ABSTRACT

This document provides an overview of the SunSpec Dashboard and information on how to set up and use the software.
About the SunSpec Alliance

The SunSpec Alliance is a trade alliance of developers, manufacturers, operators and service providers, together pursuing open information standards for the distributed energy industry. SunSpec standards address most operational aspects of PV, storage and other distributed energy power plants on the smart grid—including residential, commercial, and utility-scale systems—thus reducing cost, promoting innovation, and accelerating industry growth.

Over 70 organizations are members of the SunSpec Alliance, including global leaders from Asia, Europe, and North America. Membership is open to corporations, non-profits, and individuals. For more information about the SunSpec Alliance, or to download SunSpec specifications at no charge, please visit www.sunspec.org.

Change History

1.0: Initial version
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Chapter 1
SunSpec Dashboard

Introduction
This document describes the concepts and operational details of the SunSpec Dashboard. The SunSpec Dashboard is one of several tools available exclusively to SunSpec Alliance Members.

Overview
The SunSpec Dashboard is a Microsoft Windows 7 application that enables interrogation and inspection of devices and documents using SunSpec technology. Two principal audiences have been targeted: Support personnel engaging in troubleshooting, and software developers working with SunSpec technology.

Features
The SunSpec Dashboard supports all SunSpec models using SMDX model definitions including vendor extension models:

- Microsoft Windows 7 application
- Provides support for interacting with SunSpec enabled devices
- Automatically creates SunSpec Protocol Information Conformance Statement (PICS) templates
- Enables capture of device image snapshots.
- Allows management of alternate model definitions including vendor specific models.

Benefits
The SunSpec Dashboard provides these important benefits:

- Test your SunSpec Specification implementations for conformance
- Reduces time to implementation of SunSpec Specifications
- Provides you the ability to quickly prep and apply for SunSpec Certification
- Enables field technicians to diagnose SunSpec Certified multi-vendor hardware

Any Contributing SunSpec Alliance member in good standing may access and use SunSpec Dashboard free of charge. Click here if you are not currently a SunSpec member but would like to become one.
Chapter 2
Installing SunSpec Dashboard

The SunSpec Dashboard is distributed as a single Windows setup executable. The SunSpec Dashboard installation Windows executable is self-contained and does not require Python to be installed on the system.

Installing the Software

In order to download the software, individuals must be an employee at a SunSpec Alliance Contributing Member Company and logged into the SunSpec website with a member level account. If you are an employee of a member company and would like to receive a member level account, contact membership@sunspec.org.

Run the executable to unpack and install the software.

Setting Up SunSpec Dashboard
Upon installation of the SunSpec Dashboard, user register and obtain a key. Follow the instructions by providing your name, company, and email address and pressing Get Key.
A Key will be immediately emailed to the provided email address.

Simply copy and paste the key into the pop-up window and press OK.

**SunSpec Dashboard Updates**

New versions of the SunSpec Dashboard are periodically released on the SunSpec website and are accompanied by an announcement to the user base via email. Install over old versions without loss of saved context information.
Chapter 3
Using SunSpec Dashboard

The SunSpec Dashboard provides a GUI interface for interacting with all of the features within the Dashboard.

Device Menu
The device menu is used to open/close a connected SunSpec device, create a PICS template based on the connected device, and export an image of the connected device.

Open/Close
The ‘Open’ optional allows the user to access a SunSpec device accessible to the system either over a serial port, a TCP/IP connection, or as a device image file on the system.

The ‘Open’ dialog prompts for the parameters necessary to access the device.

Once the device is found, the device is scanned and the SunSpec information models present in the device are displayed in tabular form. SunSpec information model definitions are used to determine the contents of the models present in the device so the Dashboard supports all information models for which a definition can be found on the system. Managing alternate information model directories is described in the ‘Tools’ menu item section.

Once a device is open, all points can be read and read-write points can also be written if supported by the device.
To re-read the points contained in a model, use the ‘Read’ button. One or more points can be updated by using the text box associated with the point. All altered points are written when the ‘Write’ button is pressed.

Note: Points that are written are subsequently read immediately after being written. Systems where the write operation is delayed may not present the correct value when the point is immediately re-read.

**Create PICS Template**
The SunSpec certification procedure requires that a PICS document be submitted when a device is certified. The PICS document describes the SunSpec information models present in the implementation and the implementation details of each of the data points in a model.

This feature allows an initial PICS document to be created based on the actual device connected to the system. The generated PICS document is a starting point for the submitted PIC document and may require some annotations or adjustments. In general most of the information required will be contained in the generated document.
Export As
The contents of a connected SunSpec device can be exported as a device map file or a formatted text file.

A device map file contains the contents of each of the information models present in the device. A map file can subsequently be read back into the SunSpec Dashboard by using the ‘Mapped’ option in the ‘Open’ operation.

A formatted text file contains the contents of each of the information model in an easily inspected form.

Tools Menu
The tools menu contains additional support functionality for SunSpec technology.
**Model Directories**
The ‘Model Directories’ option allows additional SunSpec model definition (SMDX) directories to be added to the information model search path. The order of directory search can also be specified.

![Edit Model Directories](image)

**Create Model Reference**
The ‘Create Model Reference’ option allows the generation of Excel workbooks from a collection of SunSpec model definitions in SMDX format. All of the model definitions found in the specified directory are placed in an Excel workbook form for easy reference.

![Create model reference workbook](image)
Chapter 4
Support

Support is available to all Contributing Members using the SunSpec Dashboard.

**Email Support**
To receive support via email, simply contact support@sunspec.org.

**Website Support**
Tickets can also be submitted on the SunSpec website here: http://sunspec.org/report-issue-sunspec-dashboard/