A key challenge in developing any biometric application is the integration with a variety of biometric sensors. Unlike many other peripheral-centric industries, the biometric industry has yet to widely accept standardized interfaces that would enable applications to interact with biometric sensor hardware in an open and standardized way. To further complicate the challenge of deploying state-of-the-art biometric applications, many organizations are demanding a transition to web-based, distributed applications. While these applications dramatically reduce the deployment and support costs, they present very real challenges for developers with respect to interfacing with proprietary hardware devices.

Overview

The FbF® Listener is a ready-to-deploy client side application that overcomes and shortcuts these challenges by providing an abstraction layer between biometric hardware and the business logic present in web applications. This is accomplished through the use of a proprietary messaging architecture that is securely communicated through a standard TCP/IP connection. Although this communication channel can be accessed using a variety of development technologies, the FbF Listener is optimized to use the Microsoft Silverlight technology as a rich, web-based user interface for biometric systems.

One Size Fits All

The FbF Listener provides a multi-biometric, multi-sensor, subscription-based interface that is common across all FbF solutions. In addition to providing raw biometric images in a number of image formats, the FbF Listener also provides biometric templates using either proprietary Neurotechnology (VeriFinger, VeriLook, VeriEye, MegaMatcher) formats or standardized formats such as ISO and NIST. These templates are seamlessly passed to an FbF bioServer or other biometric identification system for processing.
**FbF® Messaging Model**

The key to the flexibility of the Fulcrum Biometric Framework is its sophisticated messaging model. This messaging model provides a highly optimized biometric abstraction layer that enables the FbF Listener and FbF bioServer to seamlessly connect to thousands of unique system designs with a common application version across all installations. By logically separating the development of business application functionality from biometric processing, the FbF messaging model allows application designers and developers to focus on developing the core business logic, making it possible to deliver better applications more quickly than what is possible using traditional biometric SDK’s.

**FbF Request** messages send instructions to the Listener and bioServer.

**FbF Response** messages return biometric results to the client application.

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**Supported Biometric Devices**

- Digital Persona – U.are.U 4500 series fingerprint sensors
- UPEK – Eikon and EikonTouch series fingerprint sensors
- Futronic – FS80, FS82, FS88, FS89B, FS50, FS51, FS60 fingerprint sensors
- Lumidigm – Mercury Desktop and Venus Series fingerprint sensors
- Iris ID – TD100 face and dual iris capture device
- USB Webcam or any camera supporting Windows Directshow
- Other biometric sensors supported upon request

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