Future Airborne Capability Environment (FACE™)

Library Requirements

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Prepared by The Open Group FACE™ Consortium
Business Working Group Library Subcommittee

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Future Airborne Capability Environment (FACE™): Library Requirements

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1. Introduction

The purpose of the Future Airborne Capability Environment (FACE™) Library is to provide the infrastructure for the Software Supplier to develop and certify FACE conformant products. The FACE Library is a tool to connect Software Suppliers with customers through an open listing of FACE certified products and their associated artifacts in a centrally located and managed gateway.

This document outlines the architecture and functionality for the FACE Library and defines the Library’s requirements. It is written for developers responsible for the design, implementation, and maintenance of FACE Library functions, as well as anyone interested about the operation of the FACE Library.

The primary goal of this document is to define the operational and functional requirements for identification, storage, management, certification workflow, and distribution of FACE certified products. This document also communicates the organization and functionality of the FACE Library to stakeholders in government, industry, and academia.

1.1 Scope

The basic FACE Library overview, concept, and functionality are summarized in this document. This version of the document updates those requirements based on the latest evolution of the FACE ecosystem and addresses changes to the overall structure of the FACE Library.

1.2 Related Documents

The following is a list of references used in developing this document:

- FACE Conformance Policy
- FACE Conformance Authorities Plan
2. Library Overview

The FACE Library consists of the following components (see Figure 1):

- Main FACE Landing Page
- Library Conformance Workflow Tool
- FACE Registry
- PR/CR System
- FACE Product Repositories (hosted by individual Software Suppliers)
- FACE Reference Repository
- Certification Retention Repository (hosted by the Certification Authority)
- Verification Retention Repositories (hosted by individual Verification Authorities)

![FACE Library Infrastructure Diagram](image)

Figure 1: FACE Library Infrastructure

2.1 Landing Page

The Landing Page is the public-facing website for The Open Group FACE Consortium (hereafter referred to as the FACE Consortium). This page serves to direct users to relevant FACE content. Content on the Landing Page includes:

- General information about the FACE Consortium and its products and processes
- Information about how to develop and certify FACE UoCs
Upcoming FACE events
- Solicitations and procurement activities that reference the FACE Technical Standard
- Link to the Conformance Workflow Tool
- Link to the PR/CR Process System

2.1.1 Reference Repository

The Reference Repository maintains products and documents that are used to define FACE requirements and processes, provide contracting guidance, and facilitate conformance verification, certification, and registration. Users can access the Reference Repository to obtain all documents and tools that have been approved for publication by the FACE Steering Committee and have completed The Open Group Executive Approval Process.

Specific Reference Repository requirements are defined in Section A.2.

2.1.2 FACE Product Repositories

A Product Repository may be controlled and managed by the FACE Consortium, a Software Supplier, a government organization, or an academic institution. Product Repository owners may be contacted through information provided in the Registry and are responsible for determining specific access controls for customers. These repositories are expected to reside at the Software Supplier’s site and be physically separate from the centralized FACE Library infrastructure.

Software Suppliers are responsible for ensuring the integrity of FACE products stored in a Product Repository under their control/management in accordance with the FACE Conformance Policy. The minimal requirements for a FACE Product Repository are described in this document.

Specific Product Repository requirements are defined in Section A.3.

2.1.3 Verification Retention Repositories

The Verification Authority (VA) must retain a copy of the Verification Package and the Verification Results Package for each product that initiates verification, as detailed in the FACE Conformance Policy and the FACE Conformance Authorities Plan. A Verification Retention Repository is used to store these files. Access to the Repository is restricted to the associated VA and a designated Auditor. These repositories are expected to reside at the VA site and be physically separated from the centralized FACE Library infrastructure. Each VA maintains its own Verification Retention Repository.

Specific Verification Retention Repository requirements are defined in Section A.5.

