiler during compilation are immediately merged into the source program at the correct location.

New features:

Expansions compared to TOM-M Version 4.1 C

In addition to the new assembler ASSEMBH, TomDoors-M now also supports the C programming language and, with COLUMBUS85, the current COBOL generator with its new functions Pretty Printer and Beautifier for COBOL85 sources. Expanded linkage editor conventions allow alternative use of TSOSLNK and BINDER.

Additional expansions:

- ### Control parameters for procedures initiated from TomDoors-M.
- ### Support of the LOGONPASS command for password transfer when programs are called.
- ### Expansion of the HELP functions and expansion of options after error messages.

Runtime and resource optimization measures by means of direct accesses to the TOM library.

Expansion of the TOM type table to implement new functions such as using user-specific types.

Expansions compared to TOM-M Version 4.2

TomDoors-M V 5.0 offers the following expansions compared to its predecessor, TOM-M V 4.2:

- ### Support for graphical user interface via PC.
- ### Supported by ESQL-COBOL including error merging in the source (as special function)
- ### Support for V2.0 of BS2000/OSD

Integrated working with TomDoors-M:

TomDoors-M is operated via menus and commands; it prepares, if necessary, the selected development functions by parameterization, activates the given function, controls error handling, and stores the results specifically in the TOM system library. The following functions are supported by TomDoors-M within the framework of a standard phase plan:

EDT	Editor
IFG/FHS, FORMPLAG	Generation, modification and administration of interactive interfaces
Compilers	COBOL85, COB1, ASSEMBH, FOR1 F-ASSEMB and C
Linkage editors	TSOSLNK, BINDER
LMS/FMS	Library systems
AID	Interactive symbolic debugging aid with DUMP and Trace
TOM-REF	Storage and administration of communication structures, data definitions and job control. Directory for (DDA)
TOM-REFG	Generation and display of technical and IT communication structures (communication diagrams with N ² charts)
TOM-TI	Submonitor for editing, generating for text editing and controlling subtasks (synchronous and asynchronous)
TOM-DOC	Documentation of technical problem analysis and of system design, IT system design, and other documentation

TOM-GEN	Program code and text generation
TOM-CA	Analysis and post-documentation of COBOL and COLUMBUS-COBOL programs (generation of input for DDA)
TOM-JA	Post-documentation of JOB control language procedures
TOM-TA	Post-documentation of texts (recording document structure)
TOM-MTEST	Generation of test framework for module and module group test
TOM-RTEST	Automatic retesting
COLUMBUS	Program design and generation of Nassi-Shneidermann structograms, decision table technology.

SESAM/SQL-DDA (SESAM-DDA)

Support for database description and database construction. Generation and administration of SQL2 metadata and administration of access rights, privilege management, interoperability with the data dictionary TOM-REF

Consistency checking of administration procedures (description refers largely to SESAM-DDA)

UDS-DDA

Support for database structure of UDS by generation of schemes and subschemes, DDL sources and JCL statements from the data dictionary. Support for post-documentation of existing UDS applications

Hardware:

BS2000 System 7500 and for graphical presentation on Windows PC hardware configuration see: FHS-DOORS V2.0

Memory requirements:

User address space: min. 2 Mbytes
Memory requirement: 2000 PAM pages

Software:

BS2000-GA V 10 or higher
VTSU V 11 or higher
for graphical presentation on PC
For additional software see:
FHS-DOORS (MS-DOS) V2.0 B
DialogBuilder RTS V 2.1 or higher

EDT V16.3 or higher
TOM-TI V3.0 C or higher
LMS V2.0 or higher

In addition:

TSOSLNK V21.0 or higher
BINDER V1.0 or higher
TOM-DOC V3.1 B or higher
TOM-GEN V2.0 B or higher
TOM-REF V2.0 or higher
TOM-REFG V2.1 A or higher
TOM-RTEST V2.0 A or higher
TOM-MTEST V1.1 B or higher
TOM-CA V2.0 A or higher
TOM-JA V1.0 A or higher
TOM-TA V1.0 B or higher
TOM-MP V1.0 A or higher
COBOL85 V1.2 or higher
COLUMBUS85 V1.0 A or higher
COLUMBUS-ASS V2.2 F or higher
COLUMBUS-COB V4.1 B or higher
ASSEMBH V1.1 or higher
ASSEMB V30.0 or higher
COB1 V2.3 or higher
FOR1 V2.1 or higher
C V2.0 A or higher
AID V2.0 A or higher
KMS V1.3 or higher
IFG V5.0 or higher
FHS V6.0 B or higher
FMS V2.4 or higher
FORMPLAG V2.4 B or higher
SESAM-DDA V2.0 A or higher
SESAM/SQL-DDA V 3.0 or higher
UDS-DDA V1.0 B or higher

Operating mode:

Interactive mode

Implementation language:

Assembler, SPL4

User interface:

English

Installation

By the user with the help of the
Release Notice documentation

Documentation

TomDoors-M Introductory Guide

The following manuals have not
been amended and therefore still
have TOM-M in the title

TOM-M Introductory Guide

TOM-M Reference Guide

TOM-M User Guide for
COBOL, COLUMBUS
COLUMBUS85

TOM-M User Guide for
Assembler, C, Fortran

Training

Courses are held at the Training
Center of Fujitsu Siemens
Computers under the currently
valid conditions.

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to the customer under our
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Delivery format: Machine language

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