SCS – Software Crating Station

Secure End to End processing of Field Loadable Software

Description:

The SCS (Software Crating Station) device is a dedicated hardware tool used solely for the handling of the receipt, validation and signing of field loadable software. The device is locked down, with the configuration controlled by **MBS**, and is only able to perform its intended functions, ensuring security to the standard intended by the ARINC 667-3/RTCA DO-355A guidance material for a ground support system.

The device performs the following functions:

■ Import of LSAP via electronic or physical (utilising external drives) means
  • Electronic distribution (e.g., FTP/Web) Portals
  • External CD / DVD / Floppy / PCMCIA Drives

■ Validation of the authenticity and integrity of the field loadable software using PKI. The baseline uses the following validators
  • Carillon LSAP Desktop Validator
  • Boeing compatible Validator
  • Airbus compatible Validator

■ Enable the received data and documents to be reviewed by the operator
■ Facilitate crating and digital signing of field loadable software using the Desktop Signer in the ARINC 827 crate format
■ Allow browser access to export crates for secure storage on the MBS FLS-Desk Server and to download software parts from supplier portals
■ Allows export of signed crates to physical media

The specification of the device is as follows:

Mini PC
- Intel Core i3 processor
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  - 8GB RAM
  - 128GB SSD

- Custom Linux OS
- Preloaded with the following tools
  - SCS GUI
  - Carillon LSAP Desktop Validato
  - Boeing compatible Validator
  - Airbus compatible Validator
  - Carillon LSAP Desktop Signer
  - Kiosk Mode Web Browser

- Interfaces
  - USB: 2x front (Type-A, Type-C) and 3x rear USB 3.2 Gen2
  - Graphics: HDMI 2.0b; USB-C (DP1.4); MiniDP 1.4
  - LAN

Features:

- Import of field loadable software via electronic or physical means
- Validation of the authenticity and integrity of the field loadable software using PKI
- Facilitate crating and digital signing of field loadable software using the Desktop Signer in the ARINC 827 crate format
- Export crates for secure storage on FLS-Desk
- Carillon LSAP signer tool

Benefits:

- End to End Secure Process
- ARINC 667-3 / RTCA DO-355A compliant software distribution
- Supports validation of Airbus ARINC 641-1 formatted software parts
- Fully maintained device to reduce IT efforts and running costs to maintain updates and security patches
- Plug and Play

Use:

- Operators
- Aircraft manufacturers
- Avionics equipment supplier

Software Crating Station Ordering Information

Part Number	Description
AE-667-SCS	Software Crating Station