2.1.4 Certification Retention Repository

The Certification Authority (CA) must retain a copy of the files generated during certification for each product that initiates FACE Conformance Certification, as detailed in the FACE Conformance Policy and FACE Conformance Authorities Plan. A Certification Retention Repository is used to store these files. Access to this Repository is restricted to the CA and a designated Auditor.

The set of files for Conformance Certification includes the following:

- Software Supplier’s Statement of Conformance
- Statement of Verification, including VA ID
- Conformance Certificate
- Legal Agreements

Specific Certification Retention Repository requirements are defined in Section A.4.

### 2.2 FACE Library Administrator Responsibilities

The FACE Library Administrator (LA) is responsible for the following components of the FACE Library:

- FACE Conformance Workflow Tool
- FACE Problem Reporting/Change Request System
- FACE Registry

#### 2.2.1 FACE Library Conformance Workflow Tool

The Library Conformance Workflow Tool provides a dashboard for users and organizations to facilitate moving data through a series of FACE Consortium defined processes. The Library Conformance Workflow Tool enables:

- User authentication needed to access the FACE Registry and PR/CR system
- Software Suppliers to enter metadata information about a product into the conformance workflow for Verification Authority (VA), Certification Authority (CA), and Library Administrator (LA) review prior to publication in the Registry of FACE certified products
- Software Suppliers to initiate a Registry submittal following successful completion of the FACE conformance certification process
- Users to search the Registry to find FACE certified products based on the product’s metadata
## Conformance Workflow Tool Users

The Conformance Workflow Tool supports the following users:

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Software Supplier User</strong></td>
<td>A Software Supplier uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Search the Registry for FACE certified products</td>
</tr>
<tr>
<td></td>
<td>• Submit and track progress of software products during the FACE conformance process</td>
</tr>
<tr>
<td></td>
<td>• Submit FACE certified products for listing in the Registry</td>
</tr>
<tr>
<td></td>
<td>• Manage metadata information about conformant products listed in the Registry</td>
</tr>
<tr>
<td><strong>Software Supplier Organizational Administrator</strong></td>
<td>A Software Supplier Organizational Administrator uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Manage users assigned to the Software Supplier Organization</td>
</tr>
<tr>
<td></td>
<td>• Manage UoCs created by Software Supplier users assigned to their organization</td>
</tr>
<tr>
<td><strong>Verification Authority User</strong></td>
<td>The VA user uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Enter VA-related metadata information about assigned UoCs</td>
</tr>
<tr>
<td></td>
<td>• Search the Registry for certified FACE conformant products</td>
</tr>
<tr>
<td></td>
<td>• Access the VA Community of Practice (CoP) tools</td>
</tr>
<tr>
<td><strong>Verification Authority Organizational Administrator</strong></td>
<td>A VA Organizational Administrator uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Manage users assigned to the VA Organization</td>
</tr>
<tr>
<td></td>
<td>• Manage UoCs assigned to their Organization</td>
</tr>
<tr>
<td></td>
<td>• Access the VA Community of Practice (CoP) tools</td>
</tr>
<tr>
<td><strong>Certification Authority User</strong></td>
<td>The CA user uses the FACE Library to:</td>
</tr>
<tr>
<td></td>
<td>• Enter CA-related metadata information about assigned UoCs</td>
</tr>
<tr>
<td></td>
<td>• Search the Registry for certified FACE conformant products</td>
</tr>
<tr>
<td><strong>Certification Authority Organizational Administrator</strong></td>
<td>A CA Organizational Administrator uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Manage users assigned to the CA Organization</td>
</tr>
<tr>
<td></td>
<td>• Manage UoCs assigned to the CA Organization</td>
</tr>
<tr>
<td><strong>Certification Verification Matrix (CVM) Subcommittee Administrator</strong></td>
<td>The CVM Subcommittee Administrator uses the Conformance Workflow Tool to manage information for the VA Community of Practice (CoP).</td>
</tr>
<tr>
<td><strong>Library Administrator</strong></td>
<td>The FACE LA uses the Conformance Workflow Tool to:</td>
</tr>
<tr>
<td></td>
<td>• Review UoC metadata</td>
</tr>
<tr>
<td></td>
<td>• Manage all UoCs and users</td>
</tr>
<tr>
<td></td>
<td>• Add, remove, or edit entries to the FACE Registry</td>
</tr>
</tbody>
</table>
2.2.2 FACE Registry

