

## FACE™ SOFTWARE SUPPLIER GETTING STARTED GUIDE



### **The Open Group Guide: Future Airborne Capability Environment (FACE) Software Supplier Getting Started Guide, Version 1.0**

The Software Supplier Getting Started Guide (GSG) is a navigational quick start guide for Software Suppliers to develop FACE conformant software. It provides the reader access to sample software aligned to the FACE Technical Standard, developed FACE data models, and corresponding verification artifacts.

This Guide has been designed to:

- Provide startup guidance by directing the reader to basic and primary documentation, demonstration examples, and tools available for the implementation and testing of FACE products written to the Technical Standard
- Introduce the user to an example FACE application that illustrates use and/or implementation of various FACE segments to provide a common avionics capability
- Provide the user access to software that can be used to increase knowledge of the FACE approach through a “learning by doing” approach; the example software and artifacts can be downloaded, explored, analyzed, updated, integrated, tested, etc.
- Assist the user in gaining an introduction to and a basic understanding of the verification process required in the FACE Conformance Program

The GSG is *not* designed to be an introduction to the overall FACE approach. Readers should have a basic understanding of the FACE approach and of embedded systems software development principles and practices.

One of the underlying principles of the GSG is that “learning by doing” enhances understanding. To enrich the learning experience, Basic Avionics Lightweight Source Archetype (BALSA) is used throughout the GSG. It serves as a working example for FACE Software Suppliers of how to develop FACE conformant software using the architecture defined in the FACE Technical Standard. The sample FACE software contains Units of Conformance (UoCs) that pass the FACE Conformance Test Suite (CTS). The intent is to navigate readers through a demonstration example, with information on how to continue advanced FACE development efforts, including accessing and navigating the FACE website, FACE Library, FACE tools, and published FACE business and technical documents.

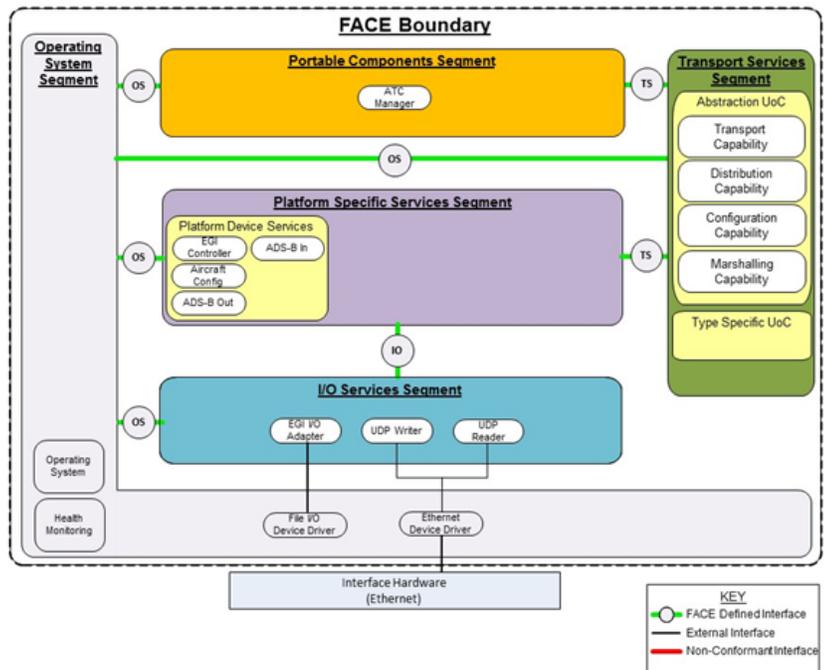
At the time of publication, the BALSA Software, FACE UoP Supplied Model (USM) for BALSA, and corresponding FACE artifacts are available only to FACE Consortium members by logging in via The Open Group FACE Consortium members’ website at [www.opengroup.us/face/BITS/protected/index.php?gpid=586](http://www.opengroup.us/face/BITS/protected/index.php?gpid=586), then clicking on the Documents tab. The most up-to-date version of BALSA can be found at <https://www.opengroup.us/face/steering/int-workshop/protected/documents.php>. A public link will be provided after the work products are approved for global distribution and publication.

(continued overleaf)

The FACE Software Supplier Getting Started Guide, Version 1.0 was prepared by The Open Group FACE™ Consortium Integration Workshop Standing Committee. It is freely available at [www.opengroup.org/library/g173](http://www.opengroup.org/library/g173).

It is released under AMRDEC PR 3023: Distribution Statement A – “Approved for public release; distribution is unlimited”.

Chapter 2 of the GSG contains more detailed information about BALSAs, along with basic information and guidance on how to establish a FACE development environment, including information about the BALSAs environment, and how to execute example FACE software environments. Sample artifacts used for FACE verification in the FACE conformance process are also provided, along with an introduction to the Conformance Test Suite, data modeling, the FACE Library, and the FACE PR/CR Process. Supporting appendices demonstrate how to review and verify a data model – including obtaining an example FACE USM and testing it – provide an overview of Configuration Services, and walk the user through the FACE PR/CR Process.



The FACE Technical Standard outlines five segments, four of which are used in BALSAs (PCS, TSS, PSSS, and IOSS). The complete OSS is not provided in BALSAs. POSIX® services of the OSS are assumed to be provided by the target operating system. In the figure, the components outlined in solid lines are part of the current BALSAs architecture. The segments outlined with a dotted line pattern have not yet been incorporated into BALSAs, but are part of the planned design or might be present in a tactical application.

## About the FACE Consortium

The Open Group FACE Consortium is a government and industry partnership to define an open avionics environment for all military airborne platform types. The FACE Consortium is a vendor-neutral forum that provides standardized approaches for using open standards with avionics systems. The FACE Consortium works to develop and consolidate the open standards, best practices, guidance documents, and business models to achieve these objectives:

- Standardized approaches for using open standards within avionics systems
- Lower implementation costs of FACE software
- Standards that support a robust architecture and enable quality software development
- The use of standard interfaces that will lead to reuse of capabilities
- Portability of applications across multiple systems and vendors
- Procurement of FACE conformant products
- More capabilities reaching the warfighter faster
- Innovation and competition within the avionics industry

Further information on the FACE Consortium is available at [www.opengroup.org/face](http://www.opengroup.org/face).

### More Information

FACE Consortium published documents are available at [www.opengroup.org/library](http://www.opengroup.org/library).

Should you have any questions or comments, please email: [ogface-admin@opengroup.org](mailto:ogface-admin@opengroup.org).

### About The Open Group

The Open Group is a global consortium that enables the achievement of business objectives through technology standards. Our diverse membership of more than 625 organizations includes customers, systems and solutions suppliers, tool vendors, integrators, academics, and consultants across multiple industries.

Please visit [www.opengroup.org](http://www.opengroup.org) for more information.

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