

FbF® - Fulcrum Multi-Biometric Framework

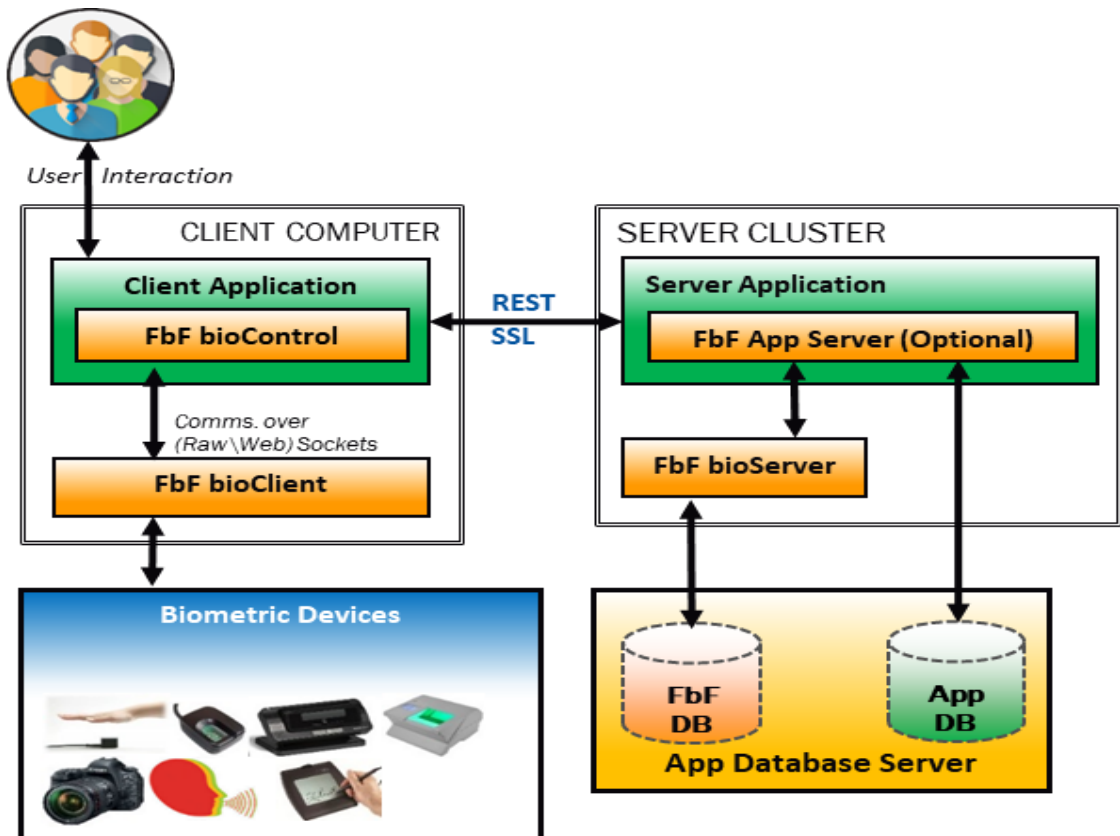


Built upon more than 15 years of experience enabling biometric solutions, the Fulcrum Biometrics Framework (FbF®) products are a suite of tools that simplify the inclusion of biometrics into any new or existing mobile, desktop, or web-based application. With FbF® tools, you have everything you need to biometrically link a physical person to their records in your database or application. By choosing to work with the FbF® tools instead of low-level SDK's, your time can be spent focused on perfecting your application or solution's features, rather than becoming an expert in implementing biometrics.



With FbF®:

- Spend hours—not months—integrating biometrics into your systems or applications
- Use any, or multiple, biometric modalities (iris, finger, face, vein, voice, etc.) best suited to your security requirements and application's needs
- Scale to any size population—from a small office, to a large enterprise and all the way up to a national database
- Save thousands of Rands in engineering costs and time spent focusing on non-core activities
- Now you can meet your customers' expectations within real-world deadlines and satisfy the concerns of auditors and regulators, by increasing the speed, accuracy and reliability of validating individual identities in your environment