The Registry is the single source for listing all FACE certified products, metadata, and associated artifacts. The Registry contains and presents only information that is approved for public release. Software Suppliers are responsible for ensuring all information in the FACE Registry is publicly releasable.

2.2.3 PR/CR System

The Problem Reporting/Change Request (PR/CR) System is a tool that implements the FACE PR/CR Process as defined by PR/CR Process document. A Problem Report (PR) identifies an issue with FACE Consortium products that prevents a UoC developed to a particular edition of the FACE Technical Standard from obtaining a Conformance Certificate. A Change Request (CR) identifies either an issue with one or more FACE Consortium products, or a desired improvement to one or more FACE Consortium products. The PR/CR System is used to create, manage, track, and store PRs and CRs that affect the FACE Consortium and its products.
3. **Requirements**

   1. The FACE Library shall support browsers that conform to current IETF and W3C standards for HTML, JavaScript, and associated technologies, to include:
      
      a. Google Chrome (latest regular release)
      b. Mozilla Firefox (latest regular release)
      c. Microsoft Internet Explorer (Version 11 and newer)
      d. Apple Safari (Version 6 and newer)

3.1 **Landing Page Requirements**

   2. The Landing Page shall be hosted on a publicly available web server.
   3. The Landing Page web page content shall be updated at the direction of the FACE Consortium.
   4. The Landing Page shall provide administrative backup and archival functions.
   5. The Landing Page shall be discoverable by public Internet search engines.
   6. The Landing Page shall provide access to the Library Conformance Workflow Tool.
   7. The Landing Page shall provide a link to the Registry.
   8. The Landing Page shall provide access to The Open Group Publications Catalog.
   9. The Landing Page shall contain overview information about the FACE Consortium.
   10. The Landing Page shall provide a list of VAs, their associated unique identifier, and their contact information as directed by the FACE Consortium.
   11. The Landing Page shall provide guidance to a Software Supplier on how to submit a FACE product for verification, certification, and registration.
   12. The Landing Page shall provide a link to the FACE PR/CR System.
   13. The Landing Page shall provide a listing of all active Approved Corrections.
   14. The Landing Page shall provide a listing of archived Approved Corrections.
   15. The Landing Page shall provide Search Engine Optimization (SEO) capabilities.
3.2 Library Conformance Workflow Tool Requirements

16. The Library Conformance Workflow Tool shall be hosted on a publicly available, HTTPS:// web server.

17. The Library Conformance Workflow Tool shall use a third-party SSL certificate authority to enable SSL access.

18. The Library Conformance Workflow Tool shall enable single sign-on access to all LA hosted tools.

19. The Library Conformance Workflow Tool shall enable single sign-on to access the FACE Registry and PR/CR System.

20. The Library Conformance Workflow Tool shall have intrusion detection capability.

21. The Library Conformance Workflow Tool shall have tamper detection capability.

3.2.1 Conformance Workflow Tool Content

22. The Library Conformance Workflow Tool web page content shall be updated at the direction of the FACE Consortium.

23. The Library Conformance Workflow Tool shall utilize a content management system that supports customizable styling attributes as directed by the FACE Consortium.

