

DATA ITEM DESCRIPTION

Title: SOFTWARE CENTER OPERATOR MANUAL (SCOM)

Number: DI-IPSC-81444A

Approval Date: 20000111

AMSC Number: N7379

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: N/SPAWAR

Applicable Forms: N/A

Use, Relationships:

The Software Center Operator Manual (SCOM) provides personnel in a computer center or other centralized or networked software installation information on how to install and operate a software system.

The SCOM is developed for software systems that will be installed in a computer center or other centralized or networked software installation, with users accessing the system via terminals or personal computers or submitting and receiving inputs and outputs in batch or interactive mode.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to identify and record information needed by persons who will operate software in a computer center or other centralized or networked software installation, so that the software can be used by others.

This DID is often used with the Software Input/Output Manual (SIOM) (DI-IPSC-81445). This pair of manuals is an alternative to the Software User Manual (SUM) (DI-IPSC-81443A).

This DID supersedes DI-IPSC-81444.

Requirements:

1. Reference documents. None.
2. General instructions.
 - a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium.
 - b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.
3. Format. Following are the format requirements.

The specification shall be in contractor format unless otherwise specified on the Contract Data Requirements List (CDRL)(DD 1423). The CDRL should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

4. Content. The specification shall contain the following:

- a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.
- b. Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.
- c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.
- d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.
- e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.
- f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.
- g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. Software summary. This section shall be divided into the following paragraphs.

3.1 Software application. This paragraph shall provide a brief description of the intended uses of the software. Capabilities, operating improvements, and benefits expected from its use shall be described.

3.2 Software inventory. This paragraph shall identify all software files, including databases and data files, that must be installed for the software to operate. The identification shall include security and privacy considerations for each file and identification of the software necessary to continue or resume operation in case of an emergency.

3.3 Software environment. This paragraph shall identify the hardware, software, manual operations, and other resources needed to install and operate the software. Included, as applicable, shall be identification of:

a. Computer equipment that must be present, including amount of memory needed, amount of auxiliary storage needed, and peripheral equipment such as terminals, printers, and other input/output devices.

b. Communications equipment that must be present.

c. Other software that must be present, such as networking software, operating systems, databases, data files, utilities, permanent files that are referenced, created, or updated by the software; and databases/data files necessary to resume operation in the event of emergencies.

- d. Forms, procedures, or other manual operations that must be present.
- e. Other facilities, equipment, or resources that must be present.

3.4 Software organization and overview of operation. This paragraph shall provide a brief description of the organization and operation of the software from the operator's point of view. The description shall include, as applicable:

- a. Logical components of the software, from the operator's point of view, and an overview of the purpose/operation of each component
- b. Types of inputs/access that can be made to the software and the software's response to each type
- c. The reports and other outputs that are produced by the software, including security and privacy considerations for each
- d. Typical run times and factors that affect it
- e. Organization of software operation into runs. This description shall use a chart, if applicable, showing how the different operations are interrelated. If sets of runs are grouped by time period or cycles, each set of integrated operations required on a daily, weekly, etc., basis shall be presented. If runs may be grouped logically by organizational level, the groups of runs that can be performed by each organizational level such as headquarters processing, field activity processing, etc., shall be presented.
- f. Any system restrictions, waivers of operational standards, information oriented toward specific support areas (for example, library, small computer and teleprocessing support, interfaces with other systems), or other special aspects of processing
- g. General description of the communications functions and processes of the software, including, as applicable, a diagram of the communications network used in the system

3.5 Contingencies and alternate states and modes of operation. This paragraph shall explain the differences in software operation at times of emergency and in various states and modes of operation, if applicable.

3.6 Security and privacy. This paragraph shall contain an overview of the security and privacy considerations associated with the software. A warning shall be included regarding making unauthorized copies of software or documents, if applicable.

3.7 Assistance and problem reporting. This paragraph shall identify points of contact and procedures to be followed to obtain assistance and report problems encountered in operating the software.

4. Installation and setup. This paragraph shall describe any procedures that the operator must perform to install the software on the equipment, to configure the software, to delete or overwrite former files or data, and to enter parameters for software operation. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

5. Description of runs. This section shall be divided into the following paragraphs to provide a description of the runs to be performed. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

5.1 Run inventory. This paragraph shall provide a list of the runs to be performed, identifying the software and the jobs that make up each run. It shall include a brief summary of the purpose of each run and shall relate the list to the run descriptions included in the remainder of this section.

5.2 Phasing. This paragraph shall describe acceptable phasing of the software into a logical series of operations. A run may be phased to permit manual or semiautomatic checking of intermediate results, to provide the user with intermediate results for other purposes, or to permit a logical break if higher priority jobs are submitted. An example of the minimum division for most systems would be edit, file update, and report preparation.

5.3 Diagnostic procedures. This paragraph shall provide the setup and execution procedures for any software diagnostics. Included shall be procedures for validation and trouble shooting. All parameters (both input and output), codes, and range values for diagnostic software shall be explained.

5.4 Error messages. This paragraph shall list all error messages output by the software, along with the meaning and corresponding correction procedure for each message.

5.5 Description of each run. This paragraph shall be divided into the following subparagraphs.

5.5x Run description for (run name or identifier). This paragraph shall identify a run and shall be divided into the following subparagraphs to describe the run.

5.5.x.1 Control inputs. This paragraph shall provide a listing of the run stream of job control statements needed to initiate the run.

5.5.x.2 Run management information. This paragraph shall provide the information needed to manage the run including, as applicable:

- a. Peripheral and resource requirements
- b. Security and privacy considerations
- c. Method of initiation, such as on request, after another run, or at a predetermined time

- d. Estimated run time
- e. Required turnaround time
- f. Messages and responses
- g. Procedures for taking check points
- h. Waivers from operational standards

5.5.x.3 Input-output files. This paragraph shall provide information about the files and databases that serve as input to or that are created or updated by the run. Included for each shall be information such as name, security and privacy, recording medium, retention schedule, and disposition.

5.5.x.4 Output reports. This paragraph shall provide information about the reports that are produced during the run. Included for each report shall be the following information, as applicable: report identifier, product control number, report control symbol, title, security and privacy, media (e.g., hard copy, magnetic tape), volume of report, number of copies, and distribution of copies.

5.5.x.5 Reproduced output reports. This paragraph shall provide information about computer-generated reports that are subsequently reproduced by other means. Included for each report shall be information such as report identification, security and privacy, reproduction technique, paper size, binding method, number of copies, and distribution of copies.

5.5.x.6 Procedures for restart/recovery and continuity of operations. This paragraph shall provide procedures to be followed by operator personnel concerning restart/recovery in the event of a system failure and for continuity of operations in the event of emergencies.

6. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81444A.