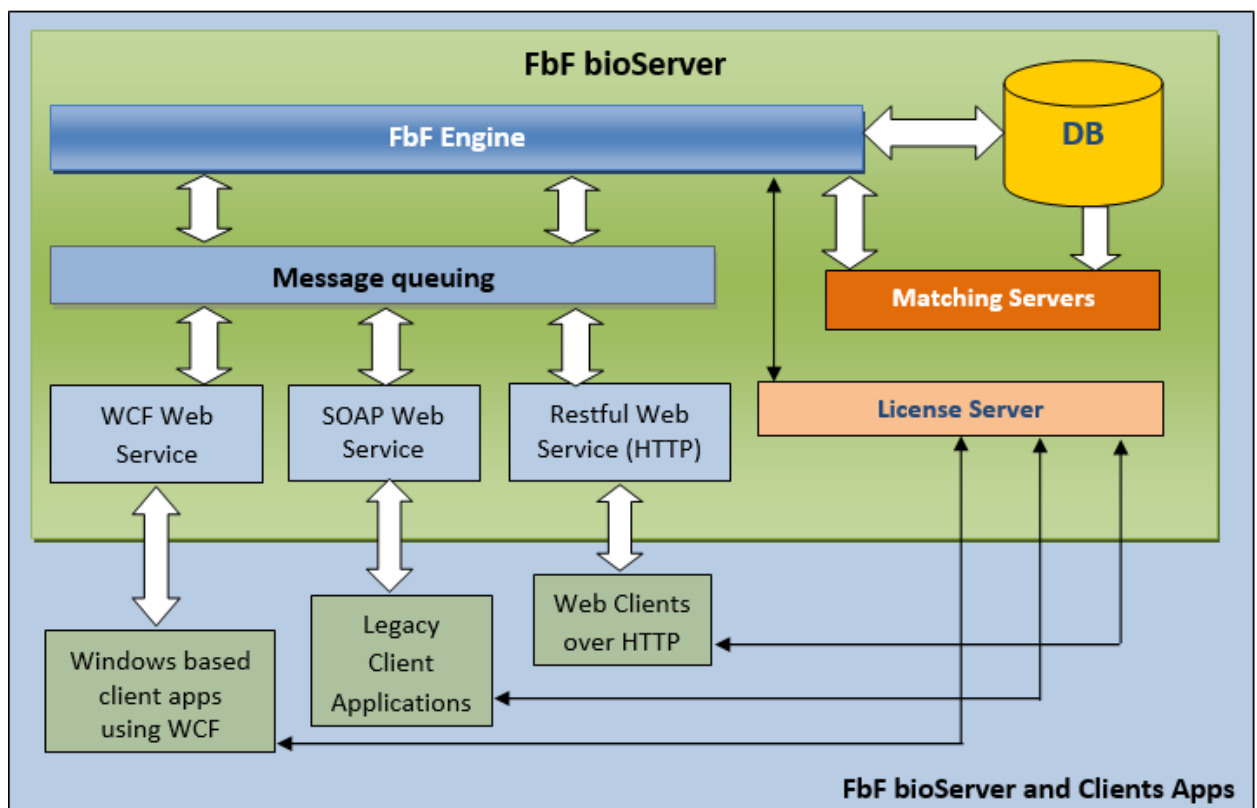
FbF® bioServer

The FbF® bioServer reduces the complexity and cost of implementing biometric identification in your project - expediting time to market with a highly reliable, robust and scalable solution.

The FbF® multi-biometric technology ensures high reliability (accuracy) and high performance (speed) of biometric identification regardless of the size of the dataset. Even when matching against large, national-scale datasets, the FbF® bioServer can scale to meet demand. In small and medium sized projects, FbF® also provides a highly cost-effective solution. The FbF® bioServer excels at both ends of the spectrum; it can be scaled from tens of thousands of identifications per second to hundreds of millions of identifications per second through a combination of software and hardware acceleration in a form-factor that supports single server and server cluster configurations.

Key Features:

- Ability to segment out groups
- No need to interfere or integrate with existing databases
- Windows Embedded 7 Server
- SQL Server Database Engine
- Easily scales from thousands to millions of people
- Standard Web Service Interface
- Advanced WCF Service Interface
- FbF® Messaging Architecture
- Supports Clustering



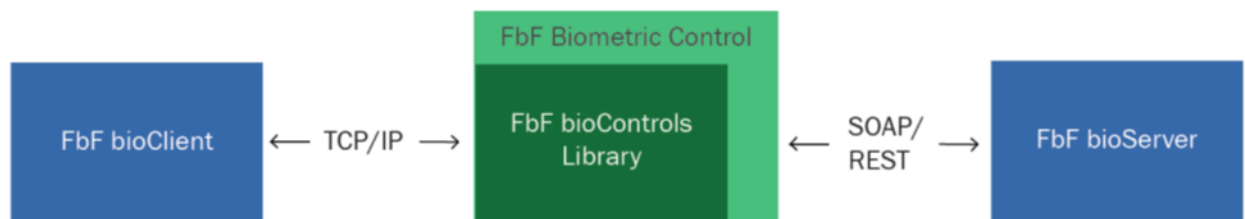
FbF® bioClient

Client-side device management and messaging.

The FbF® bioClient is a ready-to-deploy client-side application that overcomes the challenges involved with the integration of a biometric application with a variety of biometric sensors and the demand for web-based, distributed applications 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. FbF® bioClient is optimized to use the web-based user interface for biometric systems.