24. The Library Conformance Workflow Tool shall provide a Library Conformance Workflow Tool user’s guide.

25. The Library Conformance Workflow Tool shall be governed by a Configuration Management (CM) process that covers:

   a. Configuration management of all Conformance Workflow Tool website data (e.g., text, graphics, themes)

   b. Configuration management of all Registry metadata

   c. Audit procedures

3.2.2 Library Conformance Workflow Tool Metrics

26. The Library Conformance Workflow Tool shall generate an on-demand metrics report with the following information:

   a. Number of page visits

   b. Number of unique visitors

   c. IP address of page visitors

   d. Registry search terms
e. Conformance Workflow Tool entry points (e.g., direct, Google, Bing, email, FACE Landing Page)

f. Viewership by browser type

g. Home page bounce rate

27. The Library Conformance Workflow Tool shall export metrics in the following formats:

a. PDF

b. XLSX

c. XML

28. The LA shall have the ability to view metrics reports for the entire Library Conformance Workflow Tool.

29. Software Supplier users shall only have the ability to view metrics reports for the UoCs assigned to their account.

3.2.3 User Account Creation

30. The Library Conformance Workflow Tool shall require a user to create a unique account.

31. The Library Conformance Workflow Tool shall provide role-based user authentication and access privileges.

32. The default user account category shall be “Software Supplier”.

33. “Verification Authority” and “Certification Authority” user accounts shall be created at the direction of the FACE Consortium.

34. The Library Conformance Workflow Tool shall capture, at a minimum, the following information about users prior to creating a new account:

a. First name

b. Last name

c. Username

d. Password

e. Company

f. Country

g. Email address

35. The Library Conformance Workflow Tool shall enable access privileges to be granted at both the user and organization levels.
36. The Library Conformance Workflow Tool shall support the following log-in authentication protocols:
   
a. OAuth 2.0

b. CAC ID

c. Open ID

d. DS Logon

37. The Library Conformance Workflow Tool usernames shall:
   
a. Include only letters, numbers, and dashes

b. Start with a letter and be at least three (3) characters long

38. The Library Conformance Workflow Tool passwords shall:
   
a. Be at least eight (8) characters

b. Include at least one (1) of each: upper and lowercase character, number, special character (!%&@#$^*?_~)

c. Be changed by the user at least once every 120 days

39. When creating new user accounts, Library Conformance Workflow Tool users shall enter password information in two (2) separate text fields for validation.

40. The Library Conformance Workflow Tool shall generate an email confirmation to the user’s email address with a link for account validation.

41. The Library Conformance Workflow Tool shall receive validation of an email address prior to creating a new user account.

### 3.2.4 Organizational Administration

42. The Library Conformance Workflow Tool shall enable creation of the following types of Organizations:

   a. Software Supplier Organizations

   b. Verification Authority Organizations

   c. Certification Authority Organization

43. The Library Conformance Workflow Tool shall enable individual users to be grouped into organizations.

44. The Library Conformance Workflow Tool shall enable one or more users to have organizational administrator privileges for each organization created within the Tool.
45. The Library Conformance Workflow Tool shall enable organizational administrators to:
   a. Approve users to be a member of the organization
   b. Remove users from the organization
   c. Create new user members of the organization
   d. Assign UoCs to members of the organization to enter UoC metadata

3.2.5 Library Conformance Workflow Tool User Access

46. Users shall be able to log into the Library Conformance Workflow Tool directly from the Library Conformance Workflow Tool homepage.

47. Prior to log in, users shall be presented with a “pop-up” message requiring acknowledgement.
   a. The “pop up” shall contain, at a minimum, the following message: “All content of this website is approved for public and unlimited release. The administrator of this website is not responsible for verifying that content is approved for public release.”

