

DATA ITEM DESCRIPTION

Title: SOFTWARE PRODUCT PACKAGE (SPP)

Number: DI-IPSC-82090

AMSC Number: N9750

DTIC Applicable: No

Preparing Activity: AS

Applicable Forms: N/A

Approval Date: 20161208

Limitation: N/A

GIDEP Applicable: No

Project Number: IPSC-2016-003

Use/relationship: The Software Product Package (SPP) contains the procedures to install the computer software on any device that stores or processes information. The SPP also contains the build and compilation procedures.

This DID contains the format, content, and intended use information for the data deliverable resulting from the work task described in the solicitation.

Requirements:

1. Reference documents: None
2. Format: The software SPP shall be in contractor format
3. Content: The SPP shall contain the following:
 - 3.1 Title page: The SPP shall contain a title page identifying the following information, as applicable:
 - a. Document identification number
 - b. Volume number
 - c. Version or Revision indicator
 - d. Security classification
 - e. Release date
 - f. Document title
 - g. Name of the device, computational system, or computer to which this SPP applies
 - h. Name of the Software Item (SI) to which this SPP applies
 - i. Contract number
 - j. CDRL item number
 - k. Organization for which the document has been prepared
 - l. Name and address of the preparing organization
 - m. Distribution statement

3.2 Record changes

The SPP shall contain a record of changed pages from the prior document submission. Each submission shall append information to the record of changes.

DI-IPSC-82090

3.3 Table of contents

The SPP shall contain a table of contents providing the number, title, and page number for each titled paragraph, figure, table, and appendix.

3.4 Page numbering

Each page shall contain a page number and include the document number, document version, volume, and date, as applicable.

3.5 Styles

The language style shall be consistent throughout the SPP. Diagrams, tables, and other presentation styles are acceptable substitutes for text when the information required by this DID can be made more readable using these styles.

3.6 Multiple paragraphs and subparagraphs

Any section, paragraph, or subparagraph may be written as multiple paragraphs or subparagraphs to enhance readability.

3.7 System overview

This paragraph shall briefly state the purpose of the system and the software to which this document applies.

3.8 Time and Personnel

This section shall identify the anticipated amount of time that is needed to perform the SPP procedures per computer, and the anticipated minimal amount of personnel needed to perform the procedures in the anticipated time frame. This section shall also describe any special personnel skill-sets and expertise required.

3.9 Description of Software Items

This shall describe the following for each Software Item (SI):

- a. Device Name;
- b. Software Item (SI) Name;
- c. Software Item Vendor Name;
- d. Software Item Version;
- e. Software Item Release date;
- f. Contractor's Configuration Management Identifier;
- g. Security classification;
- h. Software Item Media Type and Quantity (e.g. (1) CDROM, (3) DVD, etc.)
- i. Software Item Media Data Integrity Verification Information (e.g. MD5, SHA1, or similar checksum mechanism);
- j. Software Item Data Rights.

3.10 Software Media Description

This section shall describe the computer software and databases necessary to cold start each computer system to include associated license(s), product keys(s), activation codes(s), or hardware keys(s).

DI-IPSC-82090

3.11 Cold Start Procedures

This section shall state the detailed instructions to build, install, and configure the required software item(s) on each computer. The Cold start procedures shall include the installation, software build, and firmware configuration procedures.

3.11.2 Installation Procedures

This section shall include procedures for each of the device computer. The installation procedures shall:

- a. List the physical software media required to perform the procedures.
- b. Include the software activation data, such as serial numbers, key codes, and hardware dongles, fobs and keys.
- c. Identify prerequisite tasks or procedures that must be completed prior to executing the procedure.
- d. Include the procedures to configure the Basic Input/Output System (BIOS) and other user configurable firmware from their factory default settings.
- e. Include the procedures to restore the computer software, such as the operating system, hardware device drivers, application software, and data, to the original delivered configuration.
- f. Include for each procedure step, the detailed action to be performed; the expected result following each action; and areas to document abnormalities, discrepancies, errors; and the pass or fail status for each step.
- g. Include discrete steps to break down and accomplish complex tasks.
- h. Document the computational automated processes (e.g., scripts, batch files, job control language, kick start, and slipstreamed media).
- i. Include the procedures to configure device computational software with applicable cybersecurity controls.
- j. Include all of the usernames and passwords.
- k. Include the procedures to change all passwords.

3.12.2 Software Build Procedures

Software build procedures shall be included for each computer that runs software that is built (compiled and linked) from delivered source code. The Software Build Procedures shall also include the procedures from section 3. The software build procedures shall:

- a. Include the procedures to install the operating system from a formatted hard drive without the use of a disk image.
- b. Include the procedures to compile, link and build the software source code into executable program(s).
- c. Include the procedures to configure the device computational software for use within the device, such as user accounts, network connectivity, and applicable cybersecurity controls.

3.11.3 Firmware Configuration Procedures

DI-IPSC-82090

Firmware configuration procedures shall be included for each device that includes read-only memories (ROMs), Programmable ROMs (PROMs), and Erasable PROMs (EPROMs). The firmware configuration procedures shall:

- a. Identify prerequisite tasks or procedures that must be completed prior to executing the procedure.
- b. Identify the manufacturer and model number of the firmware device.
- c. If applicable, identify the software and files used for programming and reprogramming the firmware device.
- d. If applicable, describe the equipment to be used for programming and reprogramming the firmware device.
- e. If applicable, include steps to erasure, load and verify the firmware with the device.
- f. Include steps to reset the firmware device back to the factory default settings.
- g. Include backup and restoration of the configuration of the firmware device.

3.12 Software Revision Repository

This section shall include procedures for installing, linking and configuring each software revision repository with each applicable computer. The software revision repository procedures shall:

- a. Include the installation and configuration of each software revision repository.
- b. Include the procedures to check the status of each repository.
- c. Include the procedures to add and remove files to each repository.
- d. Include the procedures on how to commit changes to each repository.

3.13 Qualification Provision

This section shall include a data integrity verification checksum for each developed SI, and procedures to verify those developed SIs against their respective checksums to confirm the SIs have not been modified after the build procedures were executed.

3.14 Transition of Software

This section shall provide information which verifies that all software was registered or transferred to the government with the appropriate activation data, such as serial numbers, key codes, hardware dongles, fobs, and keys.

3.15 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 acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

3.16 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.

DI-IPSC-82090

Appendices may be bound as separate documents for ease in handling. Appendices shall be lettered alphabetically (A, B, etc.).

End of DI-IPSC-82090