

FHS (BS2000/OSD) Version 8.3A Format Handling System (Format Control)

Issue October 2006

Pages 3

FHS enables BS2000 applications to be equipped with an alphanumeric, mask-oriented user interface. Thanks to the use of dialog elements conforming to the Alpha Style Guide it is possible to design user interfaces that correspond to the "Guidelines for the design of character-oriented user interfaces" (Alpha Style Guide, see Fig. 1). The use of FHS makes application programming largely independent of the physical characteristics of the data display terminal peripherals connected. FHS also enables formatted messages to be printed out on terminal printers or, subject to restrictions, on high-speed printers in the computer center. FHS is available for programs in interactive mode (TIAM), in openNet Server (DCAM) applications, and in transaction processing mode (openUTM).

Functional Description

Basic functions

- Creation of formats in conjunction with the Interactive Format Generator(IFG).
- Formatting of input/output messages.
- Possibility of specifying different field characteristics of formats either at the time of creation or at the time of utilization (runtime).
- Addressing aids for input and output data for all important programming languages are available for application programs. These enable the application program to access the relevant parts of the message via symbolically defined fields.
- Separate transfer areas for field contents and their attributes
- Transmission of either net data only or modified data only.
- Possibility of field handling by the application program during formatting.
- Utilization of the maximum number of fields per line on the screen, in accordance with the type of data display terminal used.
- Exchange of subformats on screen (for other subformats of the same size).
- Loading the P keys of data display terminals by means of special formats. (The service routine PLUS, which is contained in the software products VTSU and DCAM, is also required in order to assign user-determined information to the keys).
- Editing of messages for terminal printers, either as hardcopies or as printed forms. Operation of the printer either connected to the data display terminal or a printer controller. Unsolicited messages are also edited.
- Printouts of formats on highspeed printer for test purposes.

- FHS calls via Assembler interface or COBOL-CALL interface for COBOL programs under TIAM or DCAM.
- Edit functions: support for data editing and testing such as decimal and digital separation, sign, date, input duty, and minimum input length, etc.
- Optional integrated or decoupled interface during transaction operations with UTM.
- Support for 8-bit terminals (coded character set corresponding to ISO 8859).
- From an UTM application, any RSO printer can be accessed.

Dialog expansions that conform to Alpha Style Guide

- Standardized mask layout in accordance with Alpha Style Guide (Fig. 1).
- Display of single and multiple selection fields.
- Support during list display.
- Display of format name.
- Display of dialog boxes.
- Extensive help system (fieldrelated help, mask-related help, help with the Help functions, help with key assignment, help with FHS system commands).
- Choice of national language format.
- Command processing.
- Support for menu bar and pulldown menus.
- Support for cross-references.

Changes since the preceding version V8.2D

- Support of Unicode
- Support of PI up to 65K

Technical Data	
Technical requirements for hardware	BS2000/OSD server. Memory requirements: <ul style="list-style-type: none"> ▪ FHS-Kernel approx. 111 KB ▪ FHSCON approx. 91 KB ▪ FHS-DE approx. 201 KB ▪ FHS-DM approx. 1401 KB ▪ FHS-PRIV approx. 377 KB Data Display Terminals: <ul style="list-style-type: none"> 3270 8160 8161 8162 9748 9749 9750 9751 9752 9753 9754 9755 9756 9756-12x 9758 9758 8-bit 9759 9759 8-bit 9762 9763 monochrome 9763 color 9763-M/C/D7 Printers: <ul style="list-style-type: none"> 4810-P10 9001-8931/832 (9001-893 for FHS-ASS) 9001-31/32 (9001-31 for FHS-ASS) 9001-xxx 9002 9003 9004 9011-18/28 9011-19/29 9011-10/20 9012 9013 9014-11/15/15 (ECMA emulation only) 9021-2 9022-200/200U 9022 (not 9022-300/300U) 9025 9097-10/20 3287 (IBM printer) SINIX-PCs (9750 emulation EMDS)

Technical requirements for software	<ul style="list-style-type: none"> ▪ BS2000/OSD V6.0B or later ▪ openUTM V5.2A or later ▪ RSO V3.5A or later
Operating mode	Dialog
Implementation language	FHS-Kernel: Assembler, FHS-DM/-DE/-PRIV: C, SPL, Assembler.
User interface	English und German.
Installation	By the customer on the basis of the release notice
Documentation	Manuals (English and German) for users and system administrators, in printed form via http://fsc-manualshop.com/ or as PDF files; also available on the Internet via Online manuals - Fujitsu Siemens Computers
Demands on the user	BS2000 knowledge
Training	Courses are held in the Technical Training Academy von Fujitsu Siemens Computers under the currently valid conditions. For further information see http://www.fujitsu-siemens.com/training
Conditions	This software product is supplied to the customer under the conditions for the use of software products against instalments or a single payment
Warranty	Class: A Delivery format: Machine language
Ordering and delivery	This software product may be obtained from your local Fujitsu Siemens Computers regional office