48. Upon login to the Library Conformance Workflow Tool, Software Supplier users shall be able to:
   a. Search the Registry
   b. Enter metadata information about a UoC into the Verification/Certification/Registration workflow
   c. View the status of all UoCs that have been submitted by the user to the Verification/Certification/Registration workflow

3.2.6 Verification Authority Community of Practice (VA CoP)

49. Upon login to the Library Conformance Workflow Tool, Verification Authority (VA) Community of Practice (CoP) users shall be able to:
   a. View contact information from all VA CoP members
   b. Access a VA CoP knowledge base
   c. View a VA CoP message list
   d. View an event log of past and future VA CoP events
   e. Participate in a discussion forum with other VA CoP members
   f. Send messages to the VA CoP administration

50. The Library Conformance Workflow Tool shall log users out of the Conformance Workflow Tool after 15 minutes of inactivity.
3.2.7 Conformance Workflow Process

51. The Conformance Workflow Tool shall be configurable to support the Conformance Workflow process as defined in the FACE Conformance Policy.

52. The Library Conformance Workflow Tool shall provide email notifications to the LA, Software Supplier, VA, and/or CA after each change of status.

53. The Library Conformance Workflow Tool shall capture the status of the Conformance Workflow process for each FACE product.

3.2.8 UoC Metadata Collection

54. The Library Conformance Workflow Tool shall require positive affirmation of public availability of submitted metadata.

55. The Library Conformance Workflow Tool shall assign a single unique identifier to associate a single FACE product with its associated metadata.

56. The Registry shall allow the LA to create and maintain metadata templates to collect UoC metadata information defined in Appendix A, or as directed by the Library Subcommittee.
   a. UoC metadata templates shall be customizable by the LA.
   b. UoC metadata templates shall contain, at a minimum, the following field types:
      i. Headings
      ii. Text (single line)
      iii. Text (multi-line) with Rich Text
      iv. URL
      v. Email
      vi. Number
      vii. Selection
      viii. Date
      ix. Checkbox
      x. Image upload
      xi. File upload
      xii. Linked field

57. The Registry shall enable updated metadata templates to be applied to all UoCs in the Registry.
3.2.9 Verification

58. The Library Conformance Workflow Tool shall allow the LA to create and maintain a metadata template to collect Software Supplier’s Statement of Conformance metadata for each UoC as defined in the FACE Conformance Policy.

59. The Library Conformance Workflow Tool shall allow a Software Supplier to securely submit the Software Supplier’s Statement of Conformance.

60. The Library Conformance Workflow Tool shall enable an authorized user to generate the Software Supplier’s Statement of Conformance in PDF format.

61. The Library Conformance Workflow Tool shall allow the LA to create and maintain a metadata template to collect Statement of Verification metadata for each UoC as defined in the FACE Conformance Policy.

62. The Library Conformance Workflow Tool shall allow a VA to securely submit the Statement of Verification.

63. The Library Conformance Workflow Tool shall enable an authorized user to generate the Statement of Verification in PDF format.

3.2.10 Certification

64. The Library Conformance Workflow Tool shall allow the LA to create and maintain a metadata template to collect Conformance Certificate metadata for each UoC as defined in the FACE Conformance Policy.

65. The Library Conformance Workflow Tool shall allow the CA to securely submit a Conformance Certificate.

66. The Library Conformance Workflow Tool will enable the CA to generate the Conformance Certificate in PDF format.

3.2.11 Registration

67. The Library Conformance Workflow Tool shall allow the LA to create and maintain a metadata template to collect metadata for each UoC as defined in Appendix B.

68. The Library Conformance Workflow Tool shall allow a Software Supplier to submit metadata for a FACE certified product for Registration.

69. The Library Conformance Workflow Tool shall enable the Software Supplier to generate a UoC datasheet in PDF format.

70. The Library Conformance Workflow Tool shall allow the LA to review and approve product metadata for publication.

71. The Library Conformance Workflow Tool shall allow a Software Supplier to modify metadata on registered FACE products except for those fields reserved for the VA and CA.
72. The Library Conformance Workflow Tool shall allow a Software Supplier to remove a UoC from the Registry.

73. The Library Conformance Workflow Tool shall allow an LA to remove a UoC from published Registry listings.

74. The Library Conformance Workflow Tool shall allow transfer of a registered UoC between individual Software Supplier user accounts.

