# MULTIMODAL BIOMETRIC APPLICATION RESOURCE KIT

Biometric technologies are increasingly being used to authenticate a person's identity.

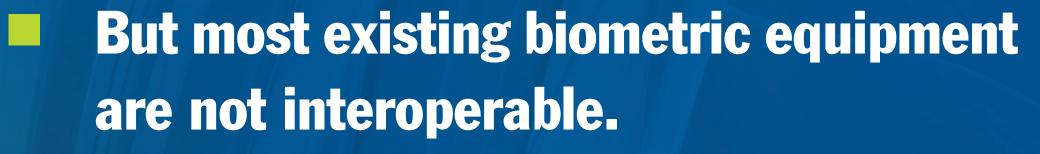
MBARK represents a ready response to<br/>the National Biometric Challenge of<br/>developing middleware techniques and<br/>standards that will permit "plug-and-<br/>play" capabilities for biometric sensors.<br/>This Challenge was issued by The<br/>National Science and Technology<br/>Council's Subcommittee on<br/>Biometrics & Identity Management.Prov<br/>users

# **Provides a consistent user interface**

By providing a consistent and usercentered interface no matter how many

Most biometric systems are "unimodal," meaning they rely on a single distinguishing physical characteristic for authenticating identity.

A multimodal system that has several sources of information can be more flexible and reliable, helping to overcome problems such as poor illumination or dirty sensors.



sensors are being used, MBARK reduces errors and minimizes the need to retrain users on different biometric sensors.

## Allows users to recover quickly and easily from mistakes

Allowing users to recover quickly and easily from mistakes increases efficiency by reducing the number of times a biometric must be re-captured.

## **Provides flexible user configuration**

Unlike applications with a fixed workflow, MBARK allows users to change the order, logic, and types of tasks a biometric application can perform.

#### **Adjusts workflow automatically**

MBARK will change a user's task list 'on-the-fly,' depending on the user's current situation.

Organizations must either purchase a complete system or develop "middle-ware" to link together applications, which can be very expensive.

The Multimodal Biometric Application Resource Kit, or MBARK, reduces the complexity and costs of implementing such an application.

#### **Multitask whenever possible**

MBARK uses multi-threading to accelerate long-running operations, such as sensor initialization.

## **Provides true sensor interoperability**

MBARK uses a 'plug-in' style mechanism that allows for true sensor interoperability based on a unified 'electronic' interface, or API (application programming interface.)

### **Open and free**

Anyone is free to modify MBARK source code for their application without intellectual property restrictions.

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For comments, questions, or inquiries (including source code), please contact *mbark@nist.gov.* 

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Specific hardware and software products identified in this open source project were used in order to perform technology transfer and collaboration. In no case does Biometric Clients Lab Image Group



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