

**FICAM Testing Program
PACS Topology Adoption Process
Document**
VERSION 1.0



FICAM TESTING PROGRAM

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Office of Government-wide Policy
Office of Technology Strategy
Identity Management Division
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1. Overview

The General Services Administration (GSA) is responsible for supporting the adoption of interoperable and standards-based Identity, Credential, and Access Management (ICAM) technologies throughout the Federal Government. As part of that responsibility, GSA operates and maintains the [Federal Information Processing Standard \(FIPS\) Publication 201 Approved Products List \(APL\)](#), as well as services for Federal ICAM (FICAM) conformance and compliance. The revised FIPS 201 EP, called the FICAM Testing Program (Program) has implemented numerous enhancements to benefit Program stakeholders.

The Federal Government's emphasis on strong authentication for physical access to federal agencies contributes to the growing need to support agency implementers. Industry has noted that there are alternative approaches to Physical Access Control System (PACS) end-to-end solutions (called Topologies) and that the Program should not dictate one approach.

Accordingly, the Program has defined a streamlined process to assess and adopt commercially-viable PACS Topologies that best serve the interests of the Federal Government. The adoption process provides a consistent, standard, structured means of identifying, vetting, and approving Topologies. The structured process provides assurance to federal agencies procuring PACS systems that the approved Topology is commercially available, usable, and consistent with Program requirements. This confidence is essential to government-wide acceptance and use of Topologies.

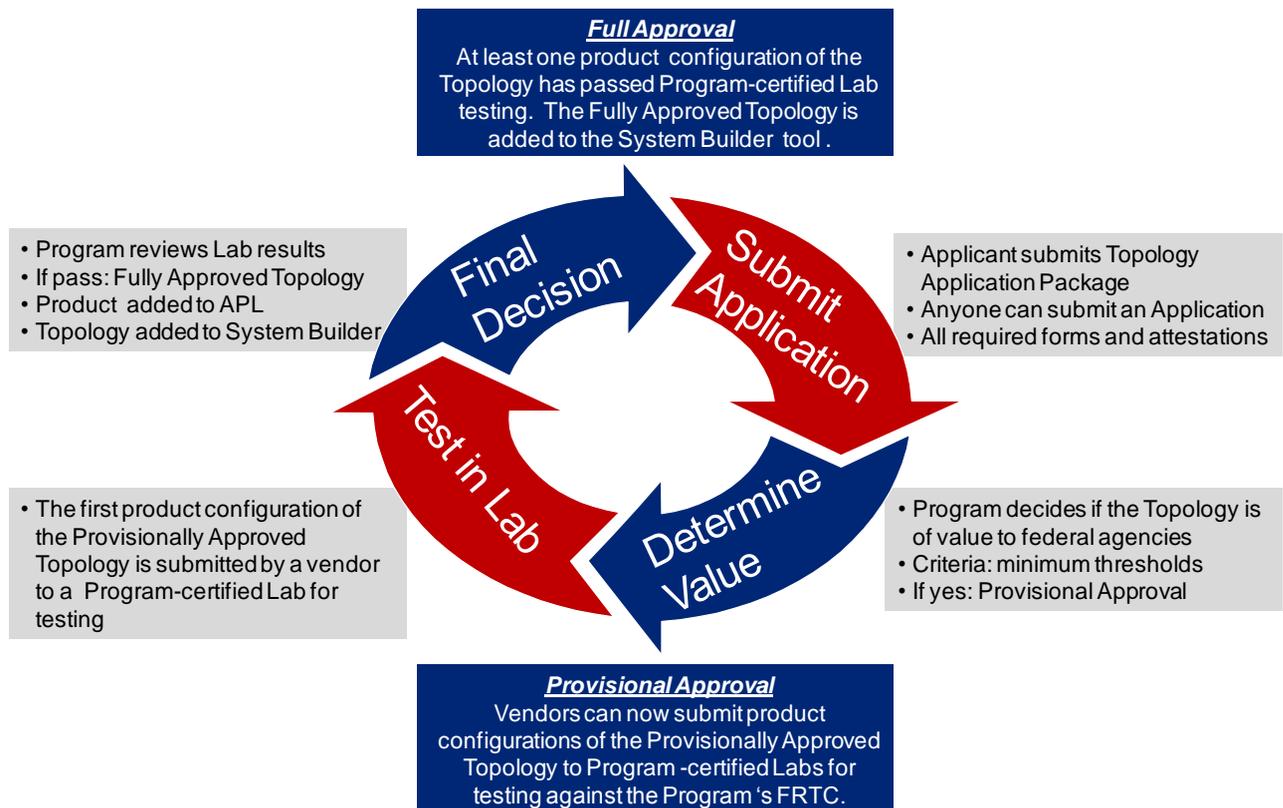
2. Topology Adoption Process

Figure 1 depicts the general concept and flow of Topology adoption. A Topology moving through the adoption process may attain the following statuses:

- **Provisional Approval** - Initial review of the Topology Application Package indicates that the proposed Topology meets the Program's threshold requirements, which includes an acceptable architecture, an acceptable mapping of Topology components to Program functional requirements (see 0 for more details), and commercial realism. Once Provisionally approved, vendors can submit product configurations using the Topology to a Program-certified Lab for testing.
- **Full Approval (Approved)** - Once a vendor's complete product configuration of the Provisionally Approved Topology has passed all required testing from a Program-certified Lab, the Topology status is changed to Full Approval. The Fully Approved Topology can be added to the System Builder tool.¹

¹ The System Builder tool, available at the [FICAM Testing Program web site](#), allows agencies to quickly and easily determine Lab-certified product configurations within each Approved Topology.