75. The Library Conformance Workflow Tool shall allow a Software Supplier to delete a FACE product from the Conformance Workflow Tool.

3.2.12 FACE Registry

76. The FACE Library shall provide a single Registry of certified FACE UoCs and UoC Packages.

77. The Library Conformance Workflow Tool shall allow access to the Registry for all users with a valid account.

78. The Library Conformance Workflow Tool shall allow an authenticated user to browse listings of FACE products in the Registry.

79. The Registry shall maintain links between UoCs and their associated approved UoC Packages, if applicable.

80. The Library Conformance Workflow Tool shall allow an authenticated user to submit search queries on each UoC metadata field in the Registry and return results.

81. The Registry shall display UoC metadata fields defined in Appendix B, or as directed.

82. The Registry shall enable filtering of the UoC metadata for each of the following field types, at a minimum:
   a. Selection
   b. Checkbox
   c. Number

83. The Registry shall enable sorting by the UoC metadata fields.

84. The Registry shall support export of UoC metadata content in the following formats:
   a. PDF
   b. XLSX
   c. XML

85. The Registry shall allow Software Suppliers to view on-demand metrics related to their UoC listings, including:
a. Keywords searched
b. Frequency of appearance in search results
c. Number of views of a UoC
d. Country of origin of viewers of a UoC

3.2.13 Problem Reporting/Change Requests

86. The Library Conformance Workflow Tool shall provide a tool to collect and manage feedback from users on FACE Consortium work products and tools in accordance with the PR/CR Process document.
A FACE Repository Requirements

A.1 General Repository Requirements

These general Repository requirements apply to the Reference Repository, Certification Retention Repository, and the Verification Retention Repositories.

1. The FACE Library shall allow multiple, independent Product Repositories managed by Software Suppliers.

2. The FACE Library shall support a single Certification Retention Repository managed by the CA.

3. The FACE Library shall support multiple, independent Verification Retention Repositories managed by VAs.

4. Documented processes and procedures for Repository management shall be available for review by designated Auditors.

5. Repositories shall support authenticated user access control in accordance with Repository owner documented processes and procedures.

6. Repositories shall store and maintain products, artifacts, and metadata in accordance with Repository owner documented processes and procedures.

A.2 Reference Repository Requirements

7. The FACE Library shall provide a single Reference Repository.

8. The Reference Repository shall provide links to individual FACE products, documents, and tools.

9. The Reference Repository shall provide links to individual artifacts, documents, and tools for FACE conformant software.

10. The Reference Repository shall maintain all previous versions of stored work products and tools.

11. The Reference Repository shall store, at a minimum, the following metadata for work products and tools:

   a. Common Name
   b. Type
   c. Reference #
   d. US ISBN
12. The Reference Repository shall allow for downloading of FACE work products and tools.

A.3 Product Repository Requirements

13. The Product Repository shall limit access to users defined by the Software Supplier.

14. The Product Repository shall store certified FACE UoCs and any associated artifacts (see Appendix B) that are advertised in the UoC Registry entry.

15. The Product Repository shall enable retrieval of a certified FACE UoC and its associated artifacts.

16. The Product Repository shall retain a certified FACE UoC for the duration that the UoC is listed in the Registry.

17. The Product Repository shall provide a unique designation for an unalterable configuration of a specific UoC.

A.4 Certification Retention Repository Requirements

18. The Certification Retention Repository shall maintain Certification Artifacts for six years.

19. The Certification Retention Repository shall maintain Certification Results for six years.

20. The Certification Retention Repository shall be accessible by only designated CA personnel.

A.5 Verification Retention Repository Requirements

21. A Verification Retention Repository shall maintain the Verification Results Package for six (6) years.

22. A Verification Retention Repository shall be accessible by only designated VA personnel.
## Registry Metadata

<table>
<thead>
<tr>
<th><strong>Metadata</strong></th>
<th><strong>Metadata Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Product</td>
<td>The formal name of the product.</td>
</tr>
<tr>
<td>Acronym</td>
<td>The abbreviated name for the product.</td>
</tr>
<tr>
<td>FACE Conformance Certificate</td>
<td>The FACE Conformance Certificate from the CA.</td>
</tr>
<tr>
<td>FACE Base Line (B/L)</td>
<td>Version number of the FACE Technical Standard against which the product was certified.</td>
</tr>
<tr>
<td>Product Version</td>
<td>The specific product version number certified as FACE conformant.</td>
</tr>
<tr>
<td>Date of Approval</td>
<td>The date the product was certified as FACE conformant.</td>
</tr>
<tr>
<td>Software Supplier’s Name</td>
<td>The name of the organization or company providing the product.</td>
</tr>
<tr>
<td>Software Supplier’s Address</td>
<td>The address of the organization or company providing the product.</td>
</tr>
<tr>
<td>Software Supplier Point of Contact (POC)</td>
<td>The title, name, and contact information of the primary person to be contacted.</td>
</tr>
<tr>
<td>Licensing Categories</td>
<td>The terms under which the product is available to be licensed.</td>
</tr>
<tr>
<td>Repository Links</td>
<td>Individual or multiple web-based links from the Registry to any appropriate Repository and/or back to any vendor’s website. Links may also take the form of email links.</td>
</tr>
<tr>
<td>Key Words</td>
<td>Identification of key words that describe the product for searching purposes.</td>
</tr>
<tr>
<td>Product Background</td>
<td>Identifies whether the product has been used before and provides some high-level descriptions of where or how. Also describes the organization(s) supported.</td>
</tr>
<tr>
<td>Description</td>
<td>Free text description of the FACE product.</td>
</tr>
<tr>
<td>Safety Certifications</td>
<td>Applicable product safety certifications and certifying authority.</td>
</tr>
<tr>
<td>Security Certifications</td>
<td>Applicable product security certifications and certifying authority.</td>
</tr>
<tr>
<td>Cybersecurity Certifications</td>
<td>Applicable product cybersecurity certifications and certifying authority.</td>
</tr>
<tr>
<td>Applicable Segment(s)</td>
<td>The segment or layer within the FACE Technical Standard such as OSS, IOS, PSSS, TSS, or PCS. (Segment selection is mutually-exclusive.)</td>
</tr>
<tr>
<td>Dependencies</td>
<td>Applicable hardware or software dependencies.</td>
</tr>
<tr>
<td>Previous Versions</td>
<td>Registry links to previous versions of the product.</td>
</tr>
<tr>
<td>Logo</td>
<td>Company/product logo.</td>
</tr>
<tr>
<td>FACE Profile</td>
<td>Identifies which FACE operating profiles are supported by the product.</td>
</tr>
<tr>
<td>Metadata</td>
<td>Metadata Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>OS API Type</td>
<td>Identifies certified FACE conformant operating system requirements for the product.</td>
</tr>
<tr>
<td>Flash Memory Size</td>
<td>Minimum static memory requirements (OFP footprint).</td>
</tr>
<tr>
<td>RAM Memory Size</td>
<td>Minimum dynamic memory requirements.</td>
</tr>
<tr>
<td>UoC External Interfaces</td>
<td>Listing of exposed UoC external interfaces.</td>
</tr>
<tr>
<td>Available Artifacts</td>
<td>Listing of artifacts available (see Appendix C Product Artifacts).</td>
</tr>
</tbody>
</table>
## Product Artifacts

Below is a list of potential product artifacts.