Key Features:

- *Runs in the background (Always-On Application)*
- *Automatic device detection*
- *ClickOnce deployment*
- *Allows for event driven biometrics*
- *Publish/Subscribe biometric model*
- *FbF® messaging architecture*
- *Easiest way to integrate client-side biometric components*
- *Eliminates messy hardware integrations*



FbF® bioControls

A reusable control Library, specially designed and developed for handling Biometric applications.

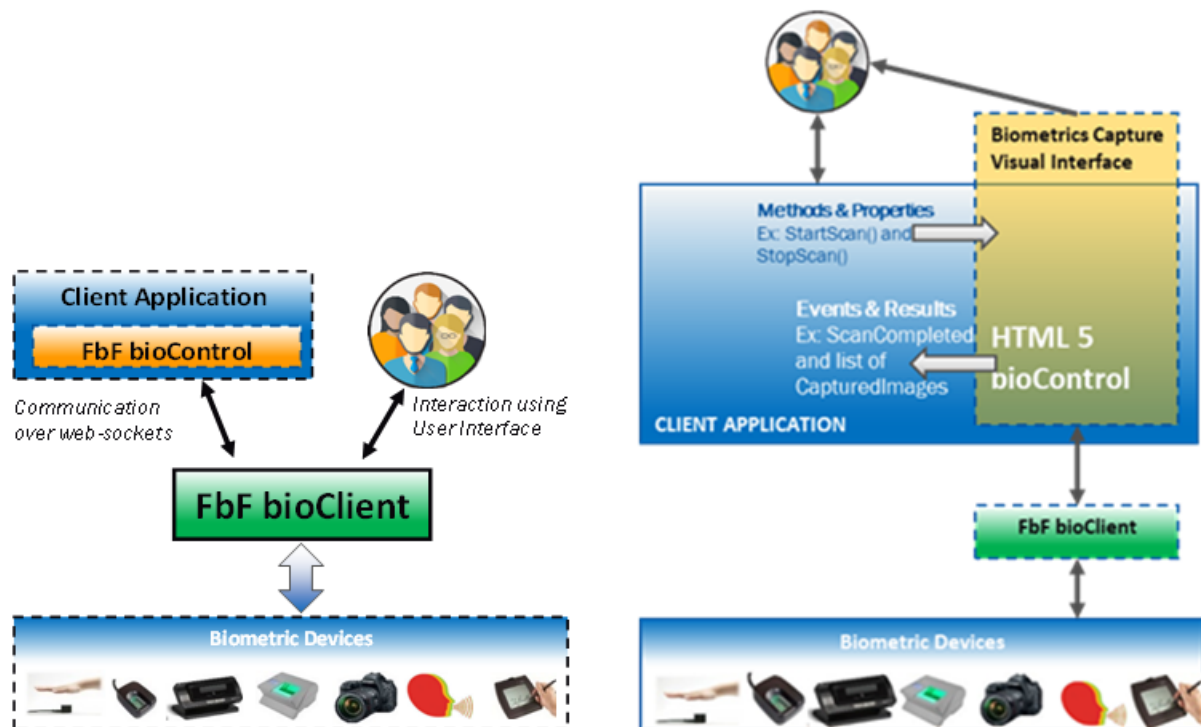
Integrating biometric enrolment, verification and identification capabilities in your new or existing application becomes a simple and painless exercise thanks to the bioControls. The bioControls essentially link your application, the bioClient and the bioServer together. Available as a set of drag-and-drop components, you use the bioControls in your development tools. They are the only piece of FbF® code "embedded" into your software.

Whether developing a web-based application, a traditional software application or something in between, the bioControls come in several flavours to suit your requirements - .Net, Silverlight, HTML, or WPF. FbF® bioControls eliminate the need for writing complicated code to communicate with the biometric capture hardware and the biometric matching engine.

Key Features:

- *Distributed as libraries/packages that can be dragged and dropped into the compatible projects*
- *Dedicated version for different programming environments: .NET, HTML5, PHP, JAVA (Web) and WPF*

- Capable of two-way communication:
 - With bioClient for biometric device related operations and
 - With bioServer for enrollment and identification related operations
- Programmer can perform complex biometric operation just by setting control properties and calling control methods. Examples are:
 - **Segment and Extract:** Automatically capture a 4-finger scan, segment 4 individual fingers and extract template in one go
 - **Identify and Enroll:** Identify the provided template and enroll if not already found on the server.
- Provides properties and methods to perform biometric operation such as:
 - Segmentation, Template extraction and format conversion
 - Get results in multiple image format
 - Inbuilt capability to display live stream, final image and layover graphics.
 - Provides ability to save images and template that can be used by the application for its internal business logic.



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