Figure 1. Summary of the Topology Adoption Process



2.1.Step #1: Applicant Submits Topology Application Package

Anyone can propose a new Topology to the Program (e.g., a vendor, an alliance, an association). A proposed Topology must be formally submitted to the Program using a Topology Application Package, which can be obtained at the [FICAM Testing Program web site](#). The Package must include:

1. A detailed picture and descriptive overview of the proposed Topology (some optionality for components within the topology is acceptable);
2. If new PACS Categories are being suggested:
 - The reason why each new category is required; and
 - A detailed description of each new category.
3. A complete definition of each component within the proposed Topology;
4. A mapping of Program functional requirements and controls to Topology components;
5. A list of commercial products that support each of the components in the topology²; and
6. A Self Attestation form from every vendor whose product is cited in the list discussed in bullet #5.

² At least two self attestations for most components in the proposed Topology.

2.2.Step #2: Program Determines Value of the Topology to the Federal Government

The Program reviews the Topology Application Package to determine whether adoption of the proposed Topology would be valuable to Federal Agencies (i.e., in the best interest of the Federal Government). To make the determination, the Program considers whether the proposed Topology meets the following minimum threshold:

1. The proposed Topology (diagram, Topology description, component descriptions) is likely to be used, is technically feasible for federal agencies, helps meet the mission and needs of federal agencies, and is consistent with government-wide objectives and mandates.
2. If new categories are proposed, the reason for each new category is acceptable and in the best interest of the Federal Government.
3. The Topology satisfies the functional requirements and controls defined in the Program's *PACS Functional Requirements and Test Cases* [FRTC] document, which can be found the [FICAM Testing Program web site](#).
4. The Topology meets a threshold of “commercial realism” (i.e., cannot be proprietary; must be general purpose):
 - The Topology is publically releasable (e.g., not provided under Non Disclosure Agreement in advance of commercial release).
 - There is at least one commercially-available product for each of the required components of the Topology at time of Application submission.
 - Most components defined within the Topology have more than one vendor supporting them.
 - Vendors cited as supporting the Topology have formally signed an attestation indicating that their products support the listed Topology.

This step does not include product testing. Further, this review may require interaction with the Applicant (or others cited in the Application) to obtain additional information, evidence, or clarification. There is no time limit for this step, as due diligence is required.

If the Program determines that the proposed Topology meets the above minimum threshold, the Program will change the status of the Topology to Provisional Approval, assign the Topology a unique number, list the Topology on the [FICAM Testing Program web site](#), and make available a Topology Mapping form specific to the Topology. Once listed, vendors can submit product configurations of the Topology to Program-certified Labs for testing.³

In all cases, the Program will notify the Applicant of the value determination decision. Unless otherwise directed by the Program, a rejected Topology Application can be resubmitted with necessary changes.

2.3.Step #3: Vendor Submits a Product Configuration for the Provisionally Approved Topology

Once a proposed Topology is Provisionally Approved, vendors can begin submitting product configuration for that Topology to Program-certified Labs for functional testing. Testing proceeds through its normal course (i.e., nothing is done differently because the Topology is Provisionally Approved). The vendor submits the standard application package. Testing is performed against the

³ Program-certified Labs cannot accept product configurations for Topologies that are not Provisionally Approved or Fully Approved.

[FRTC]. See [FICAM Testing Program Concept of Operations \(ConOps\)](#) for an overview of the functional testing process. See the [FICAM Testing Program web site](#) for assistance submitting products/services for testing.

2.4.Step #4: Program Reviews Lab Test Results to Determine Full Approval

The Program receives the functional testing results of the first product configuration submitted for the Provisionally Approved Topology. If the product configuration passed functional testing, the Program:

- Changes the status of the Topology to Fully Approved (Approved);
- Revises the Provisionally Approved List and Fully Approved list on the [FICAM Testing Program web site](#) to reflect the status change;
- Lists the vendor's product on the [Approved Products List \(APL\)](#);
- Includes the now Fully Approved Topology in the System Builder tool.

The Program does not guarantee a Topology status change to Fully Approved or listing on the APL of a product that passed testing - even if a product in the Provisionally Approved Topology passed all tests and the Topology itself met the minimum thresholds. Though unlikely, new information, changes in Program direction, or other unexpected events, circumstances, or mandates may affect the Program's decision.

In all cases, the Program will notify the vendor who submitted the product configuration and the Topology Applicant of its decision.

3. Topology Adoption Process Maintenance

The FICAM testing Program will evolve over time. As the needs of the Program change or become clearer, it is possible that the Topology Adoption Process will need to evolve. The Program has responsibility for Topology Adoption Process maintenance. Draft revisions of this document will be made available to appropriate Program stakeholders for comment before any final revision is approved.