<table>
<thead>
<tr>
<th>Product Artifacts</th>
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</thead>
<tbody>
<tr>
<td><strong>Models</strong></td>
</tr>
<tr>
<td>Development/Testing Tools</td>
</tr>
<tr>
<td>Source Code</td>
</tr>
<tr>
<td><strong>Plans</strong></td>
</tr>
<tr>
<td>Airworthiness Qualification Plan</td>
</tr>
<tr>
<td>Software Development Plan</td>
</tr>
<tr>
<td>Configuration Management Plan</td>
</tr>
<tr>
<td>Software Quality Assurance Plan</td>
</tr>
<tr>
<td>Test &amp; Evaluation Master Plan</td>
</tr>
<tr>
<td>Open Systems Management Plan</td>
</tr>
<tr>
<td>Software Architecture Evaluation Plan</td>
</tr>
<tr>
<td>System Engineering Plan</td>
</tr>
<tr>
<td>Software Transition Plan</td>
</tr>
<tr>
<td>Risk Management Plan</td>
</tr>
<tr>
<td>Software Test Plan</td>
</tr>
<tr>
<td>Lifecycle Cost Management Plan</td>
</tr>
<tr>
<td><strong>Design and Specifications</strong></td>
</tr>
<tr>
<td>System/Subsystem Design Document</td>
</tr>
<tr>
<td>System/Software Requirements Specification</td>
</tr>
<tr>
<td>API Specification</td>
</tr>
<tr>
<td>(tool-generated document that is a combination of SRS and ICD)</td>
</tr>
<tr>
<td>Requirements Trace and Verification Matrix</td>
</tr>
<tr>
<td>Software Design Document</td>
</tr>
<tr>
<td>Software Version Description</td>
</tr>
<tr>
<td>SCM Records</td>
</tr>
<tr>
<td>SQA Records</td>
</tr>
<tr>
<td>Prime Item Development Specifications</td>
</tr>
<tr>
<td>Interface Requirement Specification</td>
</tr>
<tr>
<td>System Architecture Description</td>
</tr>
<tr>
<td>Product Artifacts</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Software Architecture Description</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Safety Program Plan</td>
</tr>
<tr>
<td>Preliminary Hazard Assessment</td>
</tr>
<tr>
<td>Failure Mode Effects and Criticality Analysis</td>
</tr>
<tr>
<td>Functional Hazard Assessment</td>
</tr>
<tr>
<td>System (Software) Safety Assessment</td>
</tr>
<tr>
<td>Safety Assessment Report (Software)</td>
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<table>
<thead>
<tr>
<th>Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture Peer Review Results</td>
</tr>
<tr>
<td>PDR/CDR/TRR/FRR Milestone Review Exit Criteria Achieved</td>
</tr>
<tr>
<td>Source Code Peer Reviews</td>
</tr>
<tr>
<td>SIL Configuration Audit</td>
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<tr>
<td>Software Test Procedures Peer Review Results</td>
</tr>
<tr>
<td>Software Architecture Assessment Report</td>
</tr>
<tr>
<td>Software Re-use Management Report</td>
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<tr>
<td>Physical Configuration Audit Report</td>
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<tr>
<td>Functional Configuration Audit Report</td>
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<table>
<thead>
<tr>
<th>Test Artifacts</th>
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</thead>
<tbody>
<tr>
<td>Unit Test Results (developer document)</td>
</tr>
<tr>
<td>Software Test Plan</td>
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<tr>
<td>Software Verification Cases and Procedures (SVCP)</td>
</tr>
<tr>
<td>Software Test Results</td>
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<tr>
<td>Software Robustness Test Results</td>
</tr>
<tr>
<td>Performance Test Results</td>
</tr>
<tr>
<td>Statement Coverage Analysis Report</td>
</tr>
<tr>
<td>Static Code Analysis Report</td>
</tr>
<tr>
<td>Integration Test Plan</td>
</tr>
<tr>
<td>Integration Test Results</td>
</tr>
<tr>
<td>Software Problem Reports</td>
</tr>
<tr>
<td>Software Change Requests</td>
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<tr>
<td>Product Artifacts</td>
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<tr>
<td>Training Documentation